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MASTERARBEIT

Assessment of Simplified Life Cycle Assessment Tools in Early Architectural Design Phases

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KURZFASSUNG

Diese Masterarbeit befasst sich mit spezifischen Aspekten von Lebenszyklus-Analysen (Life Cycle Analysis – LCA) im Bereich der gebauten Umwelt. Im Detail werden Möglichkeiten identifiziert und qualifiziert, mit welchen „vereinfachte“ LCAs in frühen Planungsphasen implementiert werden können.

In einem ersten Bearbeitungsschritt wurde eine umfassende Literaturrecherche vorgenommen, in welcher Bemühungen aus dem kommerziellen wie auch aus dem akademischen Rahmen identifiziert werden konnten. Im Rahmen von 4 Domänen (Zeit, Maßstab, Eingabedaten und Einfluss der Simplifizierung Impact) konnten 21 wichtige Parameter identifiziert werden, welche zu einer Vereinfachung beizutragen geeignet sind. Diese wurden im Rahmen einer Case Study untersucht, wobei der Einfluss auf eine vollwertige LCA-Studie analysiert wurde.

Im Zuge dieser Bemühungen konnten einige Parameter identifiziert werden, die offenbar einen sehr starken Einfluss auf die Resultate der LCA haben. In einem nächsten Schritt wurden diese in drei unterschiedlichen Anwendungsfoci untersucht; Diese Foci waren (i) reine Materialbetrachtung, (ii) reine operative-Energiebetrachtung, sowie (iii) Kombination von Materialbetrachtung und operativer Energiebetrachtung. In Summe wurden 6 verschiedene Vereinfachungsmodelle mittels der Case Study getestet und im Zuge eines Vergleichs zu einer vollwertigen LCA betrachtet. Die Zielsetzung hierbei war zu verstehen, wie sich welche Vereinfachungsmethodik im Vergleich zur vollwertigen LCA hinsichtlich Aufwand und Ergebnisqualität verhält und darstellt.

Zusammenfassend stellten sich die Life-Cycle Stages gemäß ISO 14040 (ISO 2006) A1-A3 (Material Extraktion und Produktion), B1-B5 (Bauwerkserhaltung) sowie B6 (operative Energie) als signifikant in der Domäne Zeit heraus; in der Domäne Maßstab waren es horizontale (Bauelemente wie Geschossdecken, Dächer) und vertikale Strukturen (Bauelemente wie Wände, Säulen), sowie Haustechnik; in der Domäne Eingabedaten stellte sich die Bedeutung von LCI (Life Cycle Inventories) und Zielwertangaben als wesentlicher Parameter im Sinne einer Vereinfachung heraus.

Von den sechs im Detail untersuchten Modellen waren drei basierend auf generieren LCIs. Diese bilden damit sehr gut die Datenverfügbarkeit in frühen Planungsstadien ab. Interessanterweise zeigten diese Modelle einen größeren ökologischen Fußabdruck als später verwendbare Modelle, die spezifische LCA-Daten verwenden konnten. Die generischen Daten scheinen also mit einer „erhöhten“ Sicherheitsmarge zu arbeiten. Während dies aus einer Perspektive der „Sicherheit“ im Sinne von „auf

der sicheren Seite sein“ verständlich und nachvollziehbar erscheint, generiert dies aber eine Reihe von Komplikationen in der Vergleichbarkeit mit späteren Modellen und letztlich in der Aussagekraft solcher Modelle.

Keywords: Vereinfachte Lebenszyklus-Analyse, architektonische Planungs- und Bauprozesse, Baumaterialien, ökologischer Fußabdruck, graue Energie

ABSTRACT

This thesis seeks to identify and qualify simplified scenarios for life cycle analysis (LCA) within building science to support architectural design development in the early design phases.

Through a literature study that comprised academic as well as commercial efforts within the field of simplified building LCA, 21 relevant simplification parameters within four different simplification domains – time, scale, input and impact – were identified. Each simplification parameter was applied individually to a case study to determine its relative contribution to a full LCA.

The simplification parameters found to have the relatively most significant contribution to a full LCA were combined into simplification models under three different life cycle foci: 1. Building materials, 2. Operational energy and 3. the combination of building materials and operational energy. A total of six different simplification models were tested on the case study and validated by comparing them to a full LCA. The aim of this exercise was to determine, which simplification strategies provided the most convincing reflection of a full LCA, while taking into account the practical workflow of the LCA practitioner.

The study found that life cycle stages as defined in ISO 14040 (ISO 2006) A1-A3 (material extraction and production), B1-B5 (maintenance of building materials) and B6 (operational energy) were of most significance in the time domain; horizontal structures (e.g. roofs, floors, ceiling) and vertical structures (e.g. columns, walls, facades) along with building services were found to be most important in the scale domain; and a life cycle inventory (LCI) consisting of generic data as well as the use of national target values for energy performance were found to have a significant potential as a simplification parameter within the input domain.

Of the six simplification models, three models were based on generic LCI, reflecting the availability of data in the early design stages. These models generally showed a higher environmental impact than the same models with specific LCA, addressing the problem that generic building products typically have a more significant environmental impact than actual building products, thus significantly skewing the simplified results and complicating the promising case for simplified LCA.

Keywords

Simplified LCA, Architectural Design Process, Building materials, Environmental impact, Embodied energy

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Figure 1. Lara Almarcegui: "Construction Materials for this Exhibition Room", FRAC, Bourgogne 2009

CONTENTS

LIST OF ABBREVIATIONS

The below terms will continuously be referred to using their abbreviation rather than the full name.

Abbreviation	Explanation
ADPE	Abiotic Depletion Potential (Elements)
ADPF	Abiotic Depletion Potential (Fossil)
AEC	Architecture, Engineering and Construction
AP	Acidification Potential
BIM	Building Information Modeling
BMS	Building Management System
BOQ	Bill Of Quantities
CEN	European Committee for Standardization
CML	Centrum voor Milieukunde University of Leiden
DGNB	Deutsche Gesellschaft für Nachhaltiges Bauen
EBC	Energy in Buildings and Communities Programme
EebGuide	Energy efficient building Guide
EE	Embodied Energy
EEG	Embodied Energy and Greenhouse gas emissions
EG	Embodied Greenhouse gas emissions
EN	European Standard
EOL	End-Of-Life
EP	Eutrophication Potential
EPBD	European Performance of Buildings Directive
EPD	Environmental Product Declaration
GHG	Green House Gases
GWP	Global Warming Potential
IBO	Österreichisches Institute für Bauen und Ökologie
IED	Integrated Energy Design
ILCD	International Reference Life Cycle Data System
ISO	International Organization for Standardization
JRC	Joint Research Centre
KPI	Key Performance Indicator
LCA	Life Cycle Assessment
LCI	Life Cycle Inventory
LCIA	Life Cycle Impact Assessment

LOD	Level Of Development
NMD	Nationale Milieudatabase
NZEB	Nearly Zero-Energy Building
ODP	Ozone Depletion Potential
OI3	Ökoindex3
PE_{nr}	Total use of Non-Renewable Primary Energy sources
PE_{r}	Total use of Renewable Primary Energy sources
PE_{tot}	Total use of Primary Energy sources
POCP	Photochemical Ozone Creation Potential
RIBA	Royal Institute of British Architects
RSL	Reference Service Life

1 INTRODUCTION

A current trend in the AEC industry is a move towards nearly zero-energy buildings (NZEBs) as outlined in the EU directive on energy performance of buildings, EPBD (EU, 2010). As building operation becomes more efficient, the embodied energy of building materials becomes relatively more significant (Hollberg and Ruth, 2016; Marsh, 2016; Anand and Amor, 2017). The significance of building materials can be found on two levels: Firstly, the relative environmental impact of building materials increases as the energy consumption for the building operation decreases, and secondly, more building materials and especially more high-energy-intensity building materials are used to achieve a high-energy performance during the use phase. Currently, the manufacturing of building materials alone represents 5-10% of the global greenhouse gas (GHG) emissions (Habert et al., 2012).

Life cycle assessment (LCA) currently provides the state-of-the-art framework for assessing the environmental impact of a building over its entire life cycle (Marjaba and Chidiac, 2016) and includes operational energy, as well as all environmental impacts stemming from the building operation and the building itself. Several studies show that the use of LCA in the early architectural design phases can significantly reduce the environmental impact of the building during its life cycle (Rossello-Batle et al., 2014; Russell-Smith et al., 2015; Bueno and Fabricio, 2018). Figure 2 shows the correlation between time (design process) and quantity for knowledge (LCA precision) and options for design changes, respectively.

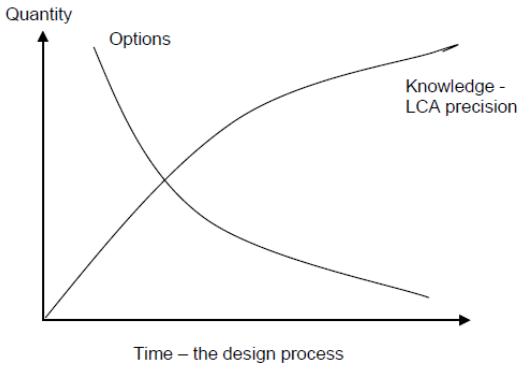


Figure 2. The correlation between design stage, LCA knowledge and design options (Illustration by ENSLIC, 2010)

However, LCA on a building level imposes many challenges: The long service life of buildings prompt a high degree of uncertainty in terms of occupancy behavior, refurbishment paradigms, and the end-of-life (EOL) treatment of building components (Passer et al., 2012). Furthermore, LCA is a time-consuming method to quantify

environmental impact, and architects often lack the expertise required to incorporate LCA findings into a building design in the early design phases (Gervásio et al., 2014).

This master thesis will address these challenges by exploring how complex knowledge about LCA can be implemented in a fast-track architectural design process by identifying and qualifying simplification strategies for LCA that are suitable for the early design phases.

1.1 Motivation

The increased focus on the environmental impact of the production stage of a building's life cycle places a new and expanded responsibility on the architects' table: Now architectural performance parameters must include not only energy, acoustics and daylight criteria, but also building materials down to the substance level. This represents a shift in scale for architects from primarily geometric optimization exercises to a consideration of a wider array of environmental impact categories. One may argue that this is not the main task of the architect; therefore, a simplified and user-friendly framework for evaluating the environmental impact of different construction alternatives and the applied building materials may be of great value to architects during the early design phases, as well as all the other stakeholders later during the design development.

1.2 Research questions

The overall research question of this thesis is:

> *How can the LCA methodology be simplified to reflect the availability of data in the early architectural design phases and still provide a realistic and useful representation of a full-framework life cycle analysis?*

It is the assumption that a correlation between LCA results in the early and the late design stages does exist. With this hypothesis as a guiding principle, the following research questions will shape this thesis:

> *Which simplification strategies are already in use in academia and as commercial tools, respectively? What are the characteristics of these simplification strategies?*
>
> *If applying a set of different simplification strategies to a case study, how well does each strategy represent a full-framework assessment of the same building?*

Which of the well-performing simplification strategies is also compliant with the practical workflow of a design project?

1.3 Thesis roadmap

The research questions will be answered through a multi-stage process that constitute the thesis methodology. The individual steps are illustrated in Figure 3:

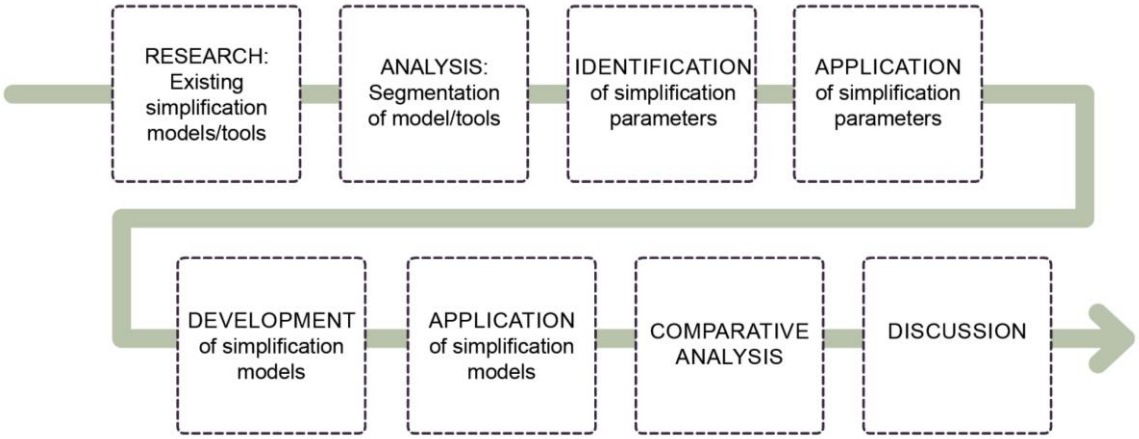


Figure 3. Roadmap for thesis methodology

1.4 Scope and limitations

Life cycle analysis (LCA) is an extensive method to assess environmental impact and can be applied to a multiple of products and processes. This thesis exclusively addresses LCAs in the AEC-domain (Architecture-Engineering-Construction) and some of the specific challenges and opportunities within this discourse.

Furthermore, the regional focus for this research will be the European AEC industry with only sporadic glances to North America and Asia for inspiration in the literature study phases. The emphasis will strictly be on new buildings with high operational energy efficiency, as this type of building provides the best platform for investigating different methodological choices within the LCA framework, as will be argued in the following chapters.

Lastly, the concept of life cycle costs – LCC – will not be elaborated on in this thesis despite its close relation to LCA. The reason for this exclusion is the concentrated focus on the LCA framework as a methodology for assessing buildings' *environmental* impact and its simplification potentials; an addition of LCC would blur the lines between the LCA and the LCC methodology.

2 BACKGROUND

LCA is used throughout the building sector from building material over assembly to the entire building (ISO, 2006), and a wealth of different software tools exist to help building designers quantify the environmental impact of their projects (Diakoumakou, 2016). Additionally, many recent studies show that in low-energy buildings, embodied energy may account for the largest portion of the building's life cycle energy (de Klijn-Chevalerias and Javed, 2017; Rasmussen et al., 2018). However, evaluation of building environmental performance is typically not performed until the design development stage or later (Schlueter and Thesseling, 2009), practically precluding any significant design changes to improve the environmental performance of the building.

Several researchers have proposed elaborate schemes for an integrated approach to life cycle design (Kreiner et al., 2015; Marsh, 2016; de Klijn-Chevalerias and Javed, 2017). Yet these proposals have a high degree of complexity and call for expert knowledge throughout the design process. A recent review article (Anand and Amor, 2017) about LCA developments within building science emphasizes the need for simplified methodologies for LCA in the design phase, but only counts a single paper with concrete research on this topic (Lewandowska et al., 2015). This suggests that additional research is needed to develop simplified LCA methodologies that are applicable to fast-track architectural design processes, thus ensuring a highly informed building design from the earliest design phases with only minor environmental optimizations later in the design process.

This chapter explores the general LCA methodology and its processes and cut-off rules and juxtaposes this methodology with current simplification trends within building science.

2.1 The LCA methodology

Life cycle assessment (LCA) is a general method used across industries to assess the environmental impact of a product throughout its service life, starting with the extraction of raw materials and ending with the end-of-life scenarios. Early versions of the method emerged in the 1960'ies (Buyle et al., 2013), but have since moved towards international standardization, e.g. through milestone documents like the International Reference Life Cycle Data System Handbook (ILCD, 2010) and the ISO family 14000 and derivative industry-specific standards. For construction works, the

product system comprises five life cycle stages with a total of 17 processes (EN, 2011), as illustrated with Figure 4:

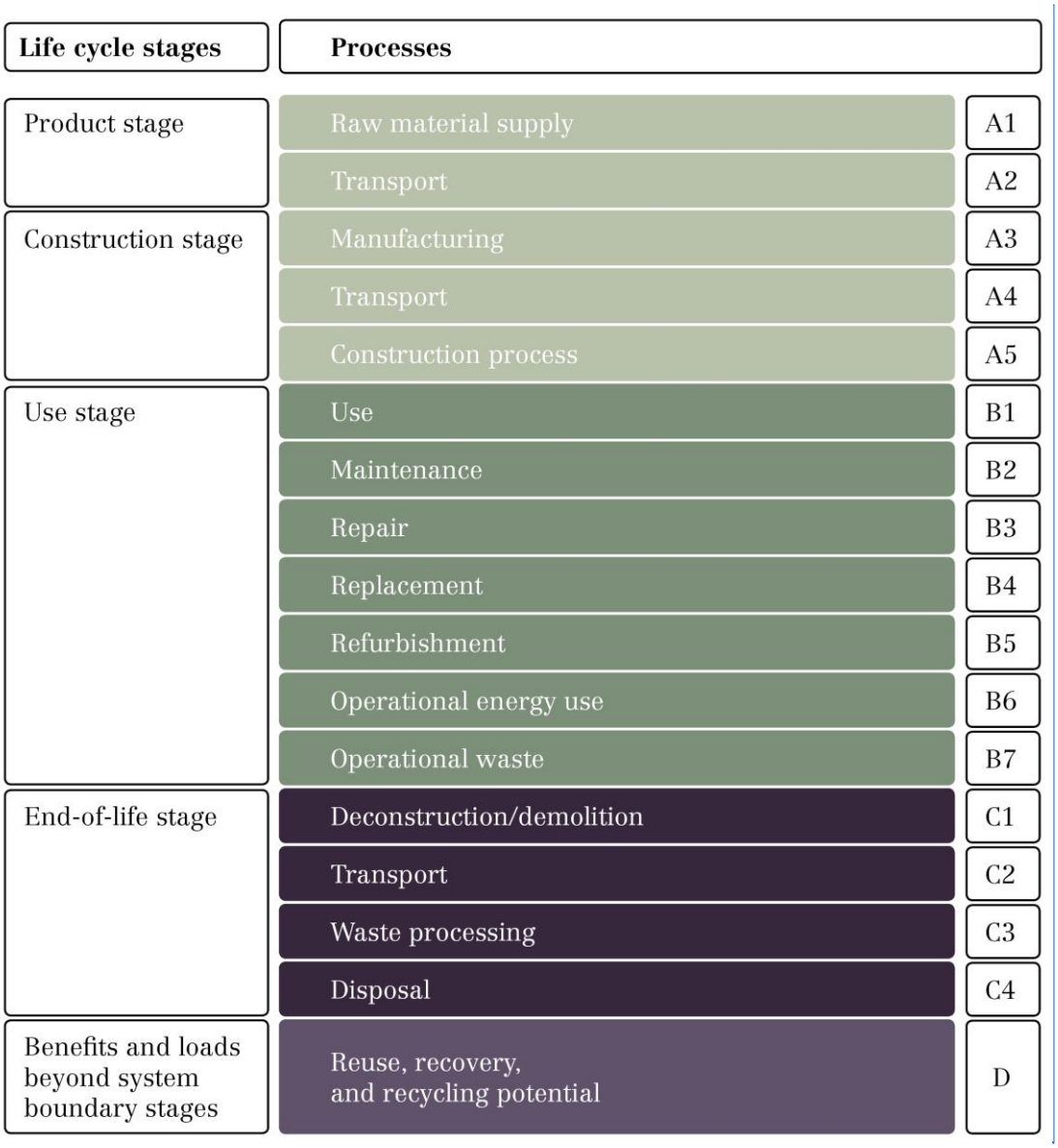


Figure 4. System boundaries for LCA calculations as defined in the EN 15978:2011.

In general, LCA approaches may be either *attributional* or *consequential*; attributional LCA is defined by its focus on describing the environmentally relevant flows within the chosen temporal window (e.g. a service life of 50 years), while consequential LCA aims to describe how environmentally relevant flows will change in response to possible decisions (Buyle et al., 2018). Construction-specific LCA standards like EN 15978 and EN 15804 rely solely on the attributional approach (Wittstock et al., 2012), whereas consequential LCA is used to inform lawmakers about nation- or global-wide consequences of current or potential policies (Buyle et al., 2018).

In more detailed terms, an attributional approach uses *midpoint categories*: A problem-oriented approach, which quantifies ozone layer depletion, global warming, etc. or in other words quantification of environmental impact. This approach is different than that of the consequential approach, which uses *endpoint categories*: Damage categories like ecosystem quality and climate change (Buyle et al., 2013).

The standardized LCA used today is based on the CML impact assessment methodology developed at the Institute of Environmental Science at the University of Leiden in the Netherlands, and this methodology examines the midpoint categories rather than endpoint categories (Wittstock et al., 2012).

Multiple literature reviews show that midpoint methodologies are dominant in the construction industry (Ortiz et al., 2009; Sharma et al., 2011). The reason for this focus is the complexity of assessing one product's fractional impact on global average temperature increases, whereas the ODP or GWP of that product is easier to measure (Marsh, 2017).

Depending on industry and product system, the midpoint categories – or more commonly known as impact assessment indicators – are selected for their relevance. ISO 14044 states that if none of the existing indicators are sufficient, new ones can be defined. For the construction industry, most LCA studies include all or most of the impact assessment indicators illustrated in Figure 5 (Birgisdòttir and Nygaard 2016):

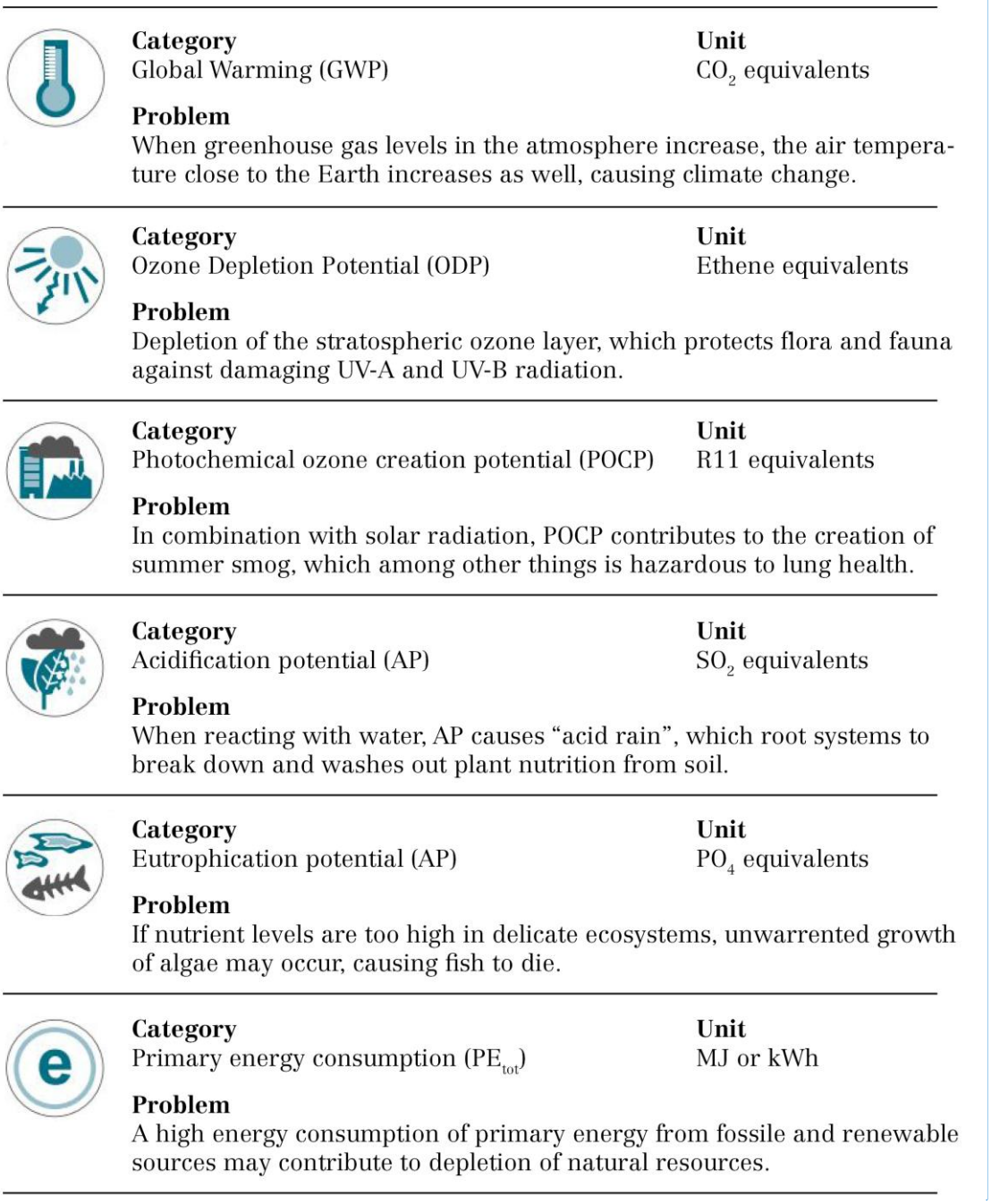


Figure 5. Most extensively used impact assessment indicators. Illustration after (Birgisdóttir and Rasmussen 2016)

There are, however, no regulations on how many or which impact assessment indicators an LCA study should include (ISO 14044, 2006).

2.1.1 LCA processes

The generic requirements for an LCA in the construction industry comprise eight processes as outlined in EN 15978. Each of these processes and the required information of each process is explained in Figure 6:

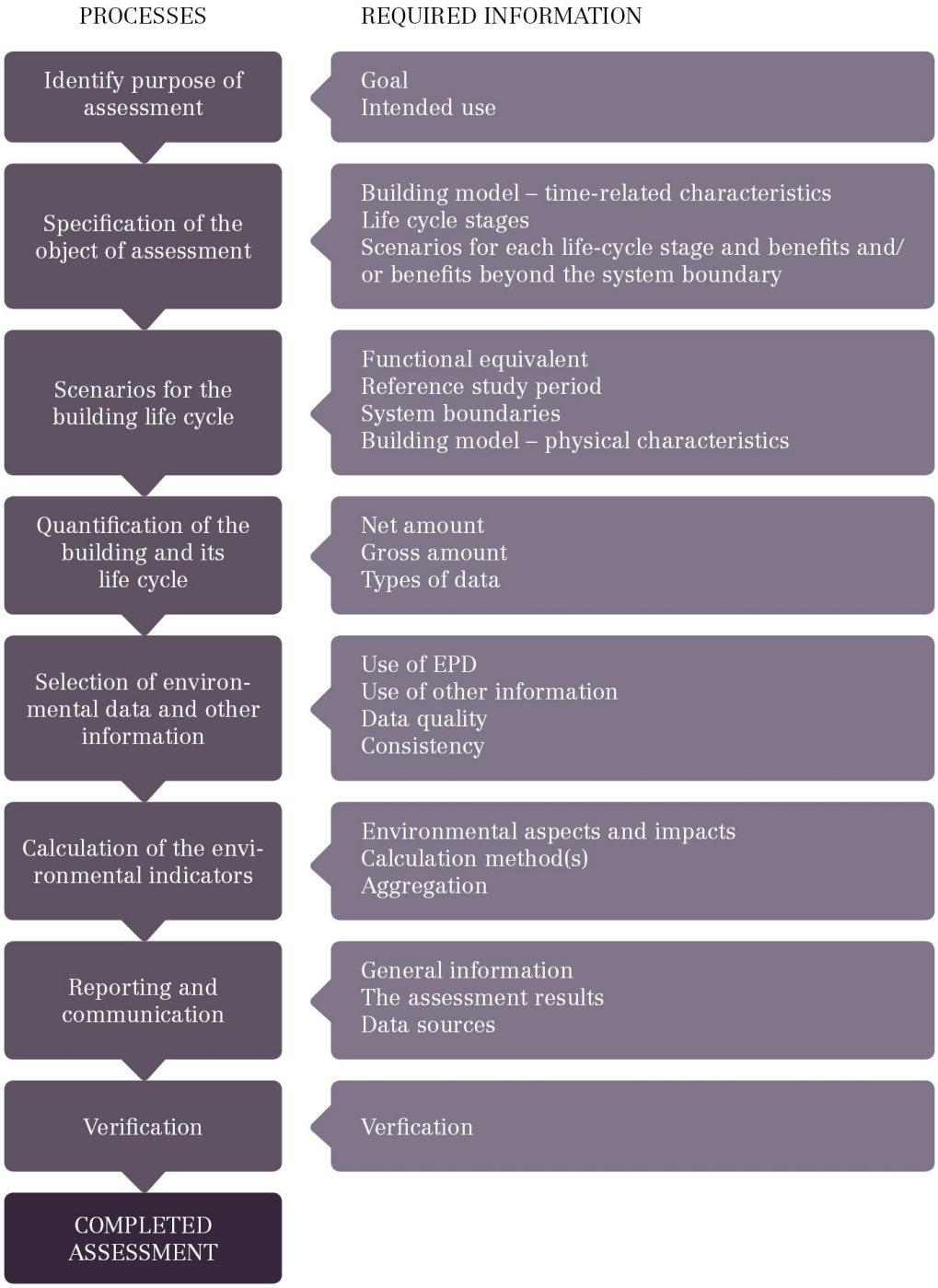


Figure 6. Processes and information required for conducting an LCA based on EN 15978.

Any LCA study – full or simplified – should follow this roadmap and address all processes within it.

2.1.2 Cut-off rules

The scope of the life cycle assessment is defined as *system boundaries* and describes the processes included in the assessment (ISO 2006).

In recognition of the data-intensive and time-consuming requirements of the LCA methodology, *cut-off rules* are in place to enable LCA practitioners to set up meaningful system boundaries and conduct LCA without having to model 100% of the product system (Wittstock et al., 2012). According to the ILCD Handbook, common cut-off rules found within LCA practice for buildings are (ILCD, 2010):

i. Omission of non-relevant life cycle stages
ii. Omission of building components with minor impact potential
iii. Omission of investigated LCIA indicators

However, no general approaches can be defined for buildings due to the complexity (Wittstock et al., 2012). In general, cut-off rules for building LCA studies should only be applied in compliance with EN 15804 and EN 15978.

Despite being established as a measure to ensure operability of the LCA methodology, the cut-off rules may also be used proactively as simplification strategies, which will be introduced in the next paragraphs.

2.1.3 Standards and guidelines

The LCA methodology is widely used within a large variety of industries (Wittstock *et al.*, 2012). A number of international and European standards define the general fundamentals as well as industry-specific applications. Table 1 below shows standards relevant for LCA in the construction industry. In the European Committee for Standardization (CEN), the technical committee TC 350 is responsible for the development of voluntary horizontal standardized methods for the assessment of the sustainability aspects of new and existing construction works (CEN 2018).

Table 1. Relevant international and European standards

Standard	Application
ISO 14040: 2006 Environmental management – Life cycle assessment – Principles and framework	This standard outlines the principles for compiling an LCA, e.g. requirements for data transparency, etc. Applicable to all industries.
ISO 14044: 2006 Environmental management – Life cycle assessment – Requirements and guidelines	This standard describes requirements for implementation of LCA. Applicable to all industries.
EN 15643-2:2011 Sustainability of construction works. Assessment of buildings. Framework for the assessment of environmental performance.	This standard outlines requirements and assessment of environmental impact of building.
EN 15978:2011 Sustainability of construction works. Assessment of environmental performance of buildings. Calculation method.	This standard outlines the calculation method for implementing LCA of building.
EN 15804:2012 Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products.	This standard outlines structure, content and principles of an Environmental Product Declaration (EPD) for construction products in order to ensure that they are made according to the same procedure and are presented in a uniform format.
ILCD Handbook International Reference Life Cycle Data System: General Guide for Life Cycle Assessment	The ILCD handbook was developed by the Institute for Environment and Sustainability in the European Commission Joint Research Centre (JRC) and provides in-depth guidance on general LCA practice (ILCD, 2010).

The content of the standards mentioned in Table 1 form the basis for the efforts conducted within this master thesis work.

2.1.4 Uncertainty and variability within LCA

One of the major challenges of the LCA methodology, is the uncertainty around it: Variables introduced through inventory data and methodological choices induce results with uncertainty, particularly in comparative contexts (Mendoza Beltran et al., 2018). This field is a mature research field of its own (Gantner et al., 2018). According to Mendoza Beltran et al. (2018), a number of different types of uncertainty can be observed for building LCA, which is illustrated in Table 2.

Table 2. Types of uncertainty in building LCA

Type of uncertainty	Description
Parameter uncertainty	Data inaccuracy, unavailability, and unrepresentative data, e.g. wrong inventory data, missing data or data that refers to other different technologies, places or temporal resolutions than the intended one
Uncertainty due to methodological choices	Based on the choices of practitioners along the phases of LCA on topics like functional units, system boundaries, allocation methods, impact categories and characterization methods and factors.
Model uncertainty	Refers to simplification aspects of LCA such as aggregation and modelling, e.g. linear and non-linear models, derivation of characterization factors or estimation of emissions with exogenous specialized models.
Epistemological uncertainty	The lack of knowledge on system behavior, e.g. when modeling future system and scenarios.
Spatial variability	The geographical context in which the building is located.
Temporal variability	The service life of building products observed and to the service life of the building as a whole.
Mistakes	Errors committed by the practitioner during the calculation process.

These types of uncertainties are important to keep in mind, when attempting to simplify the existing LCA methodology and assess the quality of the simplifications.

2.2 Current trends within simplification of LCA

This paragraph investigates existing paradigms for simplifying the LCA methodology with focus on the early architectural design phases.

Very similar terms will be used to describe different levels of this discourse: Simplification mode, simplification domain, simplification model and simplification parameter. Table 3 provides a definition of what exactly is understood by the different terms. These terms will be used extensively throughout this thesis.

Table 3. Definition of terminology

Simplification mode	The degree to which the LCA methodology is simplified: Screening LCA vs. Simplified LCA vs. Full LCA
Simplification domain	The domains in which the LCA methodology is simplified: Time vs. Scale vs. Input vs. Impact
Simplification model	Concrete approach to LCA simplification with defined system boundaries, inventory and LCIA indicators, consisting of a number of simplification parameters
Simplification parameter	Single parameters of the LCA methodology – if put together they form a simplification model

2.2.1 Simplification modes

Major work towards an established understanding of simplification strategies for LCA was undertaken with the EeBGuide project, which ran from November 2011 to October 2012 as a coordination and support action by the European Commission under the Seventh Framework Programme. The goal was to develop methods, rules and operational guidance for the preparation of LCA studies for energy-efficient buildings and building product with a strong focus on applicability (Wittstock et al., 2012). The project defined three types of LCA studies: Screening LCA, Simplified LCA and Complete LCA, each of which are described in keywords in Table 4.

This classification is developed according to system boundary definition, the experience of the practitioner, data availability and the state of development of the product or the building being assessed (Soust-Verdaguer, Llatas and García-Martínez, 2016). Table 4 provides a description of each of the three simplification modes as defined by the EeBGuide (Wittstock *et al.*, 2012).

Table 4. LCA mode definitions according to the EeBGuide

LCA mode	Description
Screening	An initial (quick) overview of the environmental impacts of a building. This study yields an estimate of the environmental performance, which can be helpful in the early stages of design. It might focus on a single indicator or several, and most studies should include PE_{nr}, PE_r and GWP. A screening study is likely to be based on generic assumptions and should thus be used for internal communication purposes only, e.g. to identify environmental optimization potentials in the early design stages or to document environmental performance during an architectural competition.
Simplified	Quick assessment of a building. This study applies a pragmatic approach and can be interpreted as an "adapted" LCA. A simplified LCA may consider a more comprehensive set of environmental impact categories than a screening LCA. National data are preferably, but European data are also acceptable. Studies of this type can be used for internal and external purposes, e.g. labelling schemes or certifications, or a study conducted by a stakeholder interested in getting a more advanced assessment than a screening.

Complete	Complete assessment of a building. This study covers the entire life cycle and yields a comprehensive view of the environmental performance of the building. Several scenarios for different assumptions on service life, energy in use, patterns of use, disposal and recycling. National data is required, and product-specific LCI data (e.g. an EPD) should be taken into account. Studies of this type should, if communicated externally, undergo an independent review/verification before communication.

(Meex et al., 2018) elaborate on the EebGuide's simplification modes of Screening LCA, Simplificed LCA and Complete LCA by coupling them with design phases and the subsequent level of detail/complexity in the following relation: Figure 7 illustrates the relation between design stages and simplification modes of LCA according to Meex et. al:

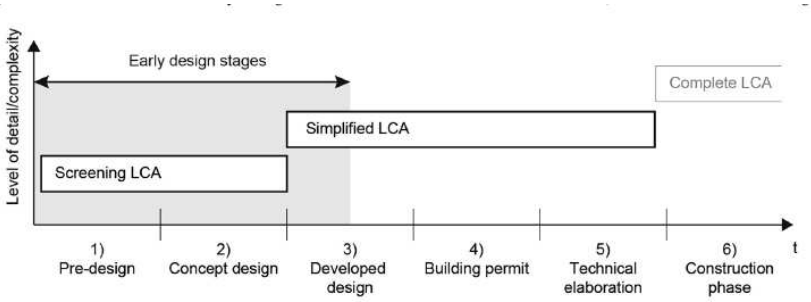


Figure 7. Relation between design stages and simplification of LCA (Meex et al., 2018).

Figure 7 shows that Screening LCA covers the initial phases of pre-design and concept design, Simplified LCA corresponds to the design phases developed design, building permit and technical elaboration, whereas a Complete LCA can only be calculated during the construction phase and into the operational phase.

2.2.2 Simplification domains

The potential for simplifying life cycle assessment within the field of building design can be divided into four different domains (Mora et al., 2011; Dixit et al., 2013; Lewandowska et al., 2015; Meex et al., 2018; Rasmussen et al., 2018):

Time: Reduction of included stages in the LCA framework (production, operation and end-of-life scenario as outlined in EN 15978:2011), i.e. this domain focuses on the system boundaries.

Scale: Focus shift from the whole building to subsystem, assembly or component. This reduction may significantly reduce the data acquisition and/or change the functional unit for which the LCA is carried out.

Input: Reduction of detail in input parameters, e.g. inventory data for building materials (product-specific vs. regional or generic) or simplified measures for operational energy, e.g. national target values or quasi-steady state methods (like a national energy certificate) instead of dynamic building performance simulation or extraction of real operational numbers from a BMS system.

Impact: Inclusion of impact categories that are considered most relevant and exclusion of less relevant impact categories. This domain significantly reduces the results communication.

The *time, scale* and *impact domains* can be characterized as *quantifying* simplification domains: They reduce the number of parameters included in the LCA profile, but do not change the quality of the data for the remaining parameters.

The *impact domain* can be characterized as a *qualifying* simplification domain in the sense that it reduces the quality of the data for certain simplification parameters.

2.2.3 Simplification models

Simplification of LCA within the AEC industry is still in its infancy, but some researches have attempted to carry out studies similar to the present thesis.

(Zabalza Bribián et al., 2009) explores possible simplification scenarios for system boundaries, arguing that the product stage (A1-A3) and the operational energy consumption (B6) are reasonable system boundaries for a simplified LCA, thus deploying simplifications in the time domain as defined above.

(Kellenberger and Althaus, 2009) examines potential simplification models for the scale domain by providing a detailed analysis of different building components on different levels of simplification from a comprehensive component to a fully reduced component.

(Lewandowska et al., 2015) investigates six so-called *compromise solutions* between a full LCA and an energy certificate, applying a similar methodology as the present study and addressing both time, input and impact domains; the study concludes that a simplification model comprising reduced system boundaries (A1-A3, B6, B7), but all inputs and LCIA indicators from a full LCA may retain an average of 90% of a full LCA across a range of different construction types. However, this study was designed to explore LCA as a more holistic approach to energy consumption assessment than an energy certification and thus not strictly a methodological investigation of LCA as a stand-alone framework.

A comprehensive investigation of the consequences of methodological simplification choices within all four domains (time, scale, input and impact) is still called for as a practical test of the recommendations formulated – but not substantiated – in the EeBGuide and other academic works within this field.

In addition to these academic studies, a growing number of commercial tools for LCA is emerging. Some of these tools are BIM-integrated, some have been designed as part of a certification scheme and yet some are stand-alone tools or approaches designed for LCA in the AEC industry. All of these tools or methods are designed with certain assumptions as guiding principles, and most of them can thus be regarded – intentionally or unintentionally – as simplification models of LCA. A selection of these tools will serve as inspiration for finding methodological variants to be tested in this study.

2.2.4 The relation between mode, domain and model

The relation between the first three terms – simplification mode, simplification domain and simplification model – can best be described graphically. Figure 8 illustrates how simplification mode and simplification domain each define a dimension in the field of potential simplification; simplification models can be plotted into this field according to the degree of simplification (simplification mode) and which domains are being simplified (simplification domain). The plotted models A, B, C and D are exemplary and only serve the purpose of illustrating how the illustration works. They do not reflect any results entailed in this thesis.

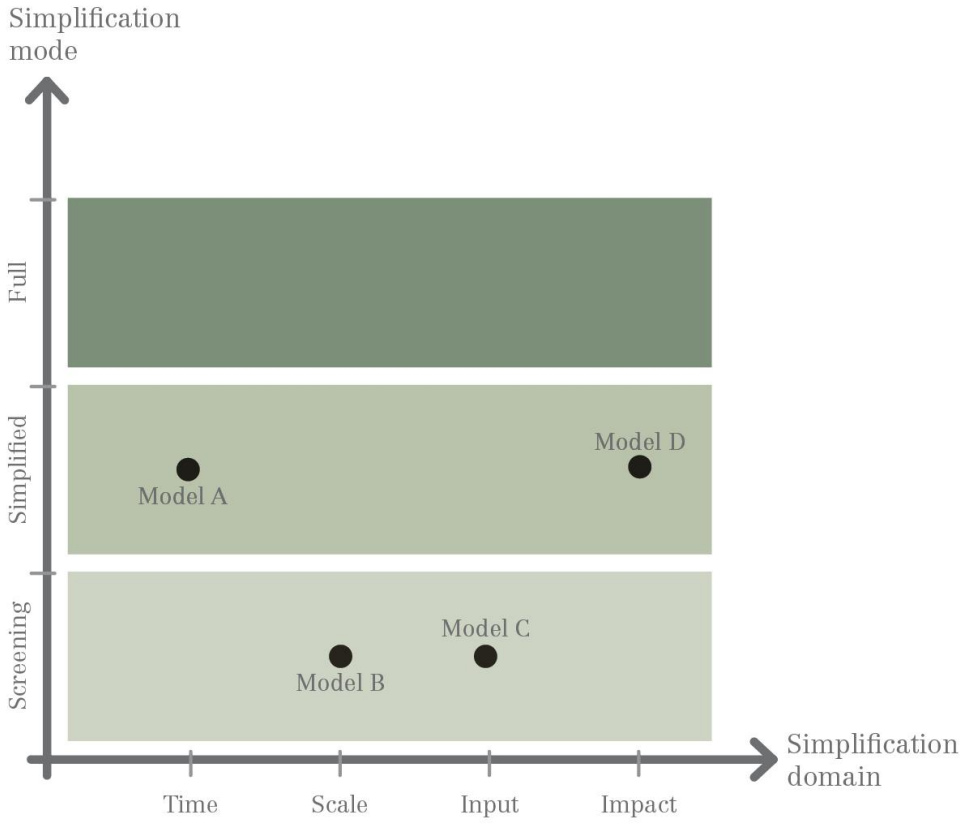


Figure 8. Relation between mode, domain and model, where the plotted models are exemplary to communicate the relevance of the illustration.

This schematic representation of the simplification models does not take into account the possibility of a simplification model to feature simplification within several domains.

3 METHOD

The research for this thesis deploys a multi-stage research methodology, which will take its point of departure in a case study. For the case study, a full-framework LCA calculation will be carried out, using the tool One Click LCA.

A literature study will be conducted to map current trends within simplification of LCA; the purpose of this study is to gain an overview of existing simplifications models, which will then be used to develop simplification models for the comparative analysis of this thesis. The literature study comprises academic journals as well as commercial tools.

The identified existing simplification strategies are compared and segmented, and based on this segmentation, a set of tool-independent simplification parameters are extracted and applied to the case study. The reason for this controlled parametric approach kept within the confines of a single LCA tool (One Click LCA) instead of applying the tools and simplification models directly is to maintain control of all methodological choices and avoid “black box” assessments: As shown by (Bueno and Fabricio, 2018) among others, LCA studies using different tools produce inconsistent results, thus undermining the potential for carrying out comparative studies. Aspects like different material databases and inclusion of different life cycle stages are obvious reasons for these inconsistencies (Lasvaux et al., 2015), but also different ways of assessing more subtle parameters like the same functional unit (e.g. 1 m^2) may differ from tool to tool based on national/regional practice (Rasmussen et al., 2018). Therefore, this study incorporates methodological simplification choices identified in the literature study into the full-framework LCA of the case study to enable a comparative analysis.

The simplified LCA results are being compared to full LCA results to assess which simplification strategy is more successful in reflecting full LCA results. As this analysis is very simple and only reflects the potential of a *single parameter* at a time, a method for combining crucial parameters into simplification models is developed, and a range of simplification models is investigated for their representation of a full LCA.

3.1 Case study

The case study is chosen with regards to the following criteria: i. It has to be a new building with high energy performance (no retrofitting projects), where building materials can be assumed to comprise a significant part of an LCA, ii. It has to be in

one of the RIBA stages 5-7 (Construction, Handover and Close-Out or In Use) to ensure that all materials in the building are accounted for, and iii. European regional context to ensure LCI data availability. There are no requirements for function, size or occupancy profiles.

Three different projects were available as cases for this study: Retail project Design Outlet Croatia in Zagreb, Croatia; residential project Islands Brygge in Copenhagen, Denmark; and office building Middelfart City Hall in Middelfart, Denmark. Data for all three could be provided through the author's current or previous employment with planners in the AEC industry.

The process of selecting the case best suited for this study included an analysis of available data. As Table 5 shows, the LCI was not complete for neither Design Outlet Croatia, nor for Islands Brygge, and a proper energy simulation only existed for Design Outlet Croatia. In other words, none of the cases had a complete LCI *and* high-resolution energy calculations.

Table 5. Comparison of potential case studies

			
Input	**Design Outlet Croatia**	**Islands Brygge**	**Middelfart City Hall**
LCI	Not complete	Not complete	Complete
Energy	Simulation	Energy certificate	Energy certificate

Based on these circumstances, Middelfart City Hall was chosen for its complete LCI, because a complete material inventory in combination with an energy certificate was considered more important for this study than a poor LCI in combination with in-depth energy calculations.

The case study chosen is the newly opened city hall in the town of Middelfart, Denmark. It was completed in 2017 and covers 9,261 m^2 of office space. It was awarded a DGNB Platinum certification, which was later upgraded to DGNB Diamond (due to its architectural quality).

Middelfart City Hall		
	Location	Middelfart, Denmark
	Function	Office
	Gross area	9,261 m^2
	Year of completion	2017
	Sustainability standard	DGNB Diamond

The building was designed by Henning Larsen Architects with Ramboll providing main engineering services. All LCI inputs were provided by Henning Larsen Architects, whereas key performance numbers from the energy certificate was provided by Ramboll.

3.2 Full LCA study

A full LCA was performed for Middelfart City Hall. The tool of choice was web-based One Click LCA, a relatively new tool on the market, but a tool that is already established as reliable for scopes like the present study (One Click LCA, 2018a).

This tool was chosen for its direct application to construction projects and its extensive database for building products unlike generic LCA tools like GaBi or SimaPro, which are only partly adapted to building projects.

3.2.1 Full-framework LCA tool

One Click LCA is an emerging full-framework LCA tool designed specifically for the AEC industry. It was developed by Finnish developer Bionova Ltd. as part of the European research program Horizon 2020 (One Click LCA, 2018b).

The tool is compliant with EN 15978 and by extension with the ISO 14040/44 standard. The impact assessment methodology is CML-IA 2010 (as required by EN 15978 and 15804). Furthermore, the tool is third-party verified for EN 15978, ISO 21931-1, ISO 21929-1 and for input data for ISO 14040/44 and EN 15804 standards (One Click LCA, 2018c).

The tool reports six different impact categories: GWP, AP, EP, ODP, POCP and PE_{tot}, and the system boundaries include all modules of the LCA methodology according to EN 15978.

3.2.2 Full-framework LCA assessment

The template from Figure 6 based on EN 15978 is used as a checklist for inputs and outputs in the LCA calculation.

Table 6. LCA processes and input according to EN 15978 requirements

Process	Input
Purpose of assessment	The purpose is to conduct a full-framework LCA of the study case Middelfart City Hall. This assessment will be used in a comparative study, where is will be used as the basecase scenario to which simplified life cycle calculation are compared. The study is to be used for an academic exercise to evaluate appropriateness of different LCA simplification strategies. The functional unit chosen for this study will be m^2 to allow for a comparative analysis. This also reflects one of the most widely used functional units for LCA of buildings (Anand and Amor, 2017).
Specification of the object of assessment	The office building was completed in 2017 in Middelfart, Denmark as a "Low-energy class 2020" building under the Danish building regulations and with an additional ambition of DGNB Platinum certification, which was granted in 2017. The building covers a gross area of 9,261 m^2 distributed over 4 levels arranged around a central atrium. For further detail, see plans in Appendix A. All building elements are included in the assessment, except external works, as they are not relevant for the current study, which focuses entire on the building itself.
Scenarios for the building life cycle	The baseline scenario follows the baseline scenario recommendations of the EebGuide, in which the following parameters are outlined (Wittstock et al., 2012): → Service life for the entire building: 50 years → Service life for building products: Default data from database (EPD or other approved database available through One Click LCA) → Reference study period: 50 years → LCA data for electricity: National (annual) average data, as they are available → No future technological developments are assessed; → Currently used technology is the basis for the assessment → Transportation distance: Derived from building material specifications as provided by Henning Larsen Architects → Carbon sequestration is not considered explicitly → End-of-life-scenario: Default data from database (EPD or other approved database available through One Click LCA) Only the baseline scenario is being investigated, as this comparative study aims at identifying methodological simplifications rather than LCA impacts from different building-operational choices.
Quantification of the building and its life cycle	Building material specifications and quantities are provided by architect Henning Larsen Architects in various forms: Revit-extracts with materials/quantities, spreadsheet with additional building components and design drawings for manual assessment, see Appendix 0.

Selection of environmental data and other information	Available LCI databases in One Click LCA are used. National EPDs are highest priority, if not available other EPDs are used. If no EPDs are available, national generic data are used followed by regional generic data. If no other data are available, One Click LCA generic data are used. All data available through One Click LCA is compliant with ISO 14040/14044 and EN 15978 to ensure data consistency.
Calculation of the environmental indicators	One Click LCA automatically calculates the environmental indicators GWP, AP, EP, ODP, PE_{nr}, PE_r, PE_{tot} – see results reporting in Appendix D.
Reporting and communication	The results for the baseline scenario (full LCA) are reported in absolute numbers in a graphical representation. This representation is in itself not very useful, but the absolute numbers will be used later to make a relative comparison between the baseline scenario and simplification scenarios.
Verification	The inputs into One Click LCA is verified on Aug. 31, 2018 by architect Martha Lewis of Henning Larsen Architects. Furthermore, a One Click LCA representative verified the calculations on as part of the student license agreement.

3.3 Simplified LCA study: 1st iteration

A literature study is conducted to map current trends within simplification of LCA, the focus being on existing academic models and commercial tools. The list of models/tools is not exhaustive, but reflects the latest endeavors pertaining to building LCA in the early design phases.

The scope of each model is identified using the matrix found in Table 7, and a tabular overview of all models with the identified features can be found in Appendix A.

Table 7. Matrix for identifying existing strategies and tools for simplified building LCA

Issue	Description
Developer and Year	Company/organization/author behind the strategy and latest year of publishing
Geographical application	Country/region included in the applicable geographical context
Functional application	Types of buildings included in the strategy, e.g. residential, educational, commercial
Time period observed	The life cycle of the building in years
System boundaries	Life cycle stages included in strategy
Object boundaries	Building components included in strategy
LCI databases	Material databases used by tool/strategy for LCI
Functional unit	Functional unit used for results reporting
Environmental indicator	LCIA indicators used for results reporting
Communication of results	Type of results communication, e.g. numerical, tabular, graphical

The study showed that within the four simplification domains, some trends could be detected.

3.3.1 Segmentation of existing simplification models

The identified simplification models are mapped according to their simplification properties in order to inform simplification models for the parametric study. Two different maps are created: Firstly, a map displaying the simplification domains “Scale” and “Time: The number of included life cycle stages as a function of the number of included components – see Figure 9. Secondly, a map displaying the simplification mode (screening/simplified/full) as a function of the simplification domain “Impact”: The number of included LCIA indicators – see Figure 10.

The study showed that within the four simplification domains, some trends could be detected.

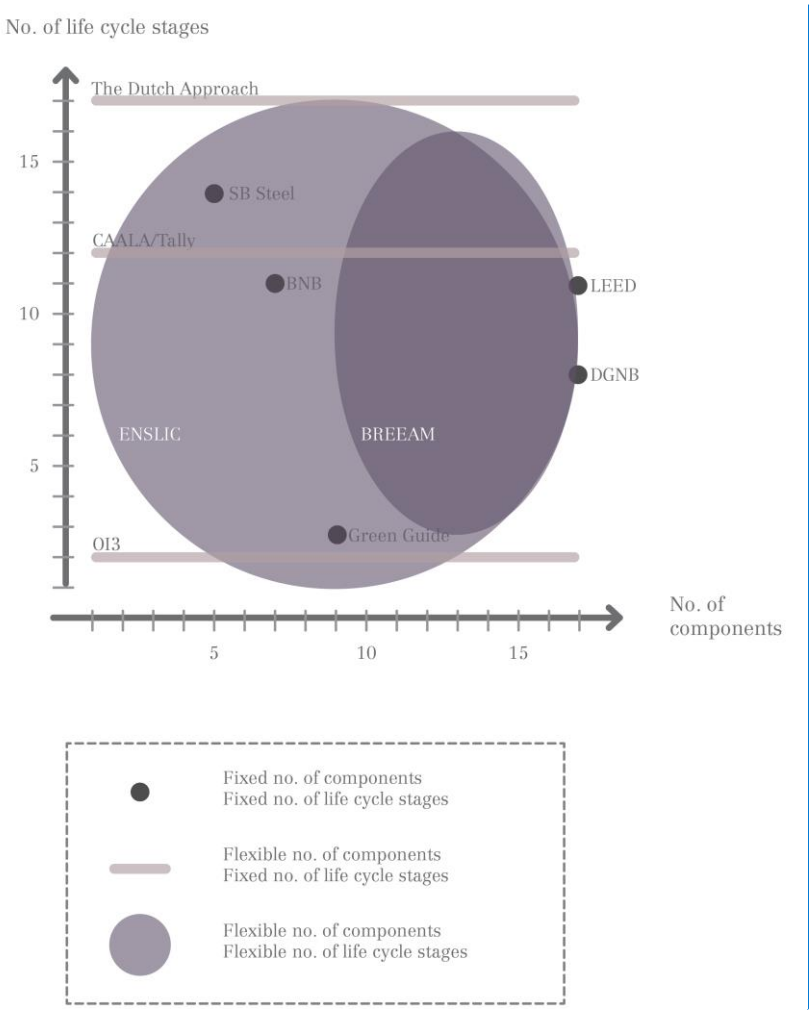


Figure 9. Graphical representation of simplification models: Simplification domains „Time“ and „Scale“.

For the time domain, the life cycle stages as defined in ISO 14040 (ISO 2006) A1-A3, B2-B4 and C1-C4 (in that order) were most prone to being included in the calculation.

In the scale domain, the dominant number of building components included in the calculation was user-defined – about half of the investigated simplification models did not mandate specific components to be included, but left it to the user. The other half with a defined number of included building components was dominated by 9 to 10 defined building components.

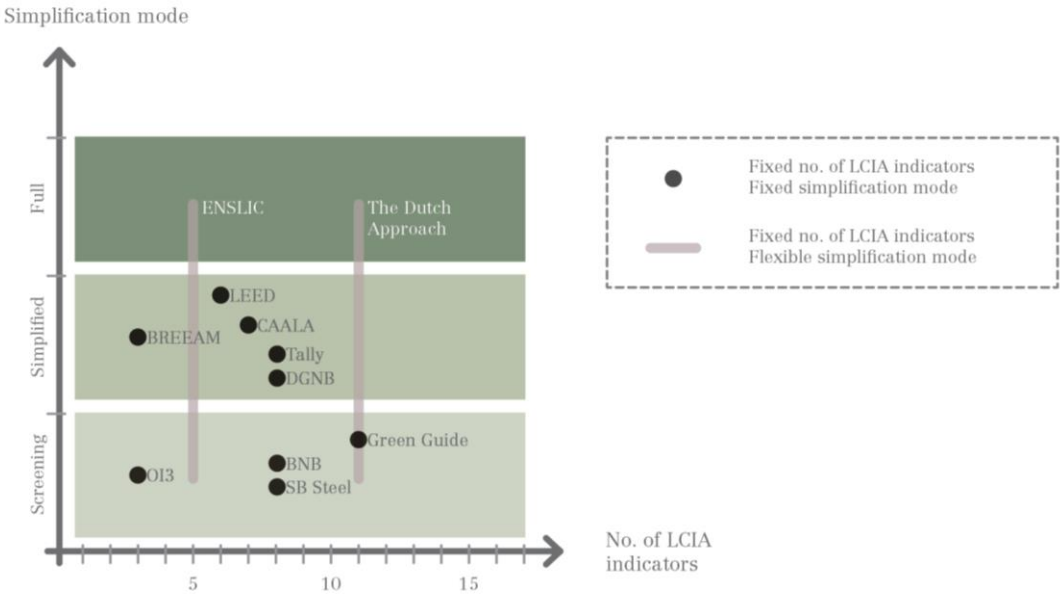


Figure 10. Graphical representation of simplification models: Simplification modes as a function of simplification domain „Impact“.

In the input domain, no clear trends could be identified. In spite of the ISO 14000 family's emphasis on EPDs, only three models use EPDs directly for their inventory. See Table 8. However, several of the databases include EPDs as part of their datasets along with self-declared LCA-profiles.

Table 8. Relation between material databases and simplification models

Material database	No. of models
EPD	3
Ökobaudat	2
Ecoinvent	2
GaBi	1
Esuco	1
NMD	1
World Steel	1
IBO	1

Baubook	1
User-defined	1

In the impact domain, the dominant number of environmental impact indicators was centered around 7 and 8 included indicators. Of these, GWP and AP dominated, followed by ODP, POCP and EP. PE_{nr} was included in six simplification models, while PE_r and PE_{tot} were included in only 4 and 3 models, respectively. See Figure 11.

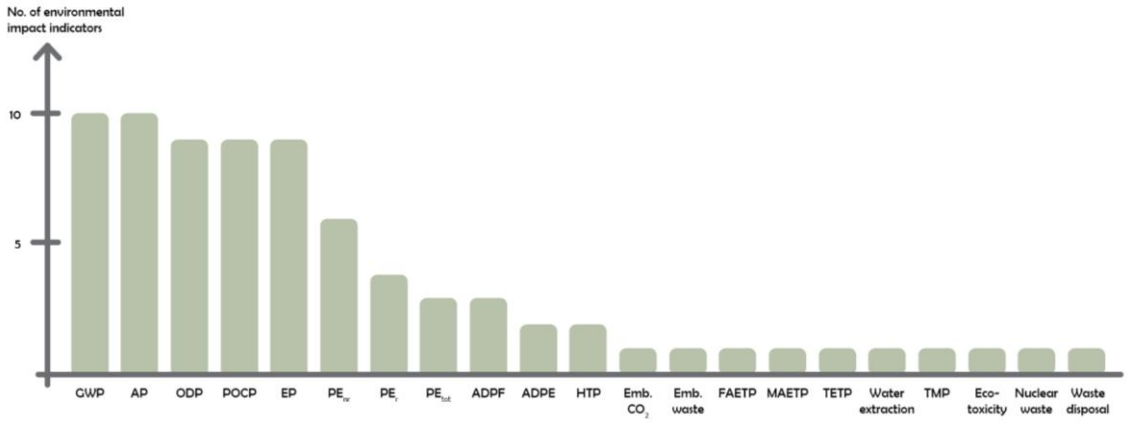


Figure 11. Prevalence of environmental indicators in existing simplification strategies

Furthermore, most models can be clearly defined as either an LCA screening or a simplified LCA according to the guidelines in the EebGuide (Wittstock et al., 2012). Only two models are flexible in their entire scope.

3.3.2 Simplification parameters

Based on the above mapping, a set of simplification parameters are identified to be tested individually on the case study. This set of parameters is perceived as very simple models, which each test a certain feature of a single simplification domain.

The parameters are derived from methodologies deployed in the identified tools along with findings and recommendations from academia, e.g. EebGuide (Wittstock et al., 2012) and (Meex et al., 2018). Figure 12 only includes parameters found in simplification tools – it is not an exhaustive list of all possible LCA parameters.

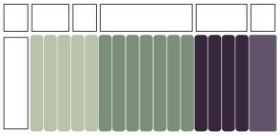
Simplification domain	Simplification strategy	Parametric study
	Reduced number of life cycle stages	1: A1-A3 2: A4 3: B1-B5 4: B6 5: C1-C4 6: D
	Reduced number of building components	7: Vertical structures 8: Horizontal structures 9: Facade 10: Foundation 11: Interior walls 12: Surface materials
	Operational energy: Performance target	13: Building class 2020 (<25 kWh/m2/year)
	Operation energy: Quasi-steady state	14: Energy certificate key figures
	Life cycle inventory: Reduce specificity	15: Change materials to generic, regional data
	Reduced environmental impact indicator	16: GWP 17: AP 18: PE_{tot} 19: EP 20: ODP 21: POCP

Figure 12. Simplification parameter extracted from existing simplification tools

The strategies are applied to the case studies using One Click LCA to keep LCI data fixed and avoid discrepancies between full LCA and simplified LCA due to different life cycle inventories.

3.3.3 Simple statistical evaluation of simplification parameters

Each of the 23 parameters are evaluated using simple statistical measures: Average and median. The average is used to represent how much impact each simplification parameter constitutes of a full LCA (for the quantifying simplification domains of time, scale and impact) across the environmental impact parameters or how well it represents a full LCA (for the qualifying simplification domain of input). The median is used to assess the distribution correspondence of each model across the environmental impact indicators.

Based on these simple measures, the models which constitutes the largest portion of a full LCA (quantifying simplification domains) or have the highest correspondence with a full LCA (qualifying simplification domains) can be chosen for further processing.

3.4 Simplified LCA study: 2nd iteration

The second iteration takes the most significant parameters of the full-framework LCA and combines them into simplification models, which are again applied to the case study.

3.4.1 Synthetization of new simplification models

The most significant parameters within each domain (time, scale, input, impact) are identified using simple, statistical measures like mean and median. These parameters are combined into simplification models using the methodology from the EeB Guideline that distinguishes between Screening and Simplified input levels on one hand, and combining these levels with either a building material-centric focus, an energy-centric focus or a combined building material and energy focus on the other hand.

The exact parameters in play for the second iteration depends on the results from the first iteration; therefore, the exact parameters will only be presented in the Results chapter below.

4 RESULTS

The results for the baseline scenario are communicated numerically with absolute numbers for environmental impact within the LCIA indicators given in One Click LCA.

The results for the parameter studies and the simplification models are communicated graphically through the full scope of LCIA indicators as given in One Click LCA (except simplification parameters 18 to 23, which investigates simplification within the Impact-domain – they are already given in One Click LCA). The graphs for the simplification parameters and the models are communicated as a relative impact based on the baseline scenario, in which all impact categories are 100%.

Parameter 16 (energy certificate instead of full-fledged energy simulation or actual energy performance extracted from the BMS) has not been investigated, as general planning practice at the time only prescribed a dynamic energy simulation for crucial rooms[1] and not the building as a whole. See Paragraph 3.2 Case study for further justification. Therefore, all calculations – including the full-framework LCA – takes the energy certificate as its baseline for input into module B6 in the LCA methodology.

4.1 Full-framework LCA

The results from the full LCA calculation are taken directly from the One Click LCA webtool, which reports GWP, AP, EP, ODP, POCP and PE_{tot}. PE_{nr} and PE_r are not explicitly stated but can be found in the Detailed Report, which can be downloaded in .xlsx-format (see full report in Appendix D). The numerical outputs are as follows in Table 9, and reflects environmental impact of the entire building:

Table 9. Results reporting: Full LCA

LCA indicator	Output
GWP	7.14E6 kg CO_2 equivalents
AP	3.06E4 kg SO_2 equivalents
EP	4.43E3 kg PO_4 equivalents
ODP	3.02E1 kg CFC11 equivalents
POCP	2.21E3 kg Ethene equivalents
PE_{tot}	1.16E8 MJ
PE_{nr}	9.09E7 MJ
PE_r	2.52E7 MJ

[1] This was related by the responsible engineer from Ramboll in an email on December 7, 2018.

One Click LCA also delivers graphical representation of the results; Pie charts describe the relative distribution of environmental impact on each life cycle stage per indicator, bar charts describe the relative environmental impact is presented for each indicator in each life cycle stage, and cumulative bar charts describe the absolute impact of each component group and each life cycle stage for individual impact categories.

However, for this study only the absolute numbers for each environmental impact indicator are relevant; the graphical representations offered by One Click LCA serves the planner with crucial information about optimization potentials – very important during the planning process, but not relevant for the current study. Therefore, this results paragraph includes only absolute numbers for each indicator.

4.2 Investigation of simplification parameters

The simplification parameters are modelled in One Click LCA, upon which the environmental impact of each indicator is calculated. These numerical results are adjusted graphically to represent the relative impact of each indicator compared to the full LCA.

4.2.1 Time domain

The first six models belong to the time domain, in which different combinations of excluded life cycle stages are investigated (see Figure 13); the results are show in Figure 14:

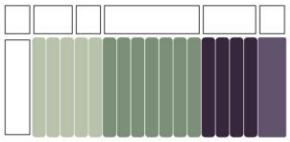
Simplification domain	Simplification strategy	Parametric study
	Reduced number of life cycle stages	1: A1-A3 2: A4 3: B1-B5 4: B6 5: C1-C4 6: D

Figure 13. Recapitulation of simplification parameters within the TIME domain

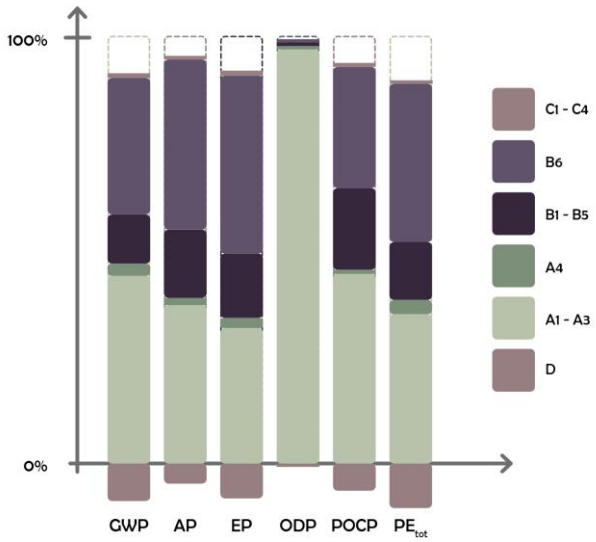


Figure 14. Simplification parameter 1: TIME domain

Figure 14 shows that the dominating life cycle stages are A1-A3 (building material extraction, transport to manufacturer and production) and B6 (environmental impact from building operation in the use phase). Life cycle stages B1-B5 (environmental impact of maintenance, repair and replacement of building materials during the use phase) and D (benefits and loads beyond the system boundary) has some significance too, whereas life cycle stages A4 (transport of building materials from manufacturer to construction site) and C1-C4 (environmental impacts of end-of-life-scenarios for building materials) have only little or no significant impact on the entire LCA profile of the building. Numerically, the relative impact of each life cycle stage on each environmental impact indicator can be found in Table 10:

Table 10. The relative impact of each life cycle stage on each impact indicator

Life cycle stage	GWP	AP	EP	ODP	POCP	PE_{nr}	PE_r	PE_{tot}
A1-A3	44%	37%	32%	99%	44%	38%	22%	35%
A4	3%	2%	2%	0%	1%	4%	1%	3%
B1-B5	12%	15%	15%	0%	19%	15%	9%	14%
B6	31%	40%	42%	1%	29%	31%	62%	37%
C1-C4	1%	1%	1%	0%	1%	1%	0%	1%
D	-9%	-5%	-8%	0%	-6%	-11%	-6%	-10%
	100 %	100%	100%	100%	100%	100%	100%	100%

Note that the results for life cycle stage D (reuse, recovery and recycling potential) has been given as a negative percentage, signifying that this life cycle stage removes environmental impact from this product system through reuse, recovery and recycling.

4.2.2 Scale domain

The scale domain investigates the importance of included and excluded building components. See Figure 15:

Simplification domain	Simplification strategy	Parametric study
	Reduced number of building components	7: Vertical structures 8: Horizontal structures 9: Facade 10: Foundation 11: Interior walls 12: Surface materials

Figure 15. Recapitulation of simplification parameters within the SCALE domain

Figure 16 shows that horizontal structures, façade and interior walls constitute the main environmental impact of the selected building components. Overall, the selected components are responsible for 30-45% of the building's entire environmental impact over its life cycle depending on indicator. Only the indicator ODP is significantly deviating from this trend.

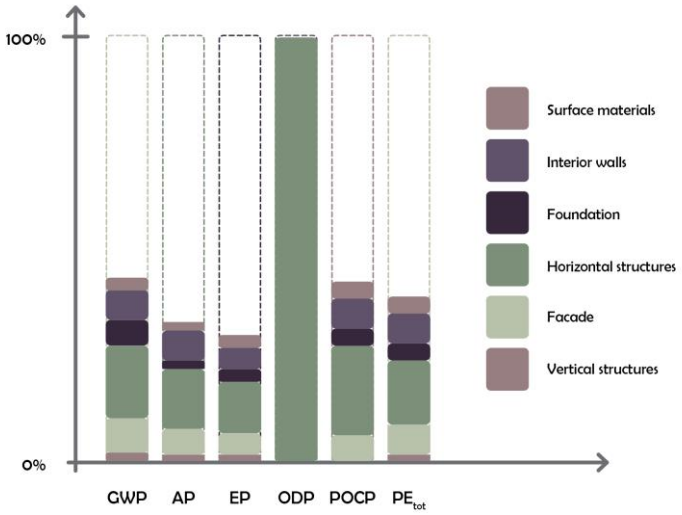


Figure 16. Simplification parameters 7 to 12 in the scale domain

The parameters unaccounted for in this parametric study is operational energy, building services and other materials.

4.2.3 Input domain

The input domain investigates the importance of the detail level of the input data. See Figure 17.

Simplification domain	Simplification strategy	Parametric study
	Operational energy: Performance target	13: Building class 2020 (<25 kWh/m2/year)
	Operation energy: Quasi-steady state	14: Energy certificate key figures
	Life cycle inventory: Reduce specificity	15: Change materials to generic, regional data

Figure 17. Recapitulation of simplification parameters within the INPUT domain

Figure 18 shows the relative environmental impact of using national performance targets for energy performance compared to the actual performance. The general correspondence is higher than 90% of that of a full LCA; only PE_{tot} is deviating slightly from this trend.

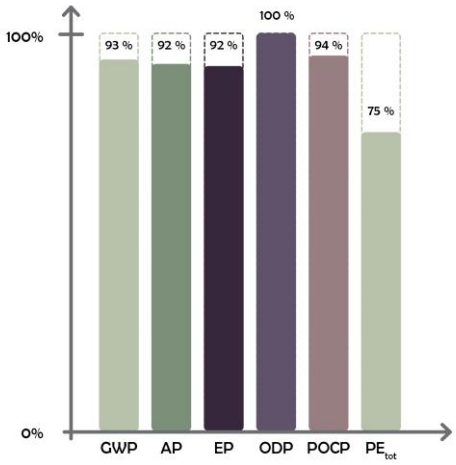


Figure 18. Simplification parameter 13: National performance targets for energy performance

Figure 19 shows the relative environmental impact of substituting precise LCI data (product-specific EPD or local generic data) with regional generic data based on regional averages. The results show that the total outputs are generally higher with regional generic datasets for LCI compared to product-specific LCI data. Especially the most frequently reported environmental indicators of GWP and PE_{tot} are significantly higher than the full LCA.

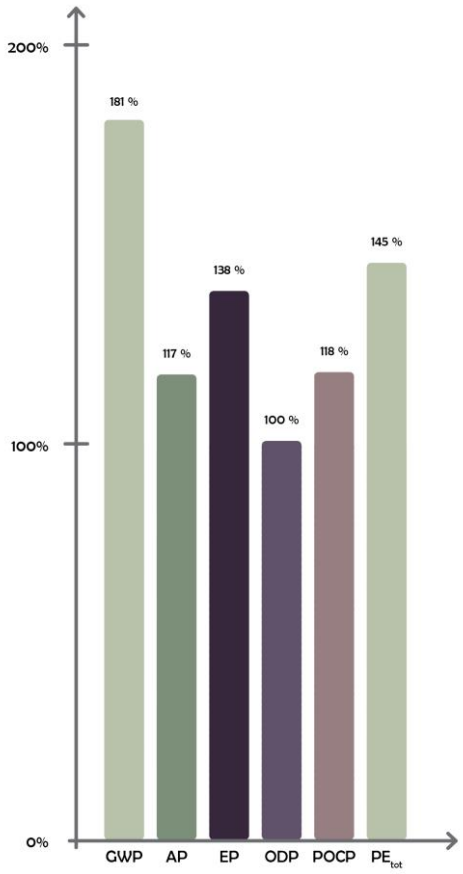


Figure 19. Simplification parameter 15: Generic LCI data

4.2.4 Impact domain

The impact domain investigates the importance of the environmental impact indicators (see Figure 20). The results here are mundane (see Figure 21), as no parameters in the calculation itself has been altered, but they have been included in this study to respect the methodology and the literature studies, upon which the methodology is based.

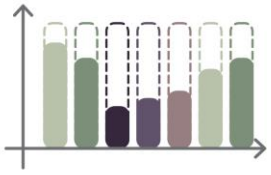
Simplification domain	Simplification strategy	Parametric study
	Reduced environmental impact indicator	16: GWP 17: AP 18: PE_{tot} 19: EP 20: ODP 21: POCP

Figure 20. Recapitulation of simplification parameter within the INPUT domain

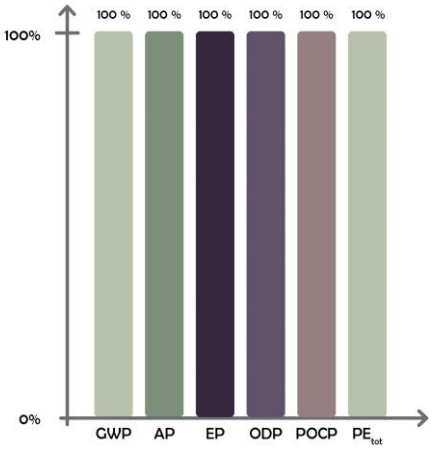


Figure 21. Simplification parameters 16 to 21 in the impact domain

From this point on, the impact domain will be discarded as a simplification domain relevant for carrying out building LCA from the perspective of a planner. In the Discussion chapter, this domain will be discussed more in depth in terms of how it may be relevant as a simplification domain for LCA.

In order to better assess how much of a full LCA the simplification parameters constitute, statistical analysis, especially sensitivity analysis is applied in the next section.

4.3 Simple statistical evaluation

To better understand the correspondence of each simplification parameter to a full LCA, the simple step of applying mean and median to each parameter across the indicators is conducted. Table 11 shows that within the time domain, the life cycle stages A1-A3, B1-B5 and B6 constitute the highest share of a full LCA profile with averages of 44%, 12% and 34%, respectively. For the scale domain, the building components with the most environmental impact across the indicators are the horizontal structure with an average of 29%, the interior walls with 6% and the façade with 5%. For the input domain, a simplified energy performance profile corresponding to the national target values reflects 82% of the full LCA profile, whereas a generic LCI reflects 134% of a full LCA.

Table 11. Mean and median for each of the first iteration simplification model.

Domain	Model	Mean	Median
Time	1: A1-A3	44%	37%
	2: A4	2%	2%
	3: B1-B5	12%	14%
	4: B6	34%	35%
	5: C1-C4	1%	1%
	6: D	-7%	-7%
Scale	7: Vertical structure	1%	1%
	8: Horizontal structure	29%	16%
	9: Façade	5%	6%
	10: Foundation	3%	3%
	11: Interior walls	6%	7%
	12: Surface materials	3%	3%
Input	13: National target	82%	92%
	14: Energy certificate	100%	100%
	15: Generic LCI	134%	133%

In general, the median is very similar to the mean, illustrating that the distribution of numbers is rather symmetrical around the mean.

4.4 Synthetization of simplification models

Based on the evaluation on the individual simplification parameters, the impact domain is discarded as meaningful simplification domain for this study: The presence of certain environmental indicators available for an LCA is dictated by the chosen tool and/or database for LCI. It makes no difference to the workflow of the LCA practitioner, whether certain indicators are included or not. Therefore, the simplification potential for a simplified LCA workflow for building design of the impact domain is deemed obsolete and will not occur in the following synthetization of simplification models.

As a result, only the time, scale and input domains are deemed relevant for a simplified methodology to assess the life cycle impact of buildings in the early design phases. Based on the results in sections 4.2 and 4.3, the following parameters are chosen for further processing: Life cycle stages A1-A3, B1-B5 and B6, national target number for energy performance as well as energy certificate and lastly, a generic LCI for building materials. For the scale domain, two different scenarios for inclusion of

selected building components are determined based on the case study and the literature review of existing simplification tool; see Table 12:

Table 12 Definition of scenarios for the scale domain

Scenario	Included building components
Light	Vertical structure – horizontal structure – façade – windows
Medium	Vertical structure – horizontal structure – façade – windows – foundation – interior walls – surface materials

If combining these parameters into models in which time, scale and input (energy performance) are mandatory simplifications, a total number of 12 models are possible. If adding the simplification parameter of generic LCI as opposed to a full LCI, the total number of models increases to 24 – see Figure 22. Even though the generic LCI overshoots the full-framework LCA with app. 30% and thus is not an optimum way to simplify building LCA, this parameter has been included in the second iteration in recognition of generic data being the reality of the early design process, where only little is known about the LCI.

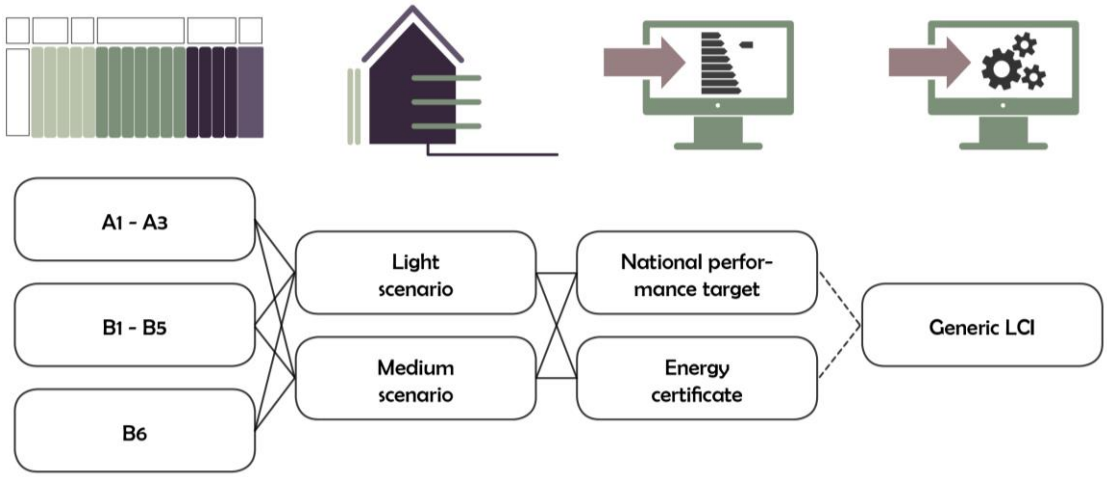


Figure 22. Combination of simplification parameters to form simplification models results in a maximum of 24 different possible models

However, not all 24 models are equally meaningful, as they combine different levels of complexity, which may not represent a realistic workflow or the increased level of knowledge and data with time and progress. Instead of testing all 24 models on the case, six different models are chosen for further testing. The guiding principle for choosing these six models is an even level of complexity for all parameters: Two different levels are applied (screening and simplified as per EeBGuide's definition), and on these two levels, three different life cycle foci are investigated: Building materials vs. energy performance vs. a combination – see Figure 23.

Model focus	Building materials	Operational energy	Building materials/ operational energy
Screening Models A – B – C	A1 - A3 Light scenario - Generic LCI	B6 Light scenario National performance target Generic LCI	A1 - A3 B6 Light scenario National performance target Generic LCI
Simplified Models D – E – F	A1 - A3 B1 - B5 Medium scenario -	B6 Medium scenario Energy certificate	A1 - A3 B1 - B5 B6 Medium scenario Energy certificate

Figure 23. The six simplification models chosen for further processing

These six simplification models are applied to the case study.

Figure 24 shows the results for the screening models: Model A – addressing cradle to gate impacts from building materials – has a mixed correspondence with a full LCA across the indicators with most indicators in the range 40-60%. Model B – addressing operational life cycle – has a rather poor correspondence with a full LCA. The combination of the two – model C shows a good correspondence across the parameters with an error margin of <30% compared to a full LCA.

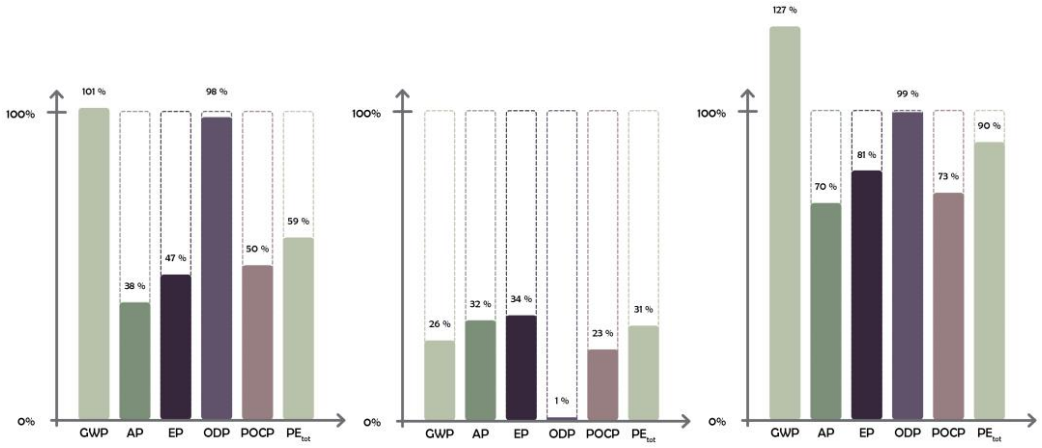


Figure 24. Screening models A (building material focus), B (operational energy focus) and C (building materials and operational energy)

The results of the simplification models are shown in Figure 25: Model D – addressing life cycle modules A1-A3 and B1-B6 – shows a correspondence of a rough 30% with a full LCA with only the indicator ODP being significantly different. Model E – addressing operational energy – has a very similar profile. Model F – combining production and maintenance of materials and operational energy – has a consistent 65-70% correspondence with a full LCA, again with ODP as only outlier.

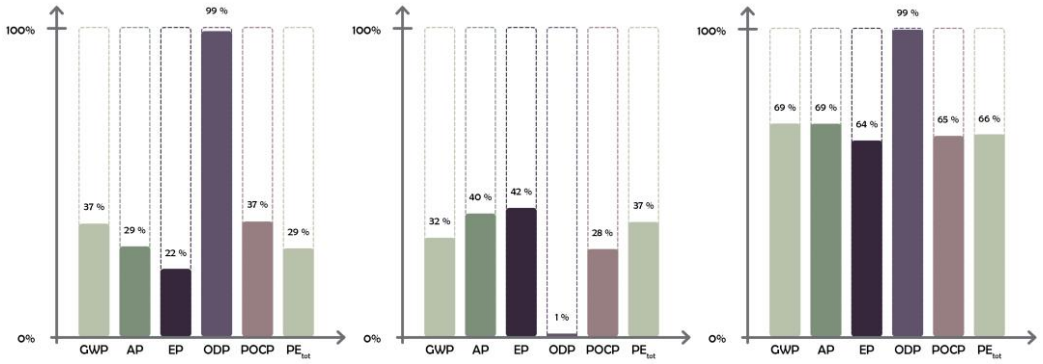


Figure 25. Simplification models D (building material focus), E (operational energy focus) and F (building materials and operational energy)

Models B and E – only addressing operational energy, but with different energy performance KPIs and product LCI – are very similar in how they reflect a full LCA across the indicators.

For models including building materials, there is a clear difference between screening models and simplification models. The main reason for the difference between screening and simplification models that involve building products can be ascribed the generic LCI for the simplified models vs. the real LCI for the screening models. However more imprecise the screening models are, screening model C performs better in terms of correspondence with a full LCA than simplification model F. Whether this is a mere coincidence or a valuable observation for future simplification models, will be discussed in the next chapter.

4.5 Sources of error

The most significant source of error is undoubtedly the correctness of LCI data: A range of installed products could not be found with product-specific data in the available databases, which is why a similar local product or generic data had to be used.

In particular, the databases available for building services were widely inadequate; almost no regional data existed, and entire components were missing from the databases. Therefore, the case study results for building services should be regarded with care. However, the results correspond with findings in other studies: (Passer et al., 2012) found that building services comprised 2-33% of environmental impacts stemming from construction products for five residential buildings, and (Chau et al.,

2007) found that building services accounted for app. 30% of total life cycle impacts for a commercial building.

Furthermore, input of distance in the transportation module A4 was carefully carried out for sake of precision, but some inputs are guesstimates, as neither the author, nor the contact person at Henning Larsen Architects were privy to all the building materials' location of origin. However, the importance of module A4 is widely questioned within the LCA community and several scholars argue that the impact from this module is negligible (Buyle et al., 2013; Marsh, 2016).

5 DISCUSSION

This study focuses on the challenges regarding simplification of life cycle analysis within the building industry. However, it is important to distinguish between the challenges of the simplifications and immanent challenges of the LCA methodology, of which scholars generally agree are quite a few (Zabalza Bribián et al., 2009; Buyle et al., 2013; Meex et al., 2018).

General problems of the LCA methodology include the lack of standardized range of impact indicators and normalization factors, the availability and uncertainty of inventory data and the requirements for experience with tools and calculations, which are still not widely spread. Table 13 shows a summary of limitations of life cycle studies as decision making support tools:

Table 13 Summary of limitations of life cycle studies as decision making support tools according to (Chau et al., 2015)

Category	Limitations
Boundary scoping	Only focuses on environmental impacts
	Some environmental qualities such as indoor air quality are not included
	Economic and social dimensions of sustainability are not included
	Environmental impacts are assumed to be constant over time
	Geographic site-specific factors are not included
Medium	Different tools may include different types of impact categories
	Different studies may adopt different normalization factor, grouping or weighting methods
	Different studies may have different assumptions on building configurations, climate conditions, etc.
	Assumptions in studies may lead to uncertainties
Methodology framework	Materials/products from different manufacturers cannot be compared
	A lack of inventories for new innovative materials
	Availability and uncertainty of inventory data can affect results
Practices	The lack of benchmarks in LCA
	Life cycle evaluations of buildings are more complicated than conventional produces
	Reluctance to move design timeline
	A lack of chain management responsibilities

A simplified LCA will by the nature of things inherit these immanent problems. It is thus important to distinguish between challenges imposed by the “mother methodology” and challenges occurring from simplification of this methodology.

An important point made in the EeBGuide is that cut-off rules should not be used to hide results (Wittstock et al., 2012); the same thing goes for a simplified LCA, which essentially is an LCA with more extensive cut-off rules than what normally applies.

The following paragraphs are each dedicated to discussing the challenges and opportunities of each of the simplification domains. Eventually, the overall potential for simplification of LCA is discussed.

5.1 Time

The study shows that the by far more important life cycle stages are A1-A3 (production of materials – 44% of a full LCA) along with B6 (operational energy – 34% of a full LCA). This picture puts the emphasis on the initial material impact, with very little contribution to overall environmental impacts from recurring impacts (12% of a full LCA) and almost no contribution from demolition impacts (-7% of a full LCA). However, this picture may be painted with a broken brush: EN 15804 (EN 2012) states that EPDs are only obligated to include A1-A3 with voluntary inclusion of remaining life cycle stages (see Figure 26). So even though the use of EPDs for life cycle analysis is highly encouraged and preferred by many tools over commercial or national material databases (e.g. Lasvaux et al., 2014; Meex et al., 2018), many recurring and demolition impacts are not accounted for in the final LCA calculation. This, however, does not show weakness in the LCA method, but in the current standard of EPDs and databases in general. Nonetheless, it highly affects the reliability of the LCA calculations and thus also the simplification results.

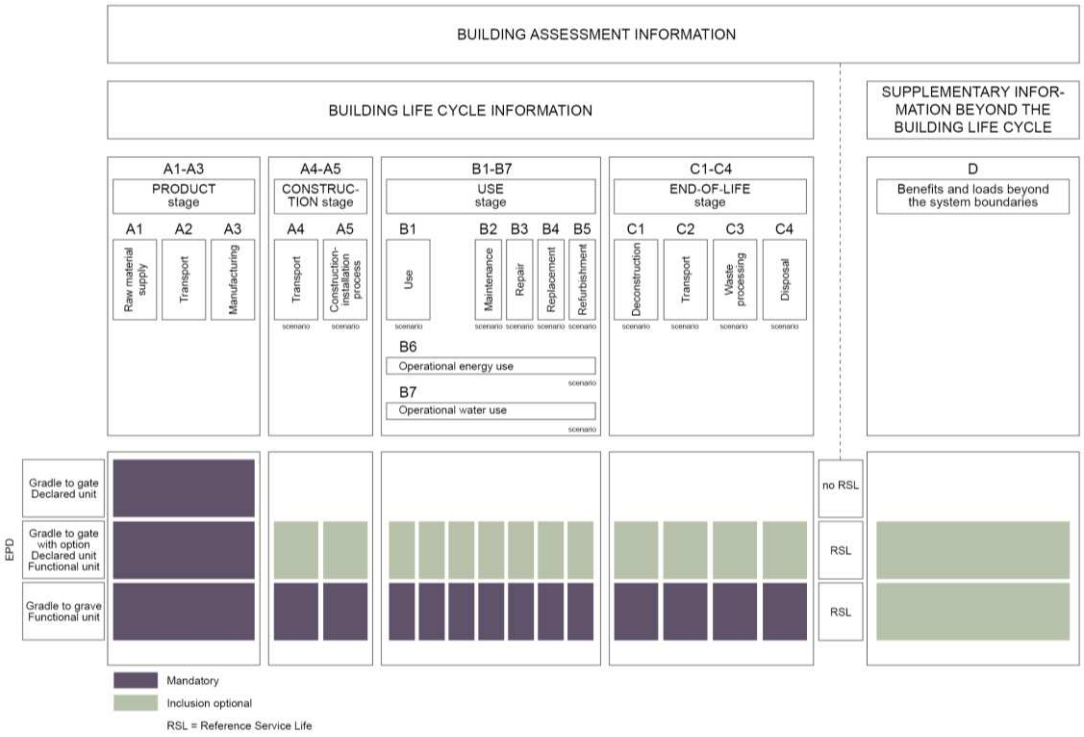


Figure 26. Life cycle stages to be included in an EPD according to EN 15 804:2012.

The combination of the case study results and EN 15804:2012 guidelines makes a case for the inclusion of A1-A3 in simplified LCA models. For this case study, life cycle stages A1-A3 constitutes around 64% of total impacts from materials (initial, recurring and demolition). This is but a black box conclusion, as it is not clear how many recurring and demolition impacts have in fact been included in the calculation. Even though all inputs can be scrutinized in One Click LCA's detailed report, it cannot be determined whether a material indeed doesn't have any recurring or demolition impacts, or if it is simply lacking information in the EPD or the database.

However, the latest amendent to EN 15804:2012 from 2018 – currently under revision and thus not fully implemented yet – fundamentally changes this premise: When this amendment becomes effective, EPDs will have to include stages C1-C4 (end of life stages) and D (benefits and loads beyond the system boundary) for all types of EPDs, and additionally B1-B7 for cradle-to-grave EPDs (see Figure 27).

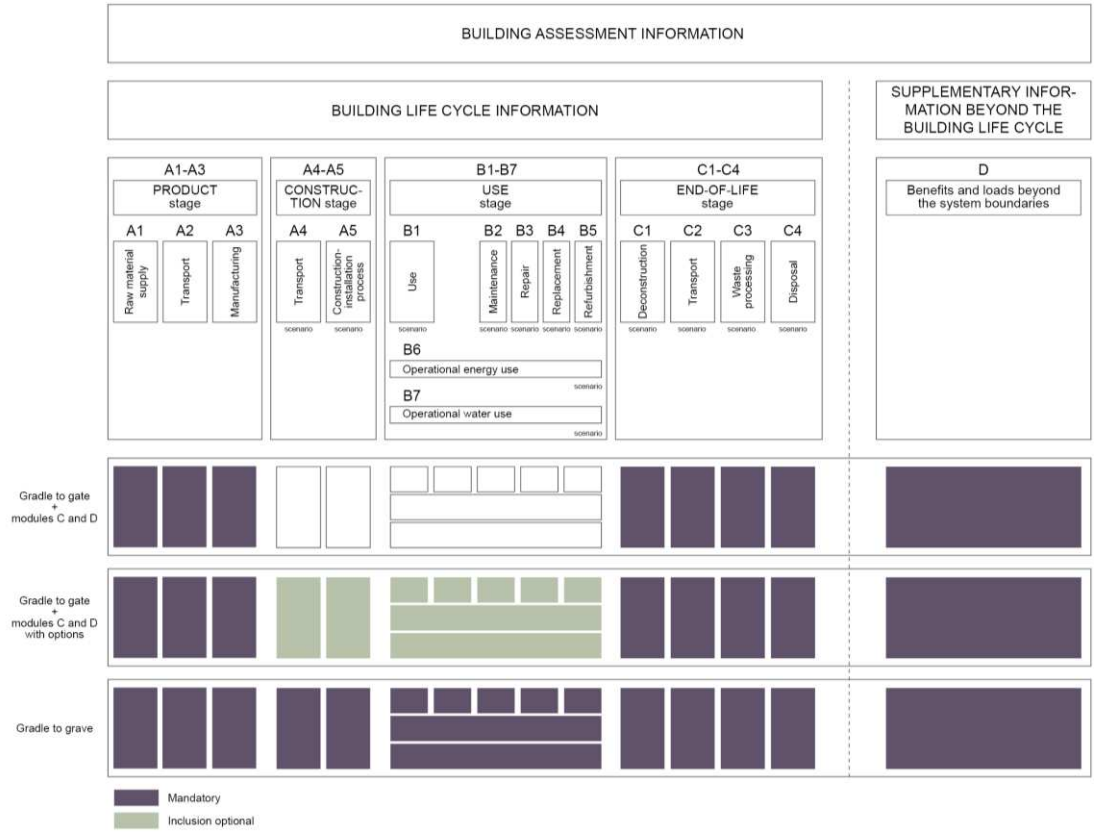


Figure 27. Life cycles stages to be included in an EPD according to EN amendment 15804:2018

This amendment is a game changer for LCA in general and simplified LCA in particular: The life cycle stages included in the simplified LCA should be revised compared to the findings in this case study. For now, the results of this study can be taken for valid, as there will likely be a transitional period from the commencement of this amendment to a full implementation due to EPDs being valid for five years before mandatory reissuance.

Life cycle stage B6 (operational energy) has been the favorite child of sustainability planners for decades as described in the Introduction; this case study showed that it remains an important aspect of LCA even for a state-of-the-art low-energy building like Middelfart City Hall with the highest possible DGNB rating. However, the trend is clear: Moving toward zero-energy buildings, embedded energy (i.e. energy relating to building materials) takes over the leading role, and eventually operational energy will be phased out, as shown on Figure 28.

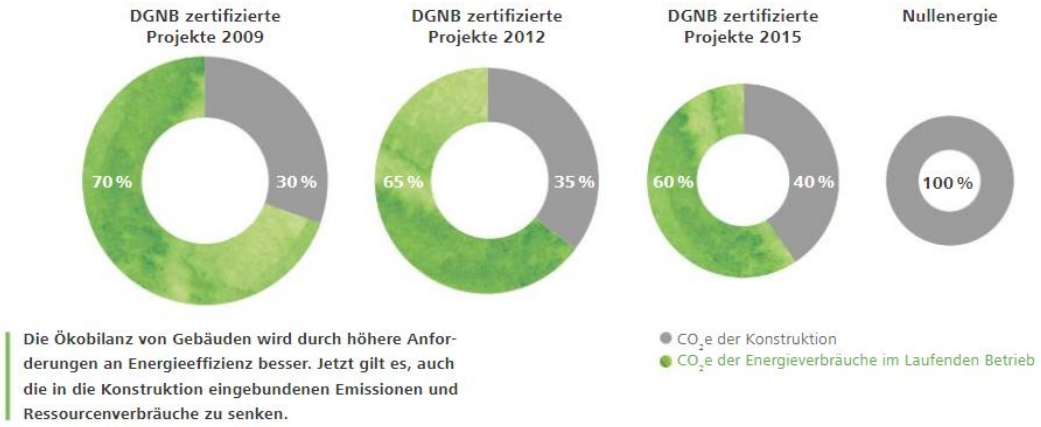


Figure 28. The relation between embedded and operational energy in DGNB-certified buildings (DGNB 2018)

For now, though, this study indicates that operational energy – with app. 34% of all environmental impacts of the building – should still be included in a simplified LCA.

Taking these observations into account, it can be concluded that if a tool like One Click LCA is used for LCA studies, no major changes in the tool are required, as the tool already includes all life cycle stages for embedded and operational energy alike. However, if dedicated simplification tools are used, the LCA practitioner needs to be even more aware of the applied cut-off rules; of the 10 simplification tools reviewed in this study, none of them includes all the life cycle stages, which will be mandatory for EPDs with EN 15804:2018. Especially a tool like the OI3 index, which only includes A1-A3, will reflect only a limited part of realistic conditions.

5.2 Scale

This simplification domain is perhaps the most interesting domain for LCA practitioners, as the most time-consuming task of carrying out an LCA is to determine the material quantities (Meex et al., 2018). This is also the domain, in which most variations in terms of simplification can be made, depending on which components are included and which are excluded from the calculation.

The distribution of impact from each group of components can be directly extracted from One Click LCA – see Figure 29.

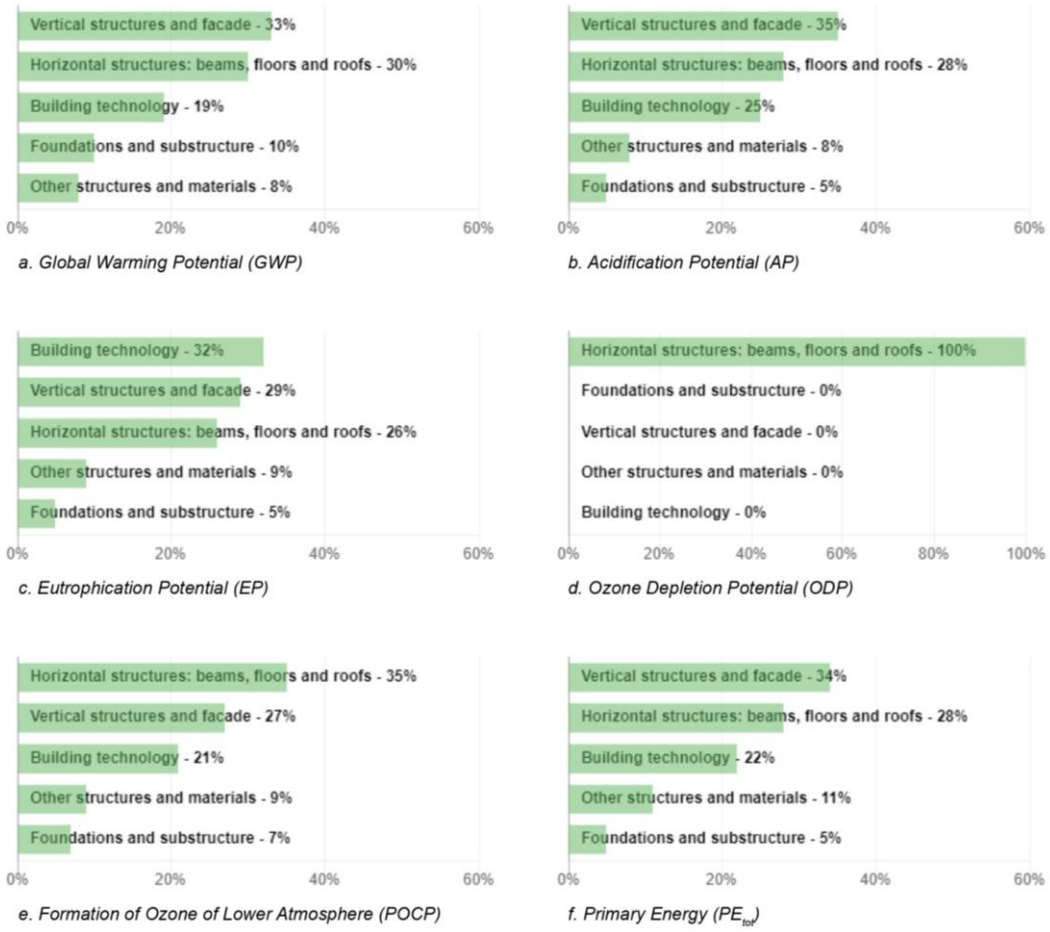


Figure 29. Graphic extracted from One Click LCA describing the buildings components with most environmental impact for each of the six indicators evaluated

The picture is very clear: Based on this case study, the building components with the most environmental impact are vertical structures and façade, horizontal structures (beams, floors and roofs) and building services. All other material groups comprise app. 10% or less of the entire environmental impacts for each indicator.

Vertical and horizontal structures is no surprise from a common-sense perspective: These are the components with the most significant volume and mass in the building.

These components are also unanimously included in all existing simplification models and tools reviewed.

Building technology, however, is the wild-card of this case study: It is a solid no. 3 in the race for most significant environmental impact of the building components and even takes the leading position for EP. This is rather unknown territory for LCA as a research field, as technical equipment is only rarely included in LCA calculations, simplified or full (Passer et al., 2012; Röck et al., 2018). For simplified LCA, it is often the consequence of early design stage lack of knowledge about technical systems. Basbagill et al. states that “the least important material decisions are related to doors,

stairs and service equipment" (Basbagill et al., 2013). The recommendation in the EeB Guide is that technical equipment be included if data is available at the European or national level, but this is only seldom the case (Chau et al., 2007); none of the reviewed simplified LCA tools included building services in the calculation, although this case study found that building services accounted for a significant part of the environmental impacts as shown in Figure 29. In the Results chapter, other studies were cited to support the range of impact of building services on the case study. These studies show that building services have a significant impact on total life cycle impacts and can only be expected to increase in the future, where zero-energy buildings call for energy-producing building components and sophisticated ventilation systems.

Also surprising is that windows are not in the top five of environmental impact. Several of the reviewed simplification tools include windows as a mandatory building component for simplification of LCA, but for this case study windows and doors comprise 0-4% for each indicator of the total environmental impact of the building over its life cycle.

On a more general level, the extraction of materials quantities may enter a new era with the emerging of solid BIM LCA tools, where a plug-in to the BIM model evaluates LCA data (like Tally or CAALA), or where quantities can be exported from a 3D model and imported into LCA tools directly like it is the case with One Click LCA. There is extensive research on the topic of BIM and LCA, which cannot even begin to be reported in this study – but the trend is clear: It is a matter of time and development before solid tools and scripts will ensure that BIM is able to convincingly carry out the tedious exercise of defining material quantities, which will save the LCA practitioner a significant amount of time (Zabalza Bribián et al., 2009; Meex et al., 2018) thus making the prospects for integrated LCA much better.

5.3 Input

The input domain suggests a reduced data complexity for energy key figures and LCI data. The case study shows that the first aspect – as illustrated in simplification parameter 9 with national target values for energy consumption – is a powerful simplification strategy, as it eliminates the building designer's requirement for a preliminary energy calculation. The results show that compared to a final energy certificate there is not much difference.

The mandatory next question is how the results of this case study compares to a dynamic energy simulation or actual performance figures measured by an onsite

BMS. This theme has been and continues to be a major research field with numerous studies establishing that dynamic simulations are superior to steady-state energy calculations as used in the generation of the energy certificate (Housez et al., 2014).

The major drawback of using a simplified energy performance profile like a national performance target is that while the energy consumption overall may be very similar between the performance target and the actual consumption, the distribution of energy sources is lost for the national performance target. This has implications for the LCA profile, if PE_r and PE_{nr} are deemed relevant for the results reporting.

The energy certificate, on the other hand, report key performance indicators for renewable and non-renewable energy consumption alike. Furthermore, it is reasonable to expect a preliminary energy certificate to be carried out early in the design process to calibrate the design in terms of energy performance. As no general conclusions could be established for this case study regarding the accuracy of an energy certificate compared to a dynamic simulation or the actual performance, this area reveals itself as a candidate for further research.

The second aspect – as illustrated in simplification parameter 15 with generic LCI instead of product-specific LCI – is a true dilemma: On one hand, it is one of the most realistic simplification scenarios in the sense that in the early design phases no specific products are known and the use of a generic LCI profile is a useful alternative for the sake of an LCA. On the other hand, based on this case study, a generic LCI results in a >30% higher environmental impact across the impact indicators. It is not necessarily the magnitude of this deviation, but rather the operational sign: It is the only simplification parameter, which *increases* the environmental impact, and if combined with other simplification parameters like Screening models A, B and C, the respective error margins end up canceling out each other, landing the screening models closer to a full LCA than the more thorough simplification models (see Figure 24 and Figure 25). While this is very convenient from a practical standpoint, it is scientifically a slippery slope.

However, generic LCI is difficult to sidestep: Often the planner is not privy to deciding or knowing exactly which building products are to be installed in the building; typically, the general contractor is responsible for sourcing building products that correspond to requirements established in the tender. Therefore, an LCA – full or simplified – carried out before the bill of quantities is finalized is subject to uncertainty.

The only sensible solution to this dilemma is the development of solid, generic LCI data sets that can support LCA in the early design phases without significantly skewing the results.

5.4 Impact

The impact domain has proven to be not as such a simplification domain as originally stated by (Mora et al., 2011) as a reporting domain. Which of the 20+ LCIA indicators should be meaningfully reported for simplified LCA in the AEC industry?

Marsh convincingly answered this question in his 2016 study, in which GWP, AP and PE_{tot} were named most significant (Marsh, 2016). Other scholars narrow the field even more, and the dominant articulation of this matter in the extensive work carried out as part of the International Energy Agency's EBC Annex 57 in the same period as Marsh's study is EE (Embodied Energy) and EG (Embodied Greenhouse gas emissions), i.e. PE_{tot} and GWP.

For building services, the most important contribution to the environmental indicators results are in the impact categories eutrophication potential (EP), acidification potential (AP), and formation potential of tropospheric ozone photochemical oxidants (POCP), mainly due to the use of primary copper (Passer et al., 2012); this speaks for a broader LCA profile than suggested by Marsh and Rasmussen et al., depending on the scope of the LCA.

However, this discussion lacks relevance as most material databases include a wide range of environmental indicators in their datasets, and it is thus a question of which of these indicators are reported by the simplification tool used. As stated in the review of existing simplification tools, most tools report 7 or 8 environmental impact indicators, allowing for a thorough investigation of different environmental impact categories.

This simplification domain would be much more interesting, if this study had taken a consequential approach that included endpoint categories: In that case political climate targets could be pursued, and findings could be used to establish a strategy for environmental impact of the built environment as a whole.

5.5 Simplification in general

A general observation is that all LCA exercises are in principle simplified: Whether it is the system boundaries, the LCI or operational energy input, there will most likely

always be missing or adapted data, intendedly or not. Absolutism has no place in the LCA research field.

For this reason, it may be helpful to draw on a terminology from the BIM world, where the concept of LOD – level of development – defines the minimum content requirements of the building components at five progressively detailed level of completeness: From LOD 100 to LOD 500 (AIA, 2013a; AIA, 2013b). Cavalliere et al. remarks that only four out of 24 BIM-based LCA studies have a defined LOD (Cavalliere et al., 2019); this remark is interesting to this thesis for two reasons:

i. The four studies with a declared LOD use either LOD 200 to support early environmental analysis or LOD 300 to support detailed analysis. In other words, the LOD 200 entails **approximate** geometry and describes the model as a **generic** system, object or assembly with approximate quantities, size, shape, location, and orientation, whereas the LOD 300 entails **precise** geometry and describes the model as a **specific** system, object, or assembly accurate in terms of quantity, size, shape, location and orientation (Natspec, 2013). This definition corresponds to that of the EebGuide, with LOD 200 corresponding to a **screening** LCA and LOD 300 corresponding to a **simplified** LCA.

ii. The remaining studies – 20 out of 24 reviewed – have no declared LOD. This brings into question, whether all building components were assessed using the same degree of detail. As Cavalliere et al. remarks, “the structure is typically defined with a higher detail in the early design stages because a structural calculation is needed, but the interior finishing is defined late. The type of paint may only be defined during the construction phase because the client has not decided before.” (Cavalliere et al., 2019). Figure 30 shows how different group of building components tend to increase in LOD at different design stages:

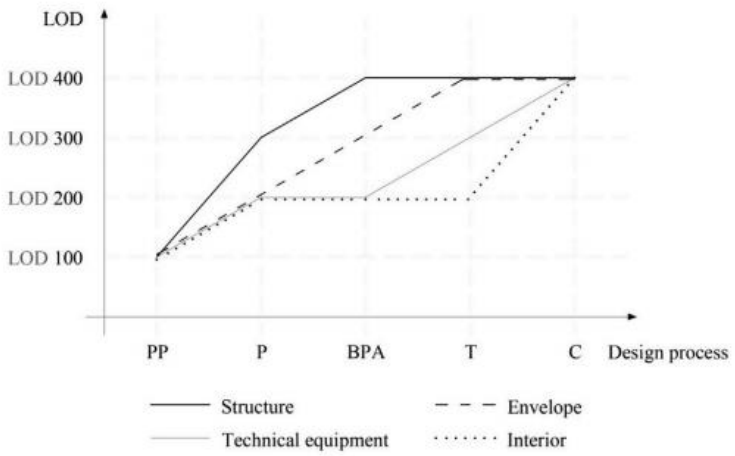


Figure 30. Design process and LODs for different construction categories. (PP) Project Planning, (P) Project, (BPA) Building Permit Application, (T) Tendering and (C) Construction. Illustration from Cavalliere et al., 2019.

The first aspect on the list above supports – if using the concept of LOD as a framework for a simplified LCA model – the definitions of the EeB Guide in terms of level of detail.

The second aspect calls for an iterative LCA modeling paradigm: For a true integrative LCA design process, the concept of LOD could be used as a framework for an iterative, simplified LCA model, which addresses increasing levels of development with increased complexity in LCA modelling. The IED design method – Integrated Energy Design – is an established design method based on an iterative process to increase the operational energy performance of a building design (Jørgensen et al., 2009) and is largely adapted by the commercial building industry. It is only fair to expect a similar iterative framework for embedded energy and greenhouse gas emissions, and the LCA methodology – with its vast opportunities for simplification – provides an excellent framework for this discourse.

However, the incentive to carry out these calculations is lacking: Meex et al. points out that a “European indicator describing the “environmental-friendliness” of a building in a single score is still missing” (Meex et al., 2018). This statement honors the European-wide energy certificate, which is universally known and uniformly communicated, albeit with different national target values and calculations of key figures. The notion of such an indicator does exist: Certification schemes like DGNB work with benchmark values for individual components, permitting a rating of each assessed component in terms of environmental performance. These benchmark values, however, are deeply buried inside DGNB-designed and maintained calculation tools and are not available to the general public.

A major European-wide initiative on the LCA scene is Level(s), a voluntary reporting framework to improve the sustainability of buildings (Dodd et al., 2019). Level(s) has six macro-objectives (see Figure 31), which can be assessed on three different levels: Common, comparative and optimized performance assessment (Dodd et al., 2019). Level(s) is currently half-way through its pilot phase, which started in April 2018, and the framework has an expected finalization in the spring of 2020.

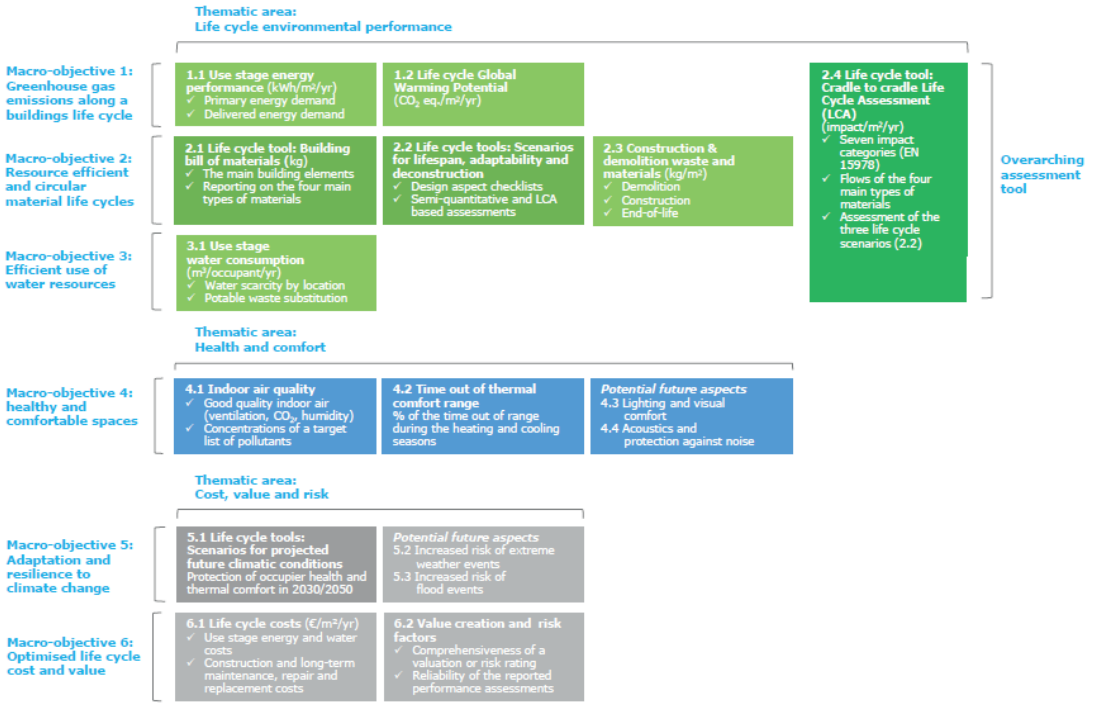


Figure 31. The six macro-objectives of the Level(s) framework (Dodd et al., 2019)

The tool does not quite promote an integrative process, but it does hint at this idea with the increasing levels of data requirements – see Figure 32.

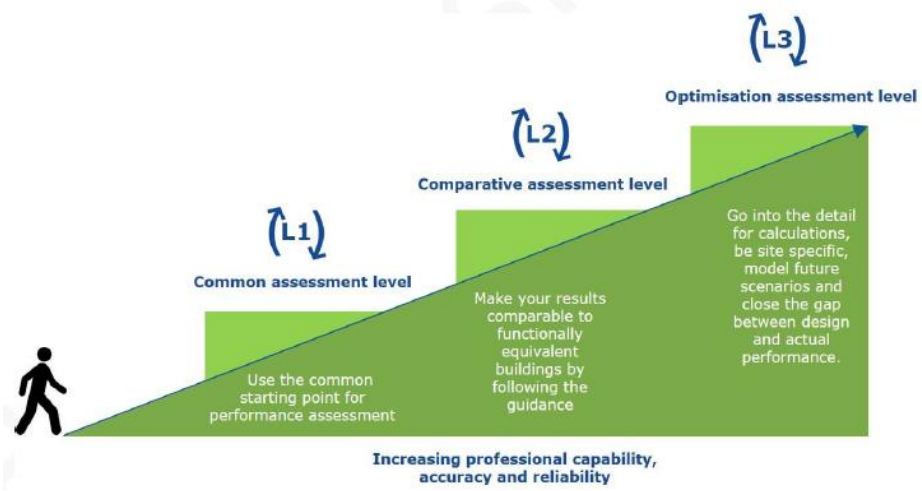


Figure 32. The three levels of performance assessment in the Level(s) tool (Dodd et al., 2019)

However, the introduction papers are not explicitly encouraging the LCA practitioner to apply all three levels to a building, as the design process progresses. The scope of Level(s) is instead broader than that of an LCA, as it includes social and economic indicators for sustainability too. Given that it operated on three different levels, it is fair to interpret Level(s) as an updated successor to the EeB Guide, pointing out new directions for simplified LCA – directions that also include social and economic aspects of sustainability in the built environment.

6 CONCLUSION

This thesis outlined the increase in academic and commercial interest for embodied energy using life cycle analysis as its framework, and the opportunities for overcoming some of the obstacles of this complex methodology by means of simplification within four different simplification domains: Time, Scale, Input and Impact.

A literature study revealed that existing simplification strategies move freely and seemingly randomly within in the four simplification domains, including and excluding certain simplification parameters without any obvious underlying logic. There were, however, similarities in which simplification parameters were including in the simplification strategies, enabling the author to detect certain trends for each simplification domain. For instance, all simplification models included life cycle stages A1-A3 (extraction and production of materials) as well as the building components external walls, roof and windows. For the Input and Impact domains, the trends were less conclusive, but almost all strategies included the impact categories global warming potential (GWP), acidification potential (AP) and primary energy (PE) with some variation of sources (renewable/non-renewable).

Based on these trends, a number of simplification parameters were selected for further investigation and individually applied to a case study. The most impactful of the parameters were combined into simplification models, using the notion of 'Screening LCA' and 'Simplified LCA' to target different levels of data requirement.

The study found that life cycle stages A1-A3 (production of building materials), B1-B5 (maintenance of building materials) and B6 (operational energy) were the most significant life cycle stages to be taken into account in the current legal framework for building product declaration. The study confirmed the load-carrying vertical and horizontal structures to be of primary significance in terms of environmental impact, but that building services – an often-neglected group of building components for LCA calculations – have a significant environmental impact. Databases used for LCI were found to severely lack data for building services, and if applying only generic LCI to the case study, it resulted in a significantly higher environmental impact than if actual materials were applied. The environmental impact indicators were found to be an irrelevant simplification domain for LCA practitioners of buildings.

Six simplification models were developed and tested on the case study, indicating a general deviation of 0-60% compared to a full LCA depending on the scope of the model and the indicator reviewed. Point forward, this thesis suggests an iterative approach to LCA for continuous validation of design choices in terms of environmental

impact. An iterative approach for LCA would benefit the designer from the first sketches, where material quantities and qualities can only be roughly estimated. The study showed that a Screening LCA holds a decent potential for representing a full LCA, however, there are significant fluctuations on certain parameters. A Simplified LCA holds a significant potential for representing a full LCA with fewer fluctuations across the parameters.

Both Screening LCA and Simplified LCA address substantial improvements of the LCA methodology for the LCA practitioner, as they reduce the manual work required by the method. However, this potential could be even greater if it was combined with BIM tools, reducing the number of tedious, time-consuming tasks and supporting the notion of an iterative LCA framework.

6.1 Further research/Outlook

While this case study did not provide an unequivocal suggestion as to the current practice of simplified LCA, it does point out some obvious potentials, which could be further developed through appropriate research scopes and ultimately refine the research field of simplified LCA. Below are a few of the most important areas, in which further research could support the issues investigated in this thesis:

- Simplified LCA calls for reliable datasets for generic LCI that may be used in the early design phases before a product-specific bill of quantities (BOQ) is established. This will significantly empower simplified LCA as a practical design decision support tool.
- More in-depth understanding of the relative impact of the embodied energy of building services on the overall LCA profile for the whole building (also supported by (Birgisdottir et al., 2017)). For instance: (Chau et al., 2007) report that building service components may account for approximately 27% of total lifecycle impacts for a commercial building, although they only accounted for less than 2% in terms of total weight. In the future this also increasingly includes energy producing features like heat pumps and photovoltaic panels, which will be the norm and often carry significant life cycle impact.
- Seeing as new construction only makes out about 1% in developed countries (Artola et al., 2016), future LCA practitioners may increasingly face projects in the retrofitting category rather than the new construction category. This shift most likely poses new challenges for the practical integration of LCA – for instance LCI data for existing building materials.

- The prospect of BIM, not only for full LCA calculations, but also for simplified LCA is of great interest: Of the research fields proposed here for further research, this last aspect seems to be the most *in vogue* in the LCA research community. It is most likely the tool with the most potential for succeeding in iterative assessments of environmental impact of buildings, as it may provide the LCA practitioner with continuous real-time life cycle assessment of a construction project during the design stage from the first sketches to finished building.
- As defined in 1.4 Scope and limitations, the concepts of life cycle cost have not been elaborated on in order to keep a clean methodological approach. However, as life cycle costs carry a heavy weight as decision tool in the practical design process – especially in the later stages, where the final bill of quantity is established – a similar study as the present, but for LCC, would be of great value to the building designer and the LCA/LCC practitioner. Several tools already include options for LCC in their LCA assessments – including One Click LCA; however, this function is not available under the student license agreement – making simplified LCC a natural next step for optimizing and qualifying simplified LCA.

6.2 Final remarks

This thesis dove deeply into the complex methodology of life cycle analysis to outline the challenges and potentials for a significant shift in data intensity required for reliable LCA calculations. Academia and industry alike are experiencing a steep learning curve with numerous initiatives on several platforms designed to empower the methodology. We have only seen the beginning of this process, and as such the uncertainty linked to the results may be off-putting for financial stakeholders in the industry and keep them from demanding LCA assessments to qualify and quantify the environmental impact of construction projects.

Ultimately, it comes down to communicating the importance of this field to financial stakeholders as well as building planners: Digital tool developers are working incessantly at making LCA tools more accessible to encourage planners to take on this field – or one may pursue the strategy of Spanish artist Lara Almacegui, who has made a career out of rendering visible the impact of buildings and building materials.

No matter the strategy chosen: Building materials and their environmental impact will only grow in importance, and as building planners we have a unique opportunity to start designing with knowledge now.

Figure 33 Lara Almacegui: „Construction Rubble of Secession's Main Hall", Vienna Secession 2010

7 INDEX

7.1 List of Figures

7.2 List of Tables

8 REFERENCES

Anand, C. K. and Amor, B. (2017) 'Recent developments, future challenges and new research directions in LCA of buildings: A critical review', *Renewable and Sustainable Energy Reviews*, pp. 408–416. doi: 10.1016/j.rser.2016.09.058.

Basbagill, J. *et al.* (2013) 'Application of life-cycle assessment to early stage building design for reduced embodied environmental impacts', *Building and Environment*, 60, pp. 81–92. doi: 10.1016/j.buildenv.2012.11.009.

Birgisdottir, H. *et al.* (2017) 'IEA EBC annex 57 "evaluation of embodied energy and CO2eqfor building construction"', *Energy and Buildings*. doi: 10.1016/j.enbuild.2017.08.030.

Bueno, C. and Fabricio, M. M. (2018) 'Comparative analysis between a complete LCA study and results from a BIM-LCA plug-in', *Automation in Construction*. doi: 10.1016/j.autcon.2018.02.028.

Buyle, M. *et al.* (2018) 'Strategies for optimizing the environmental profile of dwellings in a Belgian context: A consequential versus an attributional approach', *Journal of Cleaner Production*, 173, pp. 235–244. doi: 10.1016/j.jclepro.2016.08.114.

Buyle, M., Braet, J. and Audenaert, A. (2013) 'Life cycle assessment in the construction sector: A review', *Renewable and Sustainable Energy Reviews*, pp. 379–388. doi: 10.1016/j.rser.2013.05.001.

Chau, C. K. *et al.* (2007) 'Environmental impacts of building materials and building services components for commercial buildings in Hong Kong', *Journal of Cleaner Production*. doi: 10.1016/j.jclepro.2006.10.004.

Chau, C. K., Leung, T. M. and Ng, W. Y. (2015) 'A review on Life Cycle Assessment, Life Cycle Energy Assessment and Life Cycle Carbon Emissions Assessment on buildings', *Applied Energy*, 143, pp. 395–413. doi: 10.1016/j.apenergy.2015.01.023.

Dixit, M. K., Culp, C. H. and Fernández-Solís, J. L. (2013) 'System boundary for embodied energy in buildings: A conceptual model for definition', *Renewable and Sustainable Energy Reviews*. doi: 10.1016/j.rser.2012.12.037.

Diakoumakou, V. (2016) 'Building Related Life Cycle Assessment (LCA) Software Tools: a State of the Art Review', Master Thesis: Technical University of Vienna.

EN (2011) 'EN 15643-2:2011 - Sustainability of construction works. Assessment of building. Framework for the assessment of environmental performance', CEN:

Brussels.

EN (2012) 'EN 15804:2012 - Sustainability of construction works. Environmental product declarations. Core rules for the product category of construction products', CEN: Brussels.

EN (2011) 'EN 15978:2011 - Sustainability of construction works - Assessment of environmental performance of buildings - Calculation method', CEN: Brussels.

Gantner, J., Fawcett, W. and Ellingham, I. (2018) 'Probabilistic approaches to the measurement of embodied carbon in buildings', in *Embodied Carbon in Buildings: Measurement, Management, and Mitigation*. doi: 10.1007/978-3-319-72796-7_2.

Gervásio, H. *et al.* (2014) 'A macro-component approach for the assessment of building sustainability in early stages of design', *Building and Environment*, 73, pp. 256–270. doi: 10.1016/j.buildenv.2013.12.015.

Habert, G. *et al.* (2012) 'Reducing environmental impact by increasing the strength of concrete: Quantification of the improvement to concrete bridges', *Journal of Cleaner Production*. doi: 10.1016/j.jclepro.2012.05.028.

Hollberg, A. and Ruth, J. (2016) 'LCA in architectural design—a parametric approach', *International Journal of Life Cycle Assessment*, 21(7), pp. 943–960. doi: 10.1007/s11367-016-1065-1.

Housez, P. P., Pont, U. and Mahdavi, A. (2014) 'A comparison of projected and actual energy performance of buildings after thermal retrofit measures', in *Journal of Building Physics*. doi: 10.1177/1744259114532611.

ILCD (2010) *International Reference Life Cycle Data System (ILCD) Handbook: Analysing of existing Environmental Impact Assessment methodologies for use in Life Cycle Assessment*, *European Commission*. https://eplca.jrc.ec.europa.eu/ilcdHandbook.html. Accessed 20.05.2020.

ISO (International Standards Organization) (2006) 'Iso 14040', *Euro code SS-EN-1191-2*, 1997(148902). doi: 10.1109/IEEESTD.2007.4288250.

ISO (International Standards Organization) (2006) 'ISO 14044 - Environmental management — Life cycle assessment — Requirements and guidelines', *International Standard*, 2006(7), pp. 652–668. doi: 10.1007/s11367-011-0297-3.

Kellenberger, D. and Althaus, H. J. (2009) 'Relevance of simplifications in LCA of building components', *Building and Environment*, 44(4), pp. 818–825. doi: 10.1016/j.buildenv.2008.06.002.

de Klijn-Chevalerias, M. and Javed, S. (2017) 'The Dutch approach for assessing and reducing environmental impacts of building materials', *Building and Environment*, 111, pp. 147–159. doi: 10.1016/j.buildenv.2016.11.003.

Kreiner, H., Passer, A. and Wallbaum, H. (2015) 'A new systemic approach to improve the sustainability performance of office buildings in the early design stage', *Energy and Buildings*, 109, pp. 385–396. doi: 10.1016/j.enbuild.2015.09.040.

Lasvaux, S. *et al.* (2014) 'Influence of simplification of life cycle inventories on the accuracy of impact assessment: Application to construction products', *Journal of Cleaner Production*, 79, pp. 142–151. doi: 10.1016/j.jclepro.2014.06.003.

Lasvaux, S. *et al.* (2015) 'Comparison of generic and product-specific Life Cycle Assessment databases: application to construction materials used in building LCA studies', *International Journal of Life Cycle Assessment*, 20(11), pp. 1473–1490. doi: 10.1007/s11367-015-0938-z.

Lewandowska, A. *et al.* (2015) 'Between full LCA and energy certification methodology - A comparison of six methodological variants of buildings environmental assessment', *International Journal of Life Cycle Assessment*, 20(1), pp. 9–22. doi: 10.1007/s11367-014-0805-3.

Marjaba, G. E. and Chidiac, S. E. (2016) 'Sustainability and resiliency metrics for buildings - Critical review', *Building and Environment*. doi: 10.1016/j.buildenv.2016.03.002.

Marsh, R. (2016) 'LCA profiles for building components: strategies for the early design process', *Building Research & Information*, 44(4), pp. 358–375. doi: 10.1080/09613218.2016.1102013.

Marsh, R. (2017) 'Building lifespan: effect on the environmental impact of building components in a Danish perspective', *Architectural Engineering and Design Management*, 13(2). doi: 10.1080/17452007.2016.1205471.

Meex, E. *et al.* (2018) 'Requirements for applying LCA-based environmental impact assessment tools in the early stages of building design', *Building and Environment*, 133, pp. 228–236. doi: 10.1016/j.buildenv.2018.02.016.

Mendoza Beltran, M. A. *et al.* (2018) 'Uncertainty analysis in embodied carbon assessments: What are the implications of its omission?', in *Embodied Carbon in Buildings: Measurement, Management, and Mitigation*. doi: 10.1007/978-3-319-72796-7_1.

Mora, R., Bitsuamlak, G. and Horvat, M. (2011) 'Integrated life-cycle design of building enclosures', *Building and Environment*, 46(7), pp. 1469–1479. doi: 10.1016/j.buildenv.2011.01.018.

Ortiz, O., Castells, F. and Sonnemann, G. (2009) 'Sustainability in the construction industry: A review of recent developments based on LCA', *Construction and Building Materials*, pp. 28–39. doi: 10.1016/j.conbuildmat.2007.11.012.

Passer, A., Kreiner, H. and Maydl, P. (2012) 'Assessment of the environmental performance of buildings: A critical evaluation of the influence of technical building equipment on residential buildings', *The International Journal of Life Cycle Assessment*, 17(9), pp. 1116–1130. doi: 10.1007/s11367-012-0435-6.

Rasmussen, F. N. *et al.* (2018) 'Analysing methodological choices in calculations of embodied energy and GHG emissions from buildings', *Energy and Buildings*. doi: 10.1016/j.enbuild.2017.11.013.

Röck, M. *et al.* (2018) 'LCA and BIM: Visualization of environmental potentials in building construction at early design stages', *Building and Environment*. doi: 10.1016/j.buildenv.2018.05.006.

Rossello-Batle, B. *et al.* (2014) 'Saving potential for embodied energy and CO2 emissions from building elements: A case study', *Journal of Building Physics*, 39(3), pp. 261–284. doi: 10.1177/1744259114543982.

Russell-Smith, S. V. *et al.* (2015) 'Impact of progressive sustainable target value assessment on building design decisions', *Building and Environment*, 85, pp. 52–60. doi: 10.1016/j.buildenv.2014.11.011.

Schlueter, A. and Thesseling, F. (2009) 'Building information model based energy/exergy performance assessment in early design stages', *Automation in Construction*, 18(2), pp. 153–163. doi: 10.1016/j.autcon.2008.07.003.

Sharma, A. *et al.* (2011) 'Life cycle assessment of buildings: A review', *Renewable and Sustainable Energy Reviews*, 15(1), pp. 871–875. doi: 10.1016/j.rser.2010.09.008.

Soust-Verdaguer, B., Llatas, C. and García-Martínez, A. (2016) 'Simplification in life cycle assessment of single-family houses: A review of recent developments', *Building and Environment*. doi: 10.1016/j.buildenv.2016.04.014.

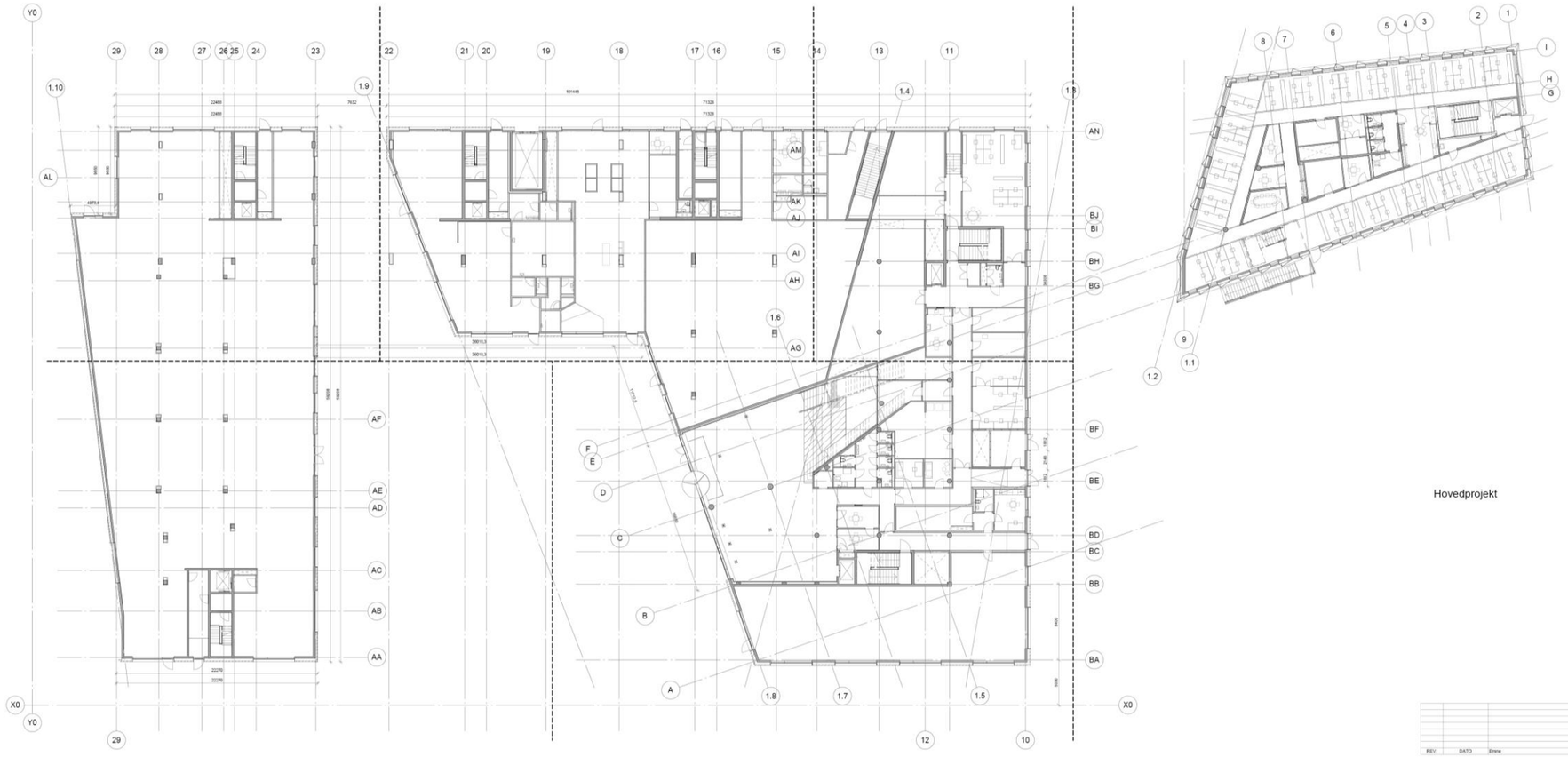
Wittstock, B. *et al.* (2012) 'EeBGuide Guidance Document Part B: BUILDINGS ', *Operational guidance for life cycle assessment studies of the Energy-Efficient*

Buildings Initiative, pp. 1–360. Available at: http://www.eebguide.eu/

Zabalza Bribián, I., Aranda Usón, A. and Scarpellini, S. (2009) 'Life cycle assessment in buildings: State-of-the-art and simplified LCA methodology as a complement for building certification', *Building and Environment*, 44(12), pp. 2510–2520. doi: 10.1016/j.buildenv.2009.05.001.

9 APPENDIX

A. Case study – Plans



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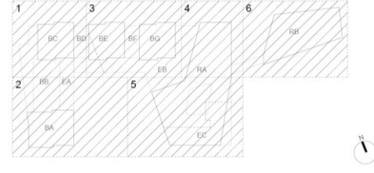

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○ BYGHERRE	Kulturarena Brammer A/S, Havnegade 21, DK-5500 Middelfart	TLF:	+45 6620 8403	FAX:	-
○ BYGHERRE	Hexagon Ejendomme A/S, Albanigade 44, DK-5000 Odense C	TLF:	-	FAX:	-
● ARKITEKT	Henning Larsen Architects, Vesterbrogade 76, DK-1620 København V	TLF:	+45 8233 3000	FAX:	+45 8233 3099
○ LANDSKABSARKITEKT	LIW stønning ApS, Vesterbrogade 95 C, 3 sal, DK-1620 København V	TLF:	+45 2810 6489	FAX:	-
○ INGENIØR	Rambøll Danmark A/S, Englandsgade 25, DK-5000 Odense C	TLF:	+45 5161 1000	FAX:	-
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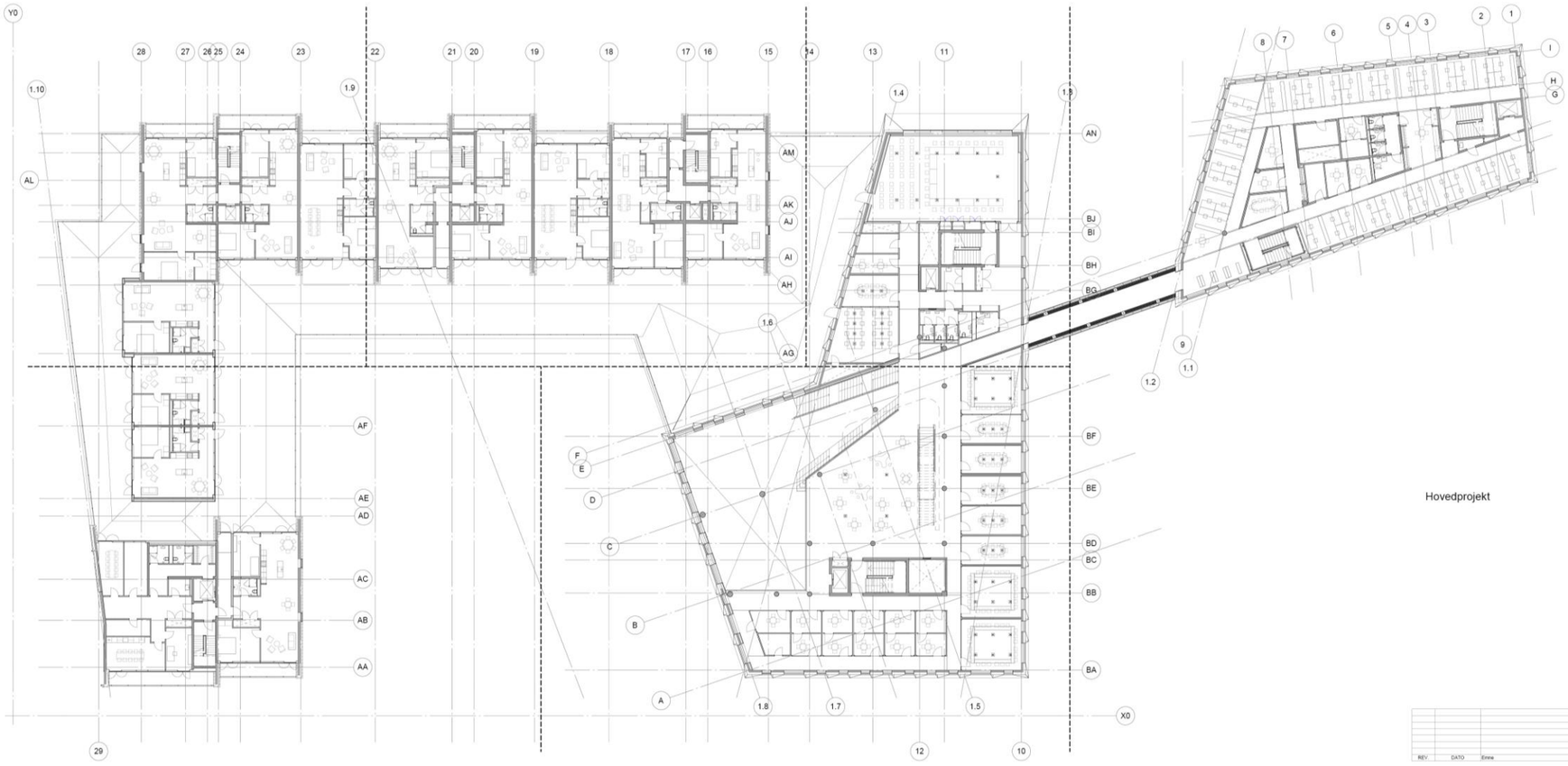

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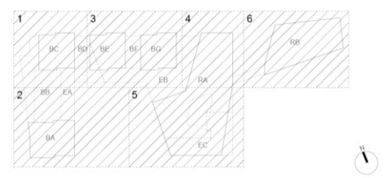

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○ BYGHERRE	:	Kulturarena Bycenter A/S, Hannegade 21, DK-5500 Middelfart	TLF:	+45 6828 8403	FAX: -
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○ INGENIØR	:	Rambøll Danmark A/S, Englandsgade 25, DK-5000 Odense C	TLF:	+45 5161 1000	FAX: -
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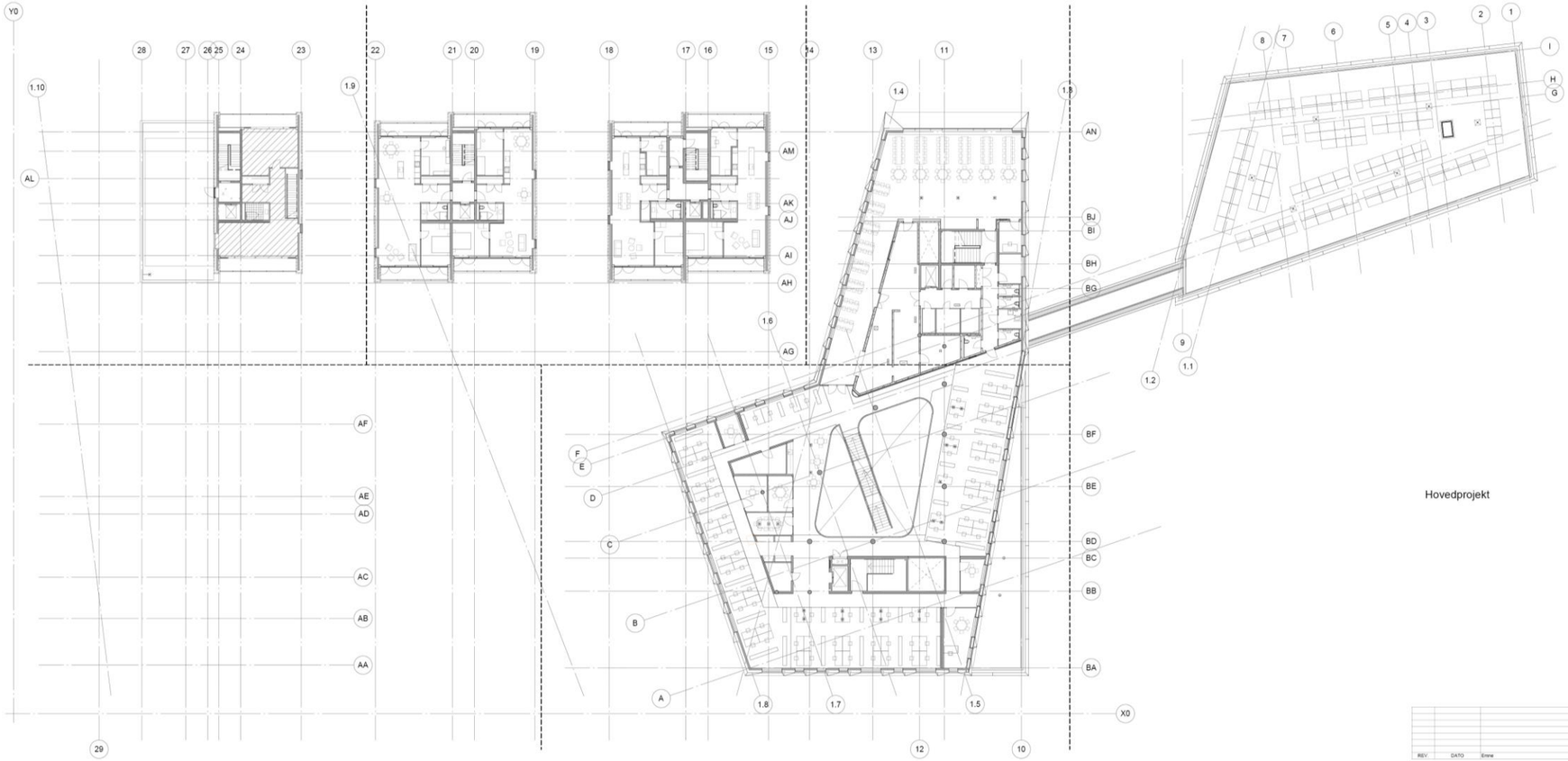

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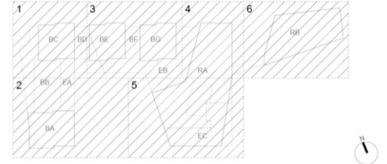

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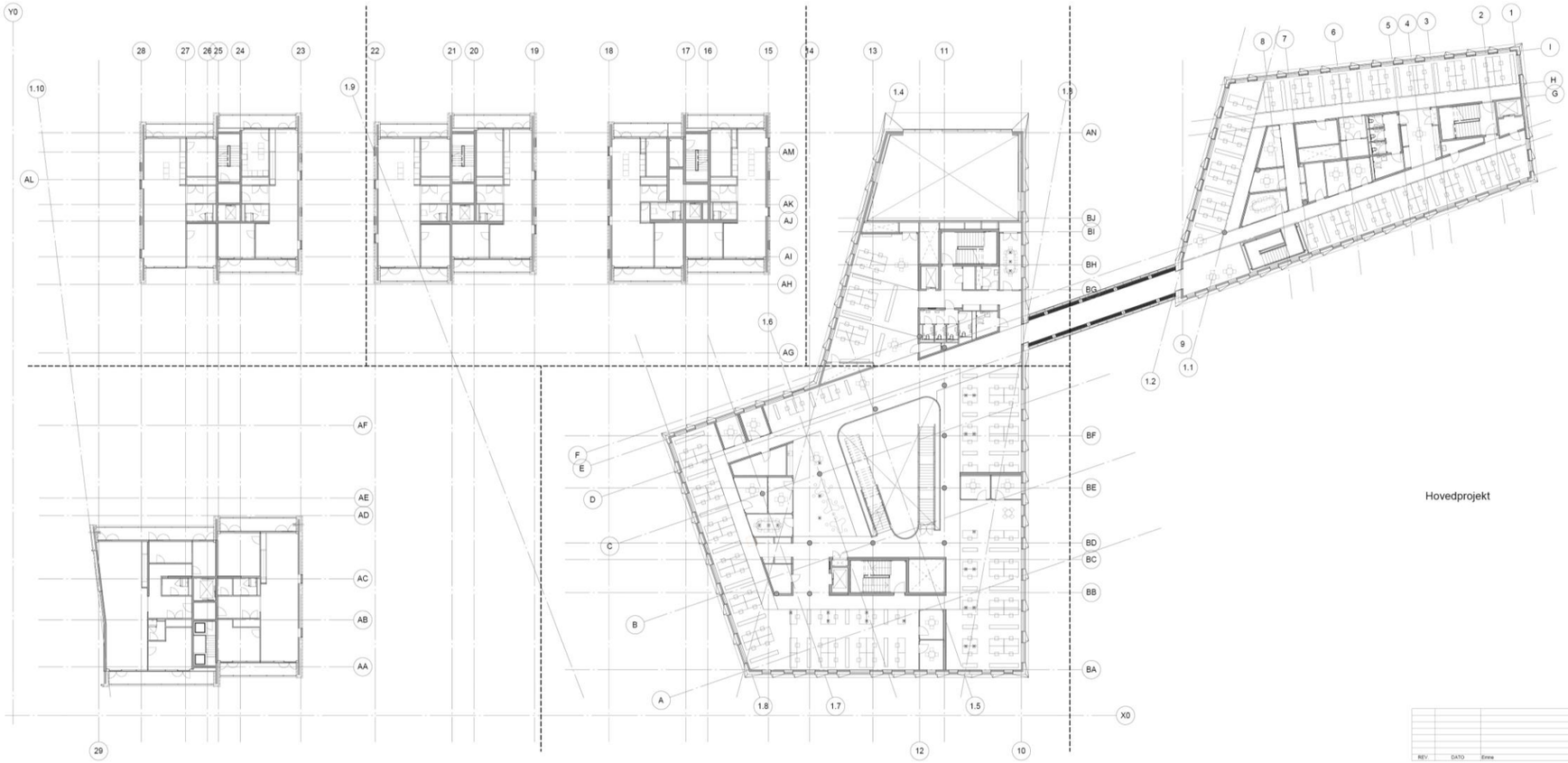

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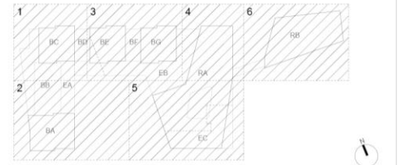

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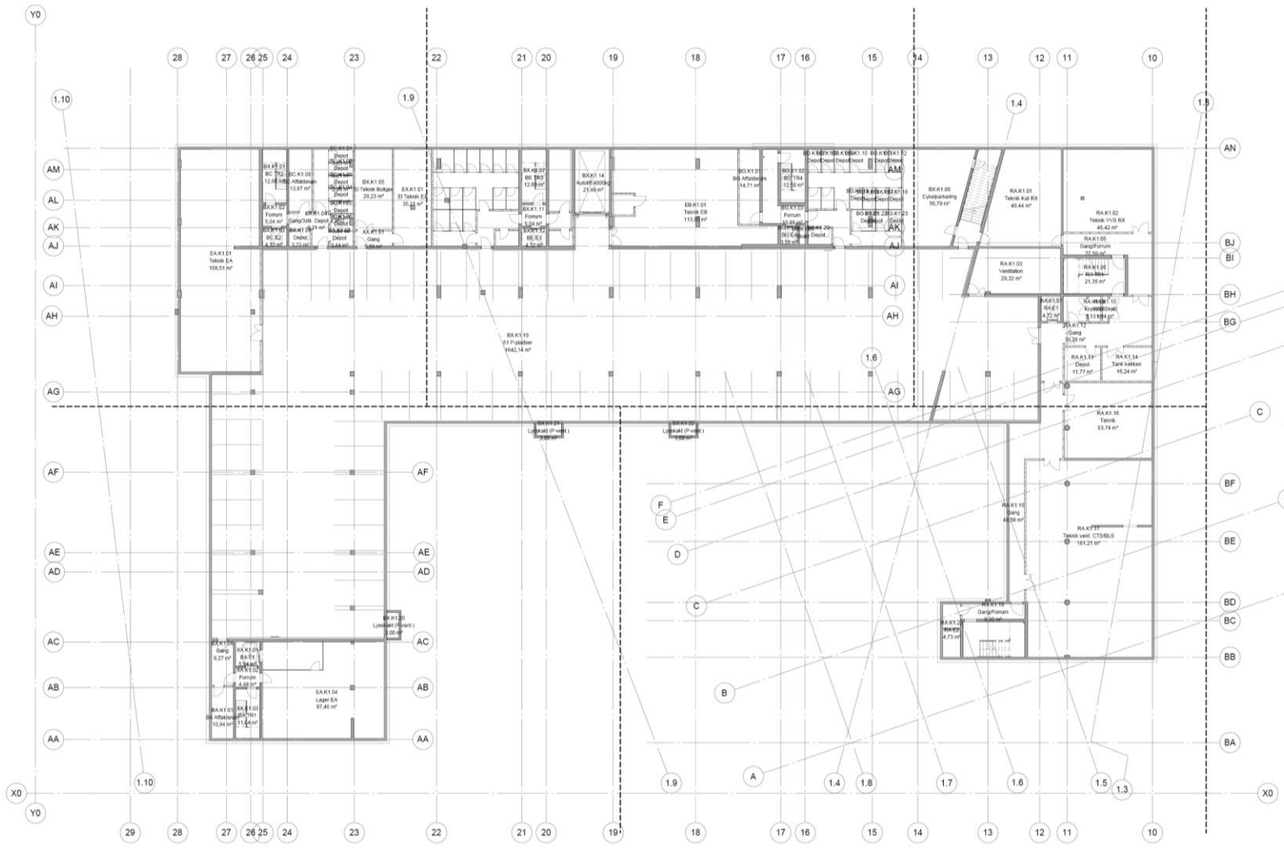

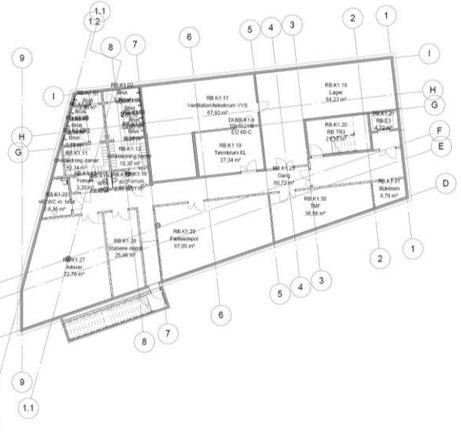

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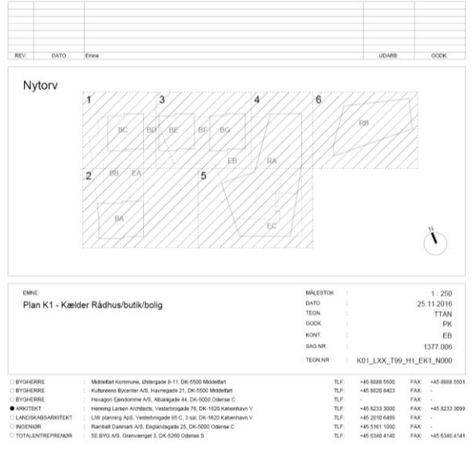

B. Case study – List of building components

MIDDELFART RÅDHUS - BUILDING COMPONENTS

Dette faneblad indeholder de bygningsdele som indgår i bygningen.

Her kan du definere de bygningsdele som indgår i bygningen

Sfb	Unikt navn [NAVN]	Areal [m²]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m³]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Fundamenter (12)	Rådhus Sokkeldetalje II, rådhus øst	92.24	Anodisering aluminium	0.000	0.0			0.02	1.35	kg/m2	124.5	124.5	kg
Fundamenter (12)	Rådhus Sokkeldetalje II, rådhus øst	92.24	Aluminiumsplader	0.002	0.0			0.18	2600	kg/m3	479.6	0.2	m3
Fundamenter (12)	Rådhus Sokkeldetalje II, rådhus øst	115.30	Mineraluld facade	0.127	0.0			14.64	46	kg/m3	673.6	14.6	m3
Fundamenter (12)	Rådhus Sokkeldetalje II, rådhus øst	149.89	EPDM Membran		0.0			0.00	2	kg/m2	299.8	149.9	m2
Fundamenter (12)	Rådhus Sokkeldetalje II, rådhus øst	115.30	EPS	0.400	0.0			46.12	30	kg/m3	1383.6	46.1	m3
Fundamenter (12)	Rådhus, Sokkel, modul AN	33.48	Murpap		0.0			0.00	5	kg/m2	167.4	33.5	m2
Fundamenter (12)	Rådhus, Sokkel, modul AN	55.80	Cement spartel /afretning	0.006	0.0			0.33	1900	kg/m3	636.1	636.1	kg
Fundamenter (12)	Rådhus, Sokkel, modul AN	55.80	Letklinker, LECA	0.084	0.0			4.69	400	kg/m3	1874.9	4.7	m3
Fundamenter (12)	Rådhus, Sokkel, modul AN	33.48	Murpap		0.0			0.00	5	kg/m2	167.4	33.5	m2
Fundamenter (12)	Rådhus, Sokkel, modul AN	33.81	Mineraluld facade	0.190	0.0			6.42	46	kg/m3	295.5	6.4	m3
Fundamenter (12)	Rådhus, Sokkel, modul AN	55.80	Cement spartel /afretning	0.006	0.0			0.33	1900	kg/m3	636.1	636.1	kg
Fundamenter (12)	Rådhus, Sokkel, modul AN	55.80	Letklinker, LECA	0.084	0.0			4.69	400	kg/m3	1874.9	4.7	m3
Tage, komplettering (37)	Rådhus, etage 1, dør, udgang til taghave,	9.60	dampspærre		0.0			0.00	0.08	kg/m2	0.8	9.6	m2
Tage, komplettering (37)	Rådhus, etage 1, dør, udgang til taghave,	24.00	stål	0.015	0.0			0.36	7850	kg/m3	2826.0	2826.0	kg
Tage, komplettering (37)	Rådhus, etage 1, dør, udgang til taghave,	21.60	beton	0.080	0.0			1.73	2300	kg/m3	3974.4	1.7	m3
Tage, komplettering (37)	Rådhus, etage 1, dør, udgang til taghave,	21.60	eps	0.020	0.0			0.43	30	kg/m3	13.0	0.4	m3
Tage, komplettering (37)	Rådhus, etage 1, dør, udgang til taghave,	43.20	EPDM membran	0.000	0.0			0.00	2	kg/m2	86.4	43.2	m2
Tage, komplettering (37)	Rådhus, etage 1, dør, udgang til taghave,	31.20	Letklinker, LECA	0.150	0.0			4.68	400	kg/m3	1872.0	4.7	m3
Tage, komplettering (37)	Rådhus, etage 1, dør, udgang til taghave,	48.00	xps	0.285	0.0			13.66	32	kg/m3	437.0	437.0	kg
Fundamenter (12)	Rådhus, indgangsfacade, sokkel, 12,5m	1.00	Mineraluld facade	0.056	0.0			0.06	46	kg/m3	2.6	0.1	m3
Fundamenter (12)	Rådhus, indgangsfacade, sokkel, 12,5m	1.25	Anodisering aluminium	0.000	0.0			0.00	1.35	kg/m2	1.7	1.7	kg
Fundamenter (12)	Rådhus, indgangsfacade, sokkel, 12,5m	1.25	aluminiumsplader	0.002	0.0			0.00	2600	kg/m3	6.5	0.0	m3
Fundamenter (12)	Rådhus, indgangsfacade, sokkel, 12,5m	13.75	EPDM membran		0.0			0.00	2	kg/m2	27.5	13.8	m2
Fundamenter (12)	Rådhus, indgangsfacade, sokkel, 12,5m	12.50	PIR/PUR isolering	0.054		20.9	20.9	0.68	35	kg/m3	23.6	0.7	m3
Fundamenter (12)	Rådhus, indgangsfacade, sokkel, 12,5m, k	1.00	aluminiumsplader	0.006	0.0			0.01	2600	kg/m3	15.6	0.0	m3
Fundamenter (12)	Rådhus, indgangsfacade, sokkel, 12,5m, k	10.00	xps	0.250	0.0			2.50	32	kg/m3	80.0	80.0	kg
Fundamenter (12)	Rådhus, overgang murværk/alufacade, 5!	11.00	stål	0.005	0.0			0.06	7850	kg/m3	431.8	431.8	kg
Fundamenter (12)	Rådhus, overgang murværk/alufacade, 5!	5.50	Anodisering aluminium	0.000	0.0			0.00	1.35	kg/m2	7.4	7.4	kg
Fundamenter (12)	Rådhus, overgang murværk/alufacade, 5!	5.50	aluminiumsplader	0.002	0.0			0.01	2600	kg/m3	28.6	0.0	m3
Fundamenter (12)	Rådhus, overgang murværk/alufacade, 5!	38.50	murpap		0.0			0.00	5	kg/m2	192.5	38.5	m2
Fundamenter (12)	Rådhus, overgang murværk/alufacade, 5!	16.50	stål	0.001		129.5		0.02	7850	kg/m3	129.5	129.5	kg
Tage, komplettering (37)	Rådhus plan 3, terrasse, murkrone, 41m	16.40	aluminiumsplader	0.002	0.0			0.03	2600	kg/m3	85.3	0.0	m3
Fundamenter (12)	Rådhus plan 3, terrasse, murkrone, 41m	16.40	Anodisering aluminium	0.000	0.0			0.00	1.35	kg/m2	22.1	22.1	kg
Tage, komplettering (37)	Rådhus plan 3, terrasse, murkrone, 41m	12.30	EPDM membran		0.0			0.00	2	kg/m2	24.6	12.3	m2
Tage, komplettering (37)	Rådhus plan 3, terrasse, murkrone, 41m	14.35	Letklinker, LECA	0.150	0.0			2.15	400	kg/m3	861.0	2.2	m3

MIDDELFART RÅDHUS - BUILDING COMPONENTS

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Sfb	Unikt navn [NAVN]	Areal [m²]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m³]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Tage, komplettering (37)	Rådhus plan 3, terrasse, murkrone, 41m	14.35	PIR/PUR isolering	0.050		22.2	22.2	0.72	35	kg/m3	25.1	0.7	m3
Fundamenter (12)	Rådhus, plan 3, terrasse, langs bygning, 3	28.70	Alucobond 4mm					0.00	7.04	kg/m2	202.0	28.7	m2
Fundamenter (12)	Rådhus, plan 3, terrasse, langs bygning, 3	20.50	EPDM membran					0.00	2	kg/m2	41.0	20.5	m2
Tage, komplettering (37)	Rådhus, murkrone, 283m	198.00	Mineraluld facade	0.250	0.0			49.50	46	kg/m3	2277.0	49.5	m3
Tage, komplettering (37)	Rådhus, murkrone, 283m	169.80	Anodisering aluminium	0.000	0.0			0.03	1.35	kg/m2	229.2	229.2	kg
Tage, komplettering (37)	Rådhus, murkrone, 283m	169.80	aluminiumsplader	0.002	0.0			0.34	2600	kg/m3	883.0	0.3	m3
Tage, komplettering (37)	Rådhus, murkrone, 283m	169.80	EPDM membran		0.0			0.00	2	kg/m2	339.6	169.8	m2
Tage, komplettering (37)	Rådhus, murkrone, 283m	198.10	PIR/PUR isolering	0.095		583.4	583.4	18.82	35	kg/m3	658.7	18.8	m3
Tage, komplettering (37)	Rådhus, murkrone, 283m	198.10	Letklinker, LECA	0.150	0.0			29.72	400	kg/m3	11886.0	29.7	m3
Fundamenter (12)	12.1 stribefundamenter,punktfundament	946.10	Beton C35/45	1.000	0.0	0.0		946.10	2365	kg/m3	2237526.5	946.1	m3
Fundamenter (12)	12.1 stribefundamenter,punktfundament	946.10	Armeringsstål i beton	1.000	0.0			946.10	47.8	kg/m3	45223.6	45223.6	kg
Fundamenter (12)	12.1 Isolering på 2 elavtorgruber	22.41	XPS	0.250	0.0			5.60	32	kg/m3	179.3	179.3	kg
Fundamenter (12)	12.1 pladefundamenter og bundplade	551.40	Beton C35/45	1.000	0.0	0.0		551.40	2365	kg/m3	1304061.0	551.4	m3
Fundamenter (12)	12.1 pladefundamenter og bundplade	551.40	Armeringsstål i beton	1.000	0.0			551.40	47.8	kg/m3	26356.9	26356.9	kg
	ING: "Ingen isolering på pladefundamenter og bundplade"												
Terrændæk (13)	13.1 Terrændæk (gulvplade i kælder)	141.80	Beton C35/45	1.000	0.0	0.0		141.80	2365	kg/m3	335357.0	141.8	m3
Terrændæk (13)	13.1 Terrændæk (gulvplade i kælder)	141.80	Armeringsstål i beton	1.000	0.0			141.80	47.8	kg/m3	6778.0	6778.0	kg
Terrændæk (13)	13.1 Terrændæk isolering	1338.30	XPS	0.075	0.0			100.37	32	kg/m3	3211.9	3211.9	kg
Terrændæk (13)	13.1 Terrændæk dræn lag	1338.30	Leca nødder	0.125	0.0			167.29	215	kg/m3	35966.8	35966.8	kg
Terrændæk (13)	13.2 Terrændæk	81.30	Beton C35/45	1.000	0.0	0.0		81.30	2365	kg/m3	192274.5	81.3	m3
Terrændæk (13)	13.2 Terrændæk	81.30	Armeringsstål i beton	1.000	0.0			81.30	47.8	kg/m3	3886.1	3886.1	kg
Terrændæk (13)	13.2 Terrændæk	677.50	XPS	0.300	0.0			203.25	32	kg/m3	6504.0	6504.0	kg
Ydervægge (21)	21.1 Ydervægge element 200	73.82	3eton - 18cm væg element, 30kg stål	0.200	0.0	0.0		14.76	432	kg/m2	31888.1	73.8	m2
Ydervægge (21)	21.1 Ydervægge element 250	1295.48	3eton - 18cm væg element, 30kg stål	0.250	0.0	0.0		323.87	432	kg/m2	559647.4	1295.5	m2
Ydervægge (21)	21.1 Ydervægge element 300	7.23	3eton - 18cm væg element, 30kg stål	0.300	0.0	0.0		2.17	432	kg/m2	3123.8	7.2	m2
Ydervægge (21)	Isolering på kældervægge Rådhus Vest	588.78	XPS	0.250	0.0	0.0		147.20	32	kg/m3	4710.3	4710.3	kg
Ydervægge (21)	Isolering på kældervægge Rådhus Øst	440.00	XPS	0.250	0.0	0.0		110.00	32	kg/m3	3520.0	3520.0	kg
Ydervægge (21)	21.3 Ydervægge element 150	159.33	3eton - 15cm væg element, 10kg stål	0.150	0.0	0.0		23.90	360	kg/m2	57358.8	159.3	m2
Ydervægge (21)	21.3 Ydervægge element 180	228.67	3eton - 15cm væg element, 10kg stål	0.180	0.0	0.0		41.16	360	kg/m2	82321.9	228.7	m2
Ydervægge (21)	21.3 Ydervægge element 200	1739.37	3eton - 18cm væg element, 30kg stål	0.200	0.0	0.0		347.87	432	kg/m2	751407.8	1739.4	m2
Ydervægge (21)	21.3 Ydervægge element 250	724.48	3eton - 18cm væg element, 30kg stål	0.250	0.0	0.0		181.12	432	kg/m2	312976.2	724.5	m2
Ydervægge (21)	21.3 Ydervægge element 300	179.81	3eton - 18cm væg element, 30kg stål	0.300	0.0	0.0		53.94	432	kg/m2	77677.4	179.8	m2

MIDDELFART RÅDHUS - BUILDING COMPONENTS

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Sfb	Unikt navn [NAVN]	Areal [m²]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m³]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Ydervægge, komplettering (31)	Alufacade	3392.00	Alucobond 4mm					0.00	7.04	kg/m2	23879.7	3392.0	m2
Ydervægge, komplettering (31)	Total elementfacade inkl glas	3494.00	Stållægter 95mm, c/c 525 facade				4592	0.00	1	kg	4592.1	4592.1	kg
Ydervægge, komplettering (31)	Total elementfacade inkl glas	3494.00	Stållægter 200mm, c/c 1575 facade				2884	0.00	1	kg	2883.9	2883.9	kg
Ydervægge, komplettering (31)	Total elementfacade inkl glas	3494.00	Stållægter 45mm c/c 3150 facade				632	0.00	1	kg	632.2	632.2	kg
Ydervægge, komplettering (31)	Total elementfacade inkl glas	1230.00	Letklinkerblokke	0.200				246.00	500	kg/m3	123000.0	246.0	m3
Ydervægge, komplettering (31)	Total elementfacade ex glas	1230.00	Mineraluld facade	0.200				246.00	46	kg/m3	11316.0	246.0	m3
Ydervægge, komplettering (31)	Total elementfacade ex glas	2460.00	Mineraluld facade	0.200				492.00	46	kg/m3	22632.0	492.0	m3
Ydervægge, komplettering (31)	gips under vinduer	327.20	Gipsplade 13mm					0.00	10	kg/m2	3272.0	327.2	m2
Ydervægge, komplettering (31)	gips under vinduer	327.20	Gipsplade 13mm					0.00	10	kg/m2	3272.0	327.2	m2
Ydervægge, komplettering (31)	Vinduesrammer i alu facade lm		Ramme (alu)		2211.0			0.00	1.43	kg/m	3161.7	2211.0	m
Ydervægge, komplettering (31)	Vindueskarm	163.60	krydsfiner EU	0.020				3.27	491	kg/m3	1606.6	3.3	m3
Ydervægge, komplettering (31)	træpanel bag alufacade	234.00	krydsfiner EU	0.020				4.68	491	kg/m3	2297.9	4.7	m3
Ydervægge, komplettering (31)	lysning og adaptering	1549.80	Gipsplade 13mm					0.00	10	kg/m2	15498.0	1549.8	m2
Ydervægge, komplettering (31)	lysning og adaptering	1549.80	Gipsplade 13mm					0.00	10	kg/m2	15498.0	1549.8	m2
Ydervægge, komplettering (31)	vinduesglas	1033.91	Glas 1 lag					0.00	10	kg/m2	10339.1	1033.9	m2
Ydervægge, komplettering (31)	vinduesglas	1033.91	Glas 2 lag					0.00	20	kg/m2	20678.2	1033.9	m2
Ydervægge, komplettering (31)	dampspærrer	780.95	Dampspærre					0.00	0.08	kg/m2	62.5	781.0	m2
Ydervægge, komplettering (31)	Solafskærmningsdug	850.00	Solafskærmning					0.00	0.4	kg/m2	340.0	850.0	m2
Ydervægge, komplettering (31)	Mørklægning	248.00	Solafskærmning					0.00	0.4	kg/m2	99.2	248.0	m2
Ydervægge, komplettering (31)	FP01 - Exterior - 46/235mm - thermal	73.43	Glas 1 lag					0.00	10	kg/m2	734.3	73.43	m2
Ydervægge, komplettering (31)	FP01 - Exterior - 46/235mm - thermal	73.43	Glas 2 lag					0.00	20	kg/m2	1468.6	73.43	m2
Ydervægge, komplettering (31)	FP01 - indgangsfacade - lodrette sprosser	0.00	Ramme (alu)		37.4			0.00	1.43	kg/m	53.5	37.4	m
Ydervægge, komplettering (31)	FP01 - indgangsfacade - vandrette sprosse	0.00	Ramme (alu)		16.8			0.00	1.43	kg/m	24.0	16.8	m
Ydervægge, komplettering (31)	FP01 - indgangsfacade - ramme	0.00	Ramme (alu)		42.2			0.00	1.43	kg/m	60.3	42.2	m
Ydervægge, komplettering (31)	FP01 - Exterior - 46/250mm - thermal	128.00	Glas 1 lag					0.00	10	kg/m2	1280	128	m2
Ydervægge, komplettering (31)	FP01 - Exterior - 46/250mm - thermal	128.00	Glas 2 lag					0.00	20	kg/m2	2560	128	m2
Ydervægge, komplettering (31)	FP01 - byrådssal - lodrette sprosser	0.00	Ramme (alu)		75.6			0.00	1.43	kg/m	108.1	75.6	m
Ydervægge, komplettering (31)	FP01 - byrådssal - vandrette sprosser	0.00	Ramme (alu)		35.7			0.00	1.43	kg/m	51.1	35.7	m
Ydervægge, komplettering (31)	FP01 - byrådssal - ramme	0.00	Ramme (alu)		45.4			0.00	1.43	kg/m	64.9	45.4	m
Ydervægge, komplettering (31)	FP01 - Exterior - 46/200mm - thermal	248.00	Glas 1 lag					0.00	10	kg/m2	2480	248	m2
Ydervægge, komplettering (31)	FP01 - Exterior - 46/200mm - thermal	248.00	Glas 2 lag					0.00	20	kg/m2	4960	248	m2
Ydervægge, komplettering (31)	FP01 - gangbro - lodrette sprosser	0.00	Ramme (alu)		236.8			0.00	1.43	kg/m	338.6	236.8	m
Ydervægge, komplettering (31)	FP01 - gangbro - vandrette sprosser	0.00	Ramme (alu)		66.8			0.00	1.43	kg/m	95.5	66.8	m
Ydervægge, komplettering (31)	FP01 - gangbro - ramme	0.00	Ramme (alu)		96.4			0.00	1.43	kg/m	137.9	96.4	m
Ydervægge, komplettering (31)	LVR01 - Gangbro alu	75.80	Mineraluld facade	0.200	0.0	0.0		15.16	46	kg/m3	697.4	15.2	m3
Ydervægge, komplettering (31)	LVR01 - Gangbro alu	75.80	Alucobond 4mm		0.0	0.0		0.00	7.04	kg/m2	533.6	75.8	m2
Ydervægge, komplettering (31)	LVR01 - Gangbro - bunden	57.75	Mineraluld facade	0.200	0.0	0.0		11.55	46	kg/m3	531.3	11.6	m3
Ydervægge, komplettering (31)	LVR01 - Gangbro - bunden	57.75	Alucobond 4mm		0.0	0.0		0.00	7.04	kg/m2	406.6	57.8	m2
Ydervægge, komplettering (31)	EWR01 - 360mm (250mm stenuld, ark)	228.13	Mineraluld facade	0.250				57.03	46	kg/m3	2623.5	57.0	m3
Ydervægge, komplettering (31)	EWR01 - 360mm (250mm stenuld, ark)	177.00	Teglsten, 1800	0.108				19.12	1800	kg/m3	34408.8	34408.8	kg
Ydervægge, komplettering (31)	EWR01 - 360mm (250mm stenuld, ark)	228.13	MØRTEL			14372.0		0.00	63	kg/m2	14372.2	14372.2	kg
Ydervægge, komplettering (31)	EWR01 - 360mm (250mm stenuld, ark)	48.39	Glas 1 lag	0.100				4.84	10	kg/m2	483.9	48.4	m2
Ydervægge, komplettering (31)	EWR01 - 360mm (250mm stenuld, ark)	48.39	Glas 2 lag	0.100				4.84	20	kg/m2	967.8	48.4	m2
Ydervægge, komplettering (31)	Vinduesrammer i murstens facade lm		Ramme (alu)		74.6			0.00	1.43	kg/m	106.7	74.6	m

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Sfb	Unikt navn [NAVN]	Areal [m²]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m³]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Indervægge (22)	22.1 Indervægge 200	472.86	3eton - 18cm væg element, 30kg stål	0.200	0.0	0.0		94.57	432	kg/m2	204275.5	472.9	m2
Indervægge (22)	22.1 Indervægge 250	306.36	3eton - 18cm væg element, 30kg stål	0.250	0.0	0.0		76.59	432	kg/m2	132345.8	306.4	m2
Indervægge (22)	22.1 Indervægge 300	951.18	3eton - 18cm væg element, 30kg stål	0.300	0.0	0.0		285.35	432	kg/m2	410909.8	951.2	m2
Indervægge (22)	22.2 Indervægge 200	1133.87	3eton - 18cm væg element, 30kg stål	0.200	0.0	0.0		226.77	432	kg/m2	489829.7	1133.9	m2
Indervægge (22)	22.2 Indervægge 250	895.16	3eton - 18cm væg element, 30kg stål	0.250	0.0	0.0		223.79	432	kg/m2	386709.1	895.2	m2
Indervægge (22)	22.2 Indervægge 300	121.18	3eton - 18cm væg element, 30kg stål	0.300	0.0	0.0		36.35	432	kg/m2	52349.8	121.2	m2
Indervægge (22)	25.1 Søjler	288.78	Beton - færdig søjler	0.196	288.8			56.70	372	kg/m	107426.2	107426.2	kg
Indvendige vægoverflader (42)	VR01 - Forsatsvæg - 50mm	243.49	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	32.4	32.4	kg
Indvendige vægoverflader (42)	VR01 - Forsatsvæg - 50mm	243.49	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	32.4	32.4	kg
Indervægge, komplettering (32)	VR01 - Forsatsvæg - 50mm	243.49	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	2434.9	243.5	m2
Indervægge, komplettering (32)	VR01 - Forsatsvæg - 50mm	243.49	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	2434.9	243.5	m2
Indervægge, komplettering (32)	VR01 - Forsatsvæg - 50mm	243.49	Stållægter 25mm Z		0.0	0.0	302	0.00	1	kg	302.5	302.5	kg
Indvendige vægoverflader (42)	VR03 - Forsatsvæg - 70mm	267.58	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	35.6	35.6	kg
Indvendige vægoverflader (42)	VR03 - Forsatsvæg - 70mm	267.58	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	35.6	35.6	kg
Indervægge, komplettering (32)	VR03 - Forsatsvæg - 70mm	267.58	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	2675.8	267.6	m2
Indervægge, komplettering (32)	VR03 - Forsatsvæg - 70mm	267.58	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	2675.8	267.6	m2
Indervægge, komplettering (32)	VR03 - Forsatsvæg - 70mm	267.58	Stållægter 45mm		0.0	0.0	332	0.00	1	kg	332.4	332.4	kg
Indervægge, komplettering (32)	VR03 - Forsatsvæg - 70mm	267.58	Mineraluld indvendig	0.045	0.0	0.0		12.04	26	kg/m3	313.1	12.0	m3
Indvendige vægoverflader (42)	VR04 - Forsats-/akustikvæg - 70mm	8.57	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.1	1.1	kg
Indvendige vægoverflader (42)	VR04 - Forsats-/akustikvæg - 70mm	8.57	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.1	1.1	kg
Indervægge, komplettering (32)	VR04 - Forsats-/akustikvæg - 70mm	8.57	Perforeret gipsplade		0.0	0.0		0.00	8.5	kg/m2	72.8	8.6	m2
Indervægge, komplettering (32)	VR04 - Forsats-/akustikvæg - 70mm	8.57	Stållægter 45mm c/c 300		0.0	0.0	19	0.00	1	kg	18.8	18.8	kg
Indervægge, komplettering (32)	VR04 - Forsats-/akustikvæg - 70mm	8.57	Mineraluld indvendig	0.045	0.0	0.0		0.39	26	kg/m3	10.0	0.4	m3
Indvendige vægoverflader (42)	VR06 - Forsats-/akustikvæg - 95-200mm	370.45	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	49.3	49.3	kg
Indvendige vægoverflader (42)	VR06 - Forsats-/akustikvæg - 95-200mm	370.45	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	49.3	49.3	kg
Indervægge, komplettering (32)	VR06 - Forsats-/akustikvæg - 95-200mm	370.45	Perforeret gipsplade		0.0	0.0		0.00	8.5	kg/m2	3148.8	370.5	m2
Indervægge, komplettering (32)	VR06 - Forsats-/akustikvæg - 95-200mm	370.45	Stållægter 45mm c/c 300		0.0	0.0	812	0.00	1	kg	812.1	812.1	kg
Indervægge, komplettering (32)	VR06 - Forsats-/akustikvæg - 95-200mm	370.45	Mineraluld indvendig	0.070	0.0	0.0		25.93	26	kg/m3	674.2	25.9	m3
Indvendige vægoverflader (42)	VR06 - Forsats-/akustikvæg - 95-200mm (	28.47	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	3.8	3.8	kg
Indvendige vægoverflader (42)	VR06 - Forsats-/akustikvæg - 95-200mm (	28.47	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	3.8	3.8	kg
Indervægge, komplettering (32)	VR06 - Forsats-/akustikvæg - 95-200mm (	28.47	Perforeret gipsplade		0.0	0.0		0.00	8.5	kg/m2	242.0	28.5	m2
Indervægge, komplettering (32)	VR06 - Forsats-/akustikvæg - 95-200mm (	28.47	Stållægter 45mm c/c 300		0.0	0.0	62	0.00	1	kg	62.4	62.4	kg
Indervægge, komplettering (32)	VR06 - Forsats-/akustikvæg - 95-200mm (	28.47	Mineraluld indvendig	0.070	0.0	0.0		1.99	26	kg/m3	51.8	2.0	m3
Indvendige vægoverflader (42)	VR06 - Forsats-/akustikvæg - 95-200mm (	161.70	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	21.5	21.5	kg
Indvendige vægoverflader (42)	VR06 - Forsats-/akustikvæg - 95-200mm (	161.70	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	21.5	21.5	kg

MIDDELFART RÅDHUS - BUILDING COMPONENTS

Dette faneblad indeholder de bygningsdele som indgår i bygningen.

Her kan du definere de bygningsdele som indgår i bygningen

Sfb	Unikt navn [NAVN]	Areal [m²]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m³]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Indervægge, komplettering (32)	VR06 - Forsats-/akustikvæg - 95-200mm (	161.70	Perforeret gipsplade		0.0	0.0		0.00	8.5	kg/m2	1374.5	161.7	m2
Indervægge, komplettering (32)	VR06 - Forsats-/akustikvæg - 95-200mm (	161.70	Stållægter 45mm c/c 300		0.0	0.0	354	0.00	1	kg	354.5	354.5	kg
Indervægge, komplettering (32)	VR06 - Forsats-/akustikvæg - 95-200mm (	161.70	Mineraluld indvendig	0.070	0.0	0.0		11.32	26	kg/m3	294.3	11.3	m3
Indvendige vægoverflader (42)	VR07 - Forsatsvæg - 95mm	103.46	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	13.8	13.8	kg
Indvendige vægoverflader (42)	VR07 - Forsatsvæg - 95mm	103.46	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	13.8	13.8	kg
Indervægge, komplettering (32)	VR07 - Forsatsvæg - 95mm	103.46	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1034.6	103.5	m2
Indervægge, komplettering (32)	VR07 - Forsatsvæg - 95mm	103.46	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1034.6	103.5	m2
Indervægge, komplettering (32)	VR07 - Forsatsvæg - 95mm	103.46	Stållægter 70mm c/c 450		0.0	0.0	167	0.00	1	kg	167.0	167.0	kg
Indvendige vægoverflader (42)	VR08 - Forsats-/akustikvæg - 95mm	913.86	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	121.5	121.5	kg
Indvendige vægoverflader (42)	VR08 - Forsats-/akustikvæg - 95mm	913.86	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	121.5	121.5	kg
Indervægge, komplettering (32)	VR08 - Forsats-/akustikvæg - 95mm	913.86	Perforeret gipsplade		0.0	0.0		0.00	8.5	kg/m2	7767.8	913.9	m2
Indervægge, komplettering (32)	VR08 - Forsats-/akustikvæg - 95mm	913.86	Stållægter 70mm c/c 300		0.0	0.0	2074	0.00	1	kg	2073.8	2073.8	kg
Indervægge, komplettering (32)	VR08 - Forsats-/akustikvæg - 95mm	913.86	Mineraluld indvendig	0.070	0.0	0.0		63.97	26	kg/m3	1663.2	64.0	m3
Indvendige vægoverflader (42)	VR10 - Skillevæg - 120mm	192.26	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	25.6	25.6	kg
Indvendige vægoverflader (42)	VR10 - Skillevæg - 120mm	192.26	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	25.6	25.6	kg
Indervægge, komplettering (32)	VR10 - Skillevæg - 120mm	192.26	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1922.6	192.3	m2
Indervægge, komplettering (32)	VR10 - Skillevæg - 120mm	192.26	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1922.6	192.3	m2
Indervægge, komplettering (32)	VR10 - Skillevæg - 120mm	192.26	Stållægter 70mm c/c 450		0.0	0.0	310	0.00	1	kg	310.2	310.2	kg
Indervægge, komplettering (32)	VR10 - Skillevæg - 120mm	192.26	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1922.6	192.3	m2
Indervægge, komplettering (32)	VR10 - Skillevæg - 120mm	192.26	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1922.6	192.3	m2
Indvendige vægoverflader (42)	VR10 - Skillevæg - 120mm	192.26	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	25.6	25.6	kg
Indvendige vægoverflader (42)	VR10 - Skillevæg - 120mm	192.26	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	25.6	25.6	kg
Indvendige vægoverflader (42)	VR12 - Skillevæg - 120mm	2721.35	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	361.9	361.9	kg
Indvendige vægoverflader (42)	VR12 - Skillevæg - 120mm	2721.35	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	361.9	361.9	kg
Indervægge, komplettering (32)	VR12 - Skillevæg - 120mm	2721.35	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	27213.5	2721.4	m2
Indervægge, komplettering (32)	VR12 - Skillevæg - 120mm	2721.35	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	27213.5	2721.4	m2
Indervægge, komplettering (32)	VR12 - Skillevæg - 120mm	2721.35	Stållægter 70mm c/c 450		0.0	0.0	4391	0.00	1	kg	4391.4	4391.4	kg
Indervægge, komplettering (32)	VR12 - Skillevæg - 120mm	2721.35	Mineraluld indvendig	0.045	0.0	0.0		122.46	26	kg/m3	3184.0	122.5	m3
Indervægge, komplettering (32)	VR12 - Skillevæg - 120mm	2721.35	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	27213.5	2721.4	m2
Indervægge, komplettering (32)	VR12 - Skillevæg - 120mm	2721.35	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	27213.5	2721.4	m2
Indvendige vægoverflader (42)	VR12 - Skillevæg - 120mm	2721.35	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	361.9	361.9	kg
Indvendige vægoverflader (42)	VR12 - Skillevæg - 120mm	2721.35	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	361.9	361.9	kg
Indvendige vægoverflader (42)	VR13 - Skillevæg - 120mm	336.47	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	44.8	44.8	kg
Indvendige vægoverflader (42)	VR13 - Skillevæg - 120mm	336.47	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	44.8	44.8	kg
Indervægge, komplettering (32)	VR13 - Skillevæg - 120mm	336.47	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	3364.7	336.5	m2
Indervægge, komplettering (32)	VR13 - Skillevæg - 120mm	336.47	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	3364.7	336.5	m2
Indervægge, komplettering (32)	VR13 - Skillevæg - 120mm	336.47	Stållægter 70mm c/c 450		0.0	0.0	543	0.00	1	kg	543.0	543.0	kg
Indervægge, komplettering (32)	VR13 - Skillevæg - 120mm	336.47	Mineraluld indvendig	0.045	0.0	0.0		15.14	26	kg/m3	393.7	15.1	m3
Indervægge, komplettering (32)	VR13 - Skillevæg - 120mm	336.47	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	3364.7	336.5	m2
Indervægge, komplettering (32)	VR13 - Skillevæg - 120mm	336.47	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	3364.7	336.5	m2
Indvendige vægoverflader (42)	VR13 - Skillevæg - 120mm	336.47	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	44.8	44.8	kg
Indvendige vægoverflader (42)	VR13 - Skillevæg - 120mm	336.47	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	44.8	44.8	kg

MIDDELFART RÅDHUS - BUILDING COMPONENTS

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Her kan du definere de bygningsdele som indgår i bygningen

Sfb	Unikt navn [NAVN]	Areal [m²]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m³]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Indvendige vægoverflader (42)	VR14 - Skillevæg - 120mm	183.20	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	24.4	24.4	kg
Indvendige vægoverflader (42)	VR14 - Skillevæg - 120mm	183.20	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	24.4	24.4	kg
Indervægge, komplettering (32)	VR14 - Skillevæg - 120mm	183.20	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	1832.0	183.2	m2
Indervægge, komplettering (32)	VR14 - Skillevæg - 120mm	183.20	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	1832.0	183.2	m2
Indervægge, komplettering (32)	VR14 - Skillevæg - 120mm	183.20	Stållægter 70mm c/c 450		0.0	0.0	296	0.00	1	kg	295.6	295.6	kg
Indervægge, komplettering (32)	VR14 - Skillevæg - 120mm	183.20	Mineraluld indvendig	0.045	0.0	0.0		8.24	26	kg/m3	214.3	8.2	m3
Indervægge, komplettering (32)	VR14 - Skillevæg - 120mm	183.20	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	1832.0	183.2	m2
Indervægge, komplettering (32)	VR14 - Skillevæg - 120mm	183.20	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	1832.0	183.2	m2
Indvendige vægoverflader (42)	VR14 - Skillevæg - 120mm	183.20	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	24.4	24.4	kg
Indvendige vægoverflader (42)	VR14 - Skillevæg - 120mm	183.20	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	24.4	24.4	kg
Indvendige vægoverflader (42)	VR18 - Skillevæg - 150mm	11.70	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.6	1.6	kg
Indvendige vægoverflader (42)	VR18 - Skillevæg - 150mm	11.70	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.6	1.6	kg
Indervægge, komplettering (32)	VR18 - Skillevæg - 150mm	11.70	Brandgips 15mm		0.0	0.0		0.00	10	kg/m2	117.0	11.7	m2
Indervægge, komplettering (32)	VR18 - Skillevæg - 150mm	11.70	Brandgips 15mm		0.0	0.0		0.00	10	kg/m2	117.0	11.7	m2
Indervægge, komplettering (32)	VR18 - Skillevæg - 150mm	11.70	Stållægter 95mm c/c 450		0.0	0.0	22	0.00	1	kg	22.1	22.1	kg
Indervægge, komplettering (32)	VR18 - Skillevæg - 150mm	11.70	Mineraluld indvendig	0.090	0.0	0.0		1.05	26	kg/m3	27.4	1.1	m3
Indervægge, komplettering (32)	VR18 - Skillevæg - 150mm	11.70	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	117.0	11.7	m2
Indervægge, komplettering (32)	VR18 - Skillevæg - 150mm	11.70	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	117.0	11.7	m2
Indvendige vægoverflader (42)	VR18 - Skillevæg - 150mm	11.70	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.6	1.6	kg
Indvendige vægoverflader (42)	VR18 - Skillevæg - 150mm	11.70	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.6	1.6	kg
Indvendige vægoverflader (42)	VR19 - Skillevæg - 170mm	119.17	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	15.8	15.8	kg
Indvendige vægoverflader (42)	VR19 - Skillevæg - 170mm	119.17	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	15.8	15.8	kg
Indervægge, komplettering (32)	VR19 - Skillevæg - 170mm	119.17	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1191.7	119.2	m2
Indervægge, komplettering (32)	VR19 - Skillevæg - 170mm	119.17	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1191.7	119.2	m2
Indervægge, komplettering (32)	VR19 - Skillevæg - 170mm	119.17	Stållægter 120mm, 4m+ c/c 450		0.0	0.0	234	0.00	1	kg	233.8	233.8	kg
Indervægge, komplettering (32)	VR19 - Skillevæg - 170mm	119.17	Mineraluld indvendig	0.045	0.0	0.0		5.36	26	kg/m3	139.4	5.4	m3
Indervægge, komplettering (32)	VR19 - Skillevæg - 170mm	119.17	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1191.7	119.2	m2
Indervægge, komplettering (32)	VR19 - Skillevæg - 170mm	119.17	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1191.7	119.2	m2
Indvendige vægoverflader (42)	VR19 - Skillevæg - 170mm	119.17	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	15.8	15.8	kg
Indvendige vægoverflader (42)	VR19 - Skillevæg - 170mm	119.17	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	15.8	15.8	kg
Indvendige vægoverflader (42)	VR22 - Skillevæg - 250mm	170.63	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	22.7	22.7	kg
Indvendige vægoverflader (42)	VR22 - Skillevæg - 250mm	170.63	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	22.7	22.7	kg
Indervægge, komplettering (32)	VR22 - Skillevæg - 250mm	170.63	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1706.3	170.6	m2
Indervægge, komplettering (32)	VR22 - Skillevæg - 250mm	170.63	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1706.3	170.6	m2
Indervægge, komplettering (32)	VR22 - Skillevæg - 250mm	170.63	Stållægter 95mm c/c 450		0.0	0.0	322	0.00	1	kg	322.0	322.0	kg
Indervægge, komplettering (32)	VR22 - Skillevæg - 250mm	170.63	Mineraluld indvendig	0.950	0.0	0.0		162.10	26	kg/m3	4214.6	162.1	m3
Indervægge, komplettering (32)	VR22 - Skillevæg - 250mm	170.63	Mineraluld indvendig	0.950	0.0	0.0		162.10	26	kg/m3	4214.6	162.1	m3
Indervægge, komplettering (32)	VR22 - Skillevæg - 250mm	170.63	Stållægter 95mm c/c 450		0.0	0.0	322	0.00	1	kg	322.0	322.0	kg
Indervægge, komplettering (32)	VR22 - Skillevæg - 250mm	170.63	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1706.3	170.6	m2
Indervægge, komplettering (32)	VR22 - Skillevæg - 250mm	170.63	stålplade (0,3 - 3mm)	0.001	0.0	0.0		0.17	7850	kg/m3	1339.4	1339.4	kg
Indervægge, komplettering (32)	VR22 - Skillevæg - 250mm	170.63	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1706.3	170.6	m2
Indvendige vægoverflader (42)	VR22 - Skillevæg - 250mm	170.63	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	22.7	22.7	kg
Indvendige vægoverflader (42)	VR22 - Skillevæg - 250mm	170.63	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	22.7	22.7	kg
Indvendige vægoverflader (42)	VR23 - Skillevæg - 250mm	9.02	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.2	1.2	kg

MIDDELFART RÅDHUS - BUILDING COMPONENTS

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Her kan du definere de bygningsdele som indgår i bygningen

Sfb	Unikt navn [NAVN]	Areal [m^2]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m^3]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Indvendige vægoverflader (42)	VR23 - Skillevæg - 250mm	9.02	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.2	1.2	kg
Indervægge, komplettering (32)	VR23 - Skillevæg - 250mm	9.02	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	90.2	9.0	m2
Indervægge, komplettering (32)	VR23 - Skillevæg - 250mm	9.02	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	90.2	9.0	m2
Indervægge, komplettering (32)	VR23 - Skillevæg - 250mm	9.02	Stållægter 95mm c/c 450		0.0	0.0	17	0.00	1	kg	17.0	17.0	kg
Indervægge, komplettering (32)	VR23 - Skillevæg - 250mm	9.02	Mineraluld indvendig	0.950	0.0	0.0		8.57	26	kg/m3	222.8	8.6	m3
Indervægge, komplettering (32)	VR23 - Skillevæg - 250mm	9.02	Mineraluld indvendig	0.950	0.0	0.0		8.57	26	kg/m3	222.8	8.6	m3
Indervægge, komplettering (32)	VR23 - Skillevæg - 250mm	9.02	Stållægter 95mm c/c 450		0.0	0.0	17	0.00	1	kg	17.0	17.0	kg
Indervægge, komplettering (32)	VR23 - Skillevæg - 250mm	9.02	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	90.2	9.0	m2
Indervægge, komplettering (32)	VR23 - Skillevæg - 250mm	9.02	stålplade (0,3 - 3mm)	0.001	0.0	0.0		0.01	7850	kg/m3	70.8	70.8	kg
Indervægge, komplettering (32)	VR23 - Skillevæg - 250mm	9.02	Vådrumsgipsplade		0.0	0.0		0.00	10	kg/m2	90.2	9.0	m2
Indvendige vægoverflader (42)	VR23 - Skillevæg - 250mm	9.02	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.2	1.2	kg
Indvendige vægoverflader (42)	VR23 - Skillevæg - 250mm	9.02	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	1.2	1.2	kg
Indvendige vægoverflader (42)	VR25 - Letklinker - 150mm	40.06	Cement spartel /afretning	0.015	0.0	0.0		0.60	1900	kg/m3	1141.7	1141.7	kg
Indervægge (22)	VR25 - Letklinker - 150mm	40.06	Lekablokke 570kg/m3	0.150	0.0	0.0		6.01	570	kg/m3	3425.1	6.0	m3
Indvendige vægoverflader (42)	VR25 - Letklinker - 150mm	40.06	Cement spartel /afretning	0.015	0.0	0.0		0.60	1900	kg/m3	1141.7	1141.7	kg
Indvendige vægoverflader (42)	VR30 - Listebeklædning - 71mm	68.71	krydsfiner EU	0.020	0.0	0.0		1.37	491	kg/m3	674.8	1.4	m3
Indvendige vægoverflader (42)	VR30 - Listebeklædning - 71mm	5.21	krydsfiner EU	0.037	0.0	0.0		0.19	491	kg/m3	94.6	0.2	m3
Indervægge, komplettering (32)	VR30 - Listebeklædning - 71mm	104.11	Mineraluld indvendig	0.050	0.0	0.0		5.21	26	kg/m3	135.3	5.2	m3
Ydervægge, komplettering (31)	Lyddug	104.11	Solafskærmning					0.00	0.4	kg/m2	41.6	104.1	m2
Indvendige vægoverflader (42)	VR31 - Forsatsvæg/lamelvæg - 166mm	95.22	krydsfiner EU	0.020	0.0	0.0		1.90	491	kg/m3	935.0	1.9	m3
Indervægge, komplettering (32)	VR31 - Forsatsvæg/lamelvæg - 166mm	144.27	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	1442.7	144.3	m2
Indervægge, komplettering (32)	VR31 - Forsatsvæg/lamelvæg - 166mm	144.27	krydsfiner EU	0.013	0.0	0.0		1.80	491	kg/m3	885.5	1.8	m3
Indervægge, komplettering (32)	VR31 - Forsatsvæg/lamelvæg - 166mm	144.27	Stållægter 120mm, 4m+ c/c 450	0.013	0.0	0.0	283	1.80	1	kg	283.0	283.0	kg
Indervægge (22)	VRXX - Multiplade - 100mm	3.50	Porebeton	0.100	0.0	0.0		0.35	123	kg/m3	43.1	0.4	m3
Indervægge, komplettering (32)	VR28 - Glasvæg - 85mm - indvendig	52.39	Vinduesglas		0.0	0.0		0.00	10	kg/m2	523.9	52.4	m2
Indervægge, komplettering (32)	VR28 - Glasvæg - 85mm - indvendig	52.39	Vinduesglas		0.0	0.0		0.00	10	kg/m2	523.9	52.4	m2
Indervægge, komplettering (32)	VR28 - Glasvæg - 85mm - indvendig	52.39	Vinduesglas		0.0	0.0		0.00	10	kg/m2	523.9	52.4	m2
Indervægge, komplettering (32)	VR28 - Glasvæg - 85mm - indvendig	52.39	Vinduesglas		0.0	0.0		0.00	10	kg/m2	523.9	52.4	m2
Indervægge, komplettering (32)	VR28 - Glasvæg - 85mm - indvendig		Ramme (alu)		274.6			0.00	1.43	kg/m	392.7	274.6	m
Indervægge, komplettering (32)	VR29 - Glasvæg - 85mm - dobbeltlaminer	8.88	Vinduesglas		0.0	0.0		0.00	10	kg/m2	88.8	8.9	m2
Indervægge, komplettering (32)	VR29 - Glasvæg - 85mm - dobbeltlaminer	8.88	Vinduesglas		0.0	0.0		0.00	10	kg/m2	88.8	8.9	m2
Indervægge, komplettering (32)	VR29 - Glasvæg - 85mm - dobbeltlaminer	8.88	Glas lamineret 8mm EU EPD		0.0	0.0		0.00	20	kg/m2	177.6	8.9	m2
Indervægge, komplettering (32)	VR29 - Glasvæg - 85mm - dobbeltlamineret lydglas		Ramme (alu)		17.8			0.00	1.43	kg/m	25.5	17.8	m
Dæk (23)	Dækelement 20cm	7936.99	beton - huldæk	0.270	0.0	0.0		2142.99	365	kg/m2	2897001.7	7937.0	m2
Dæk (23)	Betonbjælker	5.40	Beton C35/45	1.000				5.40	2365	kg/m3	12771.0	5.4	m3
Dæk (23)	Stålbjælker og plader	24.32	Stål - bjælker og plader	1.000				24.32	7850	kg/m3	190900.0	190900.0	kg
Dæk (23)	Ståltrapper Rådhus Øst	57.55	Ståltrapper	0.000				0.00	100	kg/m2	5755.0	5755.0	kg
Dæk og gulve, overflader (43)	Flugttrapper - indvæg	1185.00	Støvbinder mineralsk		0.0	0.0		0.00	0.33	kg/m2	391.1	391.1	kg
Trapper og ramper (24)	Flugttrapper overkant underkant	1300.00	Støvbinder mineralsk		0.0	0.0		0.00	0.33	kg/m2	429.0	429.0	kg
Dæk (23)	Flugttrapper - færdig beton elementtrapş	778.57	Beton C35/45	0.200	0.0	0.0		155.71	2365	kg/m3	368263.6	155.7	m3

MIDDELFART RÅDHUS - BUILDING COMPONENTS

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Sfb	Unikt navn [NAVN]	Areal [m^2]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m^3]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Dæk (23)	Flugttrapper - armering	109.00	Armeringsstål i beton	1.000	0.0	0.0		109.00	47.8	kg/m3	5210.2	5210.2	kg
Trapper og ramper (24)	overflade på stål trapper	25.00	Mosiakparket		0.0	0.0		0.00	7.8	kg/m2	195.0	25.0	m2
Trapper og ramper (24)	overflade på stål trapper	25.00	Parket behandling (2 lag)		0.0	0.0		0.00	0.22	kg/m2	5.5	5.5	kg
Trapper og ramper (24)	overflade på stål trapper	25.00	krydsfiner EU	0.022	0.0	0.0		0.55	491	kg/m3	270.1	0.6	m3
Trapper og ramper (24)	Værn, Atriumforkant, gips	238.95	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	2389.5	239.0	m2
Trapper og ramper (24)	Værn, Atriumforkant, fladstål	4.40	stål	0.010	0.0	0.0		0.04	7850	kg/m3	345.4	345.4	kg
Trapper og ramper (24)	Værn, Atriumforkant,perf gips	132.80	Perforeret gipsplade		0.0	0.0		0.00	8.5	kg/m2	1128.8	132.8	m2
Trapper og ramper (24)	Værn, Atriumforkant, fodpanel træ	4.87	Egetræ	0.014	0.0	0.0		0.07	716.8	kg/m3	48.8	0.1	m3
Trapper og ramper (24)	Værn, Atriumforkant, stållægter	560.50	Stållægter 70mm lm		0.0	0.0	331	0.00	1	kg	330.7	330.7	kg
Trapper og ramper (24)	Værn, Atriumforkant, fladstål	10.00	stål	0.010	0.0	0.0		0.10	7850	kg/m3	785.0	785.0	kg
Trapper og ramper (24)	Værn, Atriumforkant, maling af gips	256.70	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	34.1	34.1	kg
Trapper og ramper (24)	Værn, Atriumforkant, mineraluld	177.00	Mineraluld indvendig	0.070	0.0	0.0		12.39	26	kg/m3	322.1	12.4	m3
Trapper og ramper (24)	Værn, Atriumforkant, konlit	53.10	Mineraluld indvendig	0.056	0.0	0.0		2.97	26	kg/m3	77.3	3.0	m3
Trapper og ramper (24)	Værn, Atriumforkant, RHS 50x50x3	154.88	stål	0.001	0.0	0.0		0.08	7850	kg/m3	658.2	658.2	kg
Trapper og ramper (24)	Værn, Kerner, Gelænder, stål ø10	0.13	stål	1.000	0.0	0.0		0.13	7850	kg/m3	1044.1	1044.1	kg
Trapper og ramper (24)	Værn, Kerner, Gelænder, fladstål	0.34	stål	1.000	0.0	0.0		0.34	7850	kg/m3	2637.6	2637.6	kg
Trapper og ramper (24)	Værn, Foyerforkant, fladstål (34m)	0.30	stål	1.000	0.0	0.0		0.30	7850	kg/m3	2331.5	2331.5	kg
Trapper og ramper (24)	Værn, Foyerforkant, fladstål	0.03	stål	1.000	0.0	0.0		0.03	7850	kg/m3	235.5	235.5	kg
Trapper og ramper (24)	Værn, Foyerforkant, stål ø10	0.03	stål	1.000	0.0	0.0		0.03	7850	kg/m3	266.9	266.9	kg
Trapper og ramper (24)	Værn, Foyerforkant, fladstål	0.06	stål	1.000	0.0	0.0		0.06	7850	kg/m3	455.3	455.3	kg
Trapper og ramper (24)	Værn, Foyerforkant, gips	20.40	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	204.0	20.4	m2
Trapper og ramper (24)	Værn, Foyerforkant, konlit	23.00	Mineraluld indvendig	0.056	0.0	0.0		1.29	26	kg/m3	33.5	1.3	m3
Trapper og ramper (24)	Værn, Foyerforkant, maling	40.80	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	5.4	5.4	kg
Trapper og ramper (24)	Værn, Foyerforkant, mineraluld	2.38	Mineraluld indvendig	1.000	0.0	0.0		2.38	26	kg/m3	61.9	2.4	m3
Trapper og ramper (24)	Værn, Foyerforkant, L profil stål	0.01	stål	1.000	0.0	0.0		0.01	7850	kg/m3	44.0	44.0	kg
Trapper og ramper (24)	Værn, Foyerforkant,	181.00	Stållægter 70mm lm		0.0	0.0	107	0.00	1	kg	106.8	106.8	kg
Trapper og ramper (24)	Værn, Atriumtrappe, gips (48m)	57.60	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	576.0	57.6	m2
Trapper og ramper (24)	Værn, Atriumtrappe,	302.40	Stållægter 70mm lm		0.0	0.0	178	0.00	1	kg	178.4	178.4	kg
Trapper og ramper (24)	Værn, Atriumtrappe, fodliste	2.64	Egetræ	0.014	0.0	0.0		0.04	716.8	kg/m3	26.5	0.0	m3
Trapper og ramper (24)	Værn, Atriumtrappe, perf gips	72.00	Perforeret gipsplade		0.0	0.0		0.00	8.5	kg/m2	612.0	72.0	m2
Trapper og ramper, komplettering (34)	Værn, Atriumtrappe, stålhåndliste	0.02	stål	1.000	0.0			0.02	7850	kg/m3	188.4	188.4	kg
Trapper og ramper, komplettering (34)	Værn, Atriumtrappe, stålhåndliste	0.00	stål	1.000	0.0	0.0		0.00	7850	kg/m3	0.8	0.8	kg
Trapper og ramper (24)	Værn, Atriumtrappe, mineraluld	76.80	mineraluld indvendig	0.070	0.0	0.0		5.38	26	kg/m3	139.8	5.4	m3
Trapper og ramper (24)	Værn, Atriumtrappe, stålprofil 50x50	0.00	stål	1.000	0.0	0.0		0.00	7850	kg/m3	13.9	13.9	kg
Trapper og ramper (24)	Værn, Atriumtrappe, maling	100.80	Akryl maling - indvendige 1 lag		0.0	0.0		0.00	0.133	kg/m2	13.4	13.4	kg
Trapper og ramper, komplettering (34)	Værn, Atriumtrappe, fladstål, under hånc	0.05	stål	1.000	0.0	0.0		0.05	7850	kg/m3	392.5	392.5	kg
Trapper og ramper, komplettering (34)	Værn, Atriumtrappe, fladstål, lodret	0.04	stål	1.000	0.0	0.0		0.04	7850	kg/m3	282.6	282.6	kg
Trapper og ramper (24)	Trappe, Atriumtrappe	102.00	Mosiakparket		0.0	0.0		0.00	7.8	kg/m2	795.6	102.0	m2
Trapper og ramper (24)	Trappe, Atriumtrappe	102.00	Parket behandling (2 lag)		0.0	0.0		0.00	0.22	kg/m2	22.4	22.4	kg
Trapper og ramper (24)	Trappe, Atriumtrappe	102.00	Lim - ikke med i lca beregning	0.000				0.00					
Trapper og ramper (24)	Trappe, Atriumtrappe	102.00	krydsfiner EU	0.022	0.0	0.0		2.24	491	kg/m3	1101.8	2.2	m3
Trapper og ramper (24)	Trappe, Atriumtrappe	82.00	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	820.0	82.0	m2

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Sfb	Unikt navn	Areal	Materiale	Tykkelse	Længde	Vægt	Stk.	Volumen	Vægt	Enhed	Total vægt	Mængde	Mængde ang.
	[NAVN]	[m²]	[-]	[m]	[m]	[kg]	[-]	[m³]	[#]	[-]	[kg]		[-]
Trapper og ramper (24)	Trappe, Atriumtrappe	82.00	Gipsplade 13mm		0.0	0.0		0.00	10	kg/m2	820.0	82.0	m2
Tage, komplettering (37)	Tag opbygning T01 (tagterrasser)	447.43	Tag overpap		0.0	0.0		0.00	5	kg/m2	2237.2	447.4	m2
Tage, komplettering (37)	Tag opbygning T01 (tagterrasser)	447.43	Tag underpap		0.0	0.0		0.00	3.3	kg/m2	1476.5	447.4	m2
Tage, komplettering (37)	Tag opbygning T01 (tagterrasser)	447.43	Flammespærrer		0.0	0.0		0.00	2.7	kg/m2	1208.1	447.4	m2
Tage, komplettering (37)	Tag opbygning T01 (tagterrasser)	447.43	Dampspærre tag		0.0	0.0		0.00	3.4	kg/m2	1521.3	447.4	m2
Tage, komplettering (37)	Tag opbygning T01 (tagterrasser)	447.43	XPS	0.500	0.0	0.0		223.72	32	kg/m3	7158.9	7158.9	kg
Tage, komplettering (37)	Tag opbygning T02	1857.46	Tag overpap	0.500	0.0	0.0		928.73	5	kg/m2	9287.3	1857.5	m2
Tage, komplettering (37)	Tag opbygning T02	1857.46	Tag underpap	0.500	0.0	0.0		928.73	3.3	kg/m2	6129.6	1857.5	m2
Tage, komplettering (37)	Tag opbygning T02	1857.46	Dampspærre tag		0.0	0.0		0.00	3.4	kg/m2	6315.4	1857.5	m2
Tage, komplettering (37)	Tag opbygning T02	1857.46	Mineraluld fladtag	0.500	0.0	0.0		928.73	145	kg/m3	134665.9	928.7	m3
Tage, komplettering (37)	Tag opbygning T05 (gangbro)	35.39	Tag overpap		0.0	0.0		0.00	5	kg/m2	177.0	35.4	m2
Tage, komplettering (37)	Tag opbygning T05 (gangbro)	35.39	Tag underpap		0.0	0.0		0.00	3.3	kg/m2	116.8	35.4	m2
Tage, komplettering (37)	Tag opbygning T05 (gangbro)	35.39	Flammespærrer		0.0	0.0		0.00	2.7	kg/m2	95.6	35.4	m2
Tage, komplettering (37)	Tag opbygning T05 (gangbro)	35.39	Dampspærre tag		0.0	0.0		0.00	3.4	kg/m2	120.3	35.4	m2
Tage, komplettering (37)	Tag opbygning T05 (gangbro)	35.39	PIR/PUR isolering	0.300	0.0	0.0		10.62	35	kg/m3	371.6	10.6	m3
Indervægge, komplettering (32)	**Indvendig Dør Stål (m2 plade)**	6.77	Indvendig ståldør uden karm				7	0.00	24.6	kg	166.6	6.8	stk.
Indervægge, komplettering (32)	**Stål dørkarm (stk a 1,23 x 2,18)**	7.00	Karm (stål)				7	0.00	3.372	kg/m	0.0	7.0	stk.
Indervægge, komplettering (32)	**Indvendig Dør Træ (stk a 900x2100)**	357.00	Indvendig trædør og karm				357	0.00	74.27	kg	26514.4	357.0	stk.
Indervægge, komplettering (32)	**Aluminium dørkarm (m2)**	23.52	Aluminiumspladder	0.002				0.05	2600	kg/m3	122.3	0.0	m3
Indervægge, komplettering (32)	**Udvendig Dør Alu/glas (stk a 900x2100)**	24.00	ılasdør med aluminium karm og profil				24	0.00	129	kg	3096.0	24.0	stk.
Tage, komplettering (37)	**Skylights Domex**	15.40	Ovenlys		0.0	0.0		0.00	56.94	kg/m2	876.9	15.4	m2
Tage, komplettering (37)	**OVENLYS, STOR, PIR langs ovenlys**	25.49	PIR/PUR isolering	0.500		395.1	395.1	12.74	35	kg/m3	446.0	12.7	m3
Tage, komplettering (37)	**Tagpap**	94.40	Tag overpap					0.00	5	kg/m2	472.0	94.4	m2
Lofter, overflader (45)	**indvendig gips langs ovenlys**	556.40	Gipsplade 13mm					0.00	10	kg/m2	5564.0	556.4	m2
Lofter, komplettering (35)	**stållægter**	377.60	Stållægter 45mm				279	0.00	1	kg	279.4	279.4	kg
Tage, komplettering (37)	**3-lagsglas - 1 lag**	85.00	Glas 1 lag					0.00	10	kg/m2	850.0	85.0	m2
Tage, komplettering (37)	**3-lagsglas - lag 2 og 3**	85.00	Glas 2 lag					0.00	20	kg/m2	1700.0	85.0	m2
Tage, komplettering (37)	**sprosser**		Karm (alu)		115.2			0.00	1.51	kg/m	174.0	115.2	m
Tage, komplettering (37)	**rammer**		Ramme (alu)		108.8			0.00	1.43	kg/m	155.6	108.8	m
Tage, komplettering (37)	**PIR i gavle af ovenlys**	64.00	XPS	0.500		992.0	992	32.00	32	kg/m3	1024.0	1024.0	kg
Lofter, overflader (45)	**indvendig gips gavle af ovenlys**	64.00	Gipsplade 13mm					0.00	10	kg/m2	640.0	64.0	m2
Lofter, overflader (45)	**indvendig gips gavle af ovenlys**	64.00	Gipsplade 13mm					0.00	10	kg/m2	640.0	64.0	m2
Tage, komplettering (37)	**ovenlys konvektor 5 x 4 stk a 1600mm**	0.00	Radiator - ikke med i LCAen		0.0	0.0	0						
Tage, komplettering (37)	**Konlit**	24.00	Mineraluld fladtag	0.056	0.0	0.0		1.34	145	kg/m3	194.9	1.3	m3
Dæk og gulve, overflader (43)	**GR01 - Mosaikparket 150mm**	**3578.16**	Mosiakparket	0.008	0.0	0.0		28.63	7.8	kg/m2	27909.6	3578.2	m2
Dæk, komplettering (33)	**GR01 - Mosaikparket 150mm**	**0.00**	Lim - ikke med i lca beregning	0.002	0.0	0.0		0.00	0	0	0.0	0.0	m2
Dæk, komplettering (33)	**GR01 - Mosaikparket 150mm**	3578.16	Cement spartel /afretning	0.010	0.0			35.78	1900	kg/m3	67985.0	67985.0	kg
Dæk, komplettering (33)	**GR01 - Mosaikparket 150mm**	3578.16	Cement spartel /afretning	0.070	0.0			250.47	1900	kg/m3	475895.3	475895.3	kg
Dæk, komplettering (33)	**GR01 - Mosaikparket 150mm**	3578.16	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0	0	0.00	3.02	kg/m2	10806.0	10806.0	kg
Dæk, komplettering (33)	**GR01 - Mosaikparket - 150mm**	3578.16	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		1.43	0.38	kg/m2	1359.7	3578.2	m2
Dæk, komplettering (33)	**GR01 - Mosaikparket 150mm**	3578.16	EPS	0.040	0.0	0.0		143.13	30	kg/m3	4293.8	143.1	m3

MIDDELFART RÅDHUS - BUILDING COMPONENTS

Dette faneblad indeholder de bygningsdele som indgår i bygningen.

Her kan du definere de bygningsdele som indgår i bygningen

Sfb	Unikt navn	Areal	Materiale	Tykkelse	Længde	Vægt	Stk.	Volumen	Vægt	Enhed	Total vægt	Mængde	Mængde ang.
	[NAVN]	[m²]	[-]	[m]	[m]	[kg]	[-]	[m³]	[#]	[-]	[kg]		[-]
Dæk, komplettering (33)	**GR01 - Mosaikparket 150mm**	3578.16	Cement spartel /afretning	0.020	0.0	0.0		71.56	1900	kg/m3	135970.1	135970.1	kg
Dæk og gulve, overflader (43)	**GR01 - Mosaikparket - 150mm**	3578.16	Parket behandling (2 lag)	0.000	0.0			0.00	0.22	kg/m2	787.2	787.2	kg
Dæk og gulve, overflader (43)	**GR02 - Mosaikparket 150 GV**	**153.26**	Mosiakparket	0.008	0.0	0.0		1.23	7.8	kg/m2	1195.4	153.3	m2
Dæk, komplettering (33)	**GR02 - Mosaikparket 150 GV**	153.26	Lim	0.002	0.0	0.0		0.31	#N/A	#N/A	#N/A	#N/A	#N/A
Dæk, komplettering (33)	**GR02 - Mosaikparket 150 GV**	153.26	Cement spartel /afretning	0.010	0.0	0.0		1.53	1900	kg/m3	2911.9	2911.9	kg
Dæk, komplettering (33)	**GR02 - Mosaikparket 150 GV**	153.26	Cement spartel /afretning	0.070	0.0	0.0		10.73	1900	kg/m3	20383.6	20383.6	kg
Dæk, komplettering (33)	**GR02 - Mosaikparket 150 GV**	153.26	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0	########	0.00	3.02	kg/m2	462.8	462.8	kg
Dæk, komplettering (33)	**GR02 - Mosaikparket 150 GV**	153.26	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		0.06	0.38	kg/m2	58.2	153.3	m2
Dæk, komplettering (33)	**GR02 - Mosaikparket 150 GV**	153.26	Thermotec 90r	0.060	0.0	0.0		9.20	104	kg/m3	956.3	9.2	m3
Dæk, komplettering (33)	**GR02 - Mosaikparket 150 GV**	153.26	Gulvvarmeslanger	0.000		0.0							
Dæk og gulve, overflader (43)	**GR01 - Mosaikparket - 150mm**	153.26	Parket behandling (2 lag)	0.000	0.0	51.1		0.00	0.22	kg/m2	33.7	33.7	kg
Dæk og gulve, overflader (43)	**GR03 - Mosaikparket 180mm**	**91.48**	Mosiakparket	0.008	0.0	0.0		0.73	7.8	kg/m2	713.5	91.5	m2
Dæk, komplettering (33)	**GR03 - Mosaikparket 180mm**	91.48	Lim	0.002	0.0	0.0		0.18	#N/A	#N/A	#N/A	#N/A	#N/A
Dæk, komplettering (33)	**GR03 - Mosaikparket 180mm**	91.48	Cement spartel /afretning	0.010	0.0	0.0		0.91	1900	kg/m3	1738.1	1738.1	kg
Dæk, komplettering (33)	**GR03 - Mosaikparket 180mm**	91.48	Cement spartel /afretning	0.070	0.0	0.0		6.40	1900	kg/m3	12166.8	12166.8	kg
Dæk, komplettering (33)	**GR03 - Mosaikparket 180mm**	91.48	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0	########	0.00	3.02	kg/m2	276.3	276.3	kg
Dæk, komplettering (33)	**GR03 - Mosaikparket 180mm**	91.48	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		0.04	0.38	kg/m2	34.8	91.5	m2
Dæk, komplettering (33)	**GR03 - Mosaikparket 180mm**	91.48	Thermotec 90r	0.090	0.0	0.0		8.23	104	kg/m3	856.3	8.2	m3
Dæk og gulve, overflader (43)	**GR01 - Mosaikparket - 150mm**	91.48	Parket behandling (2 lag)	0.000	0.0	30.5		0.00	0.22	kg/m2	20.1	20.1	kg
Dæk og gulve, overflader (43)	**GR04 - Linoleum**	**582.13**	Linoleum	0.003	0.0	0.0		1.46	0.344	kg/m2	200.3	582.1	m2
Dæk, komplettering (33)	**GR04 - Linoleum**	582.13	Lim - til linoleum	0.003	0.0	0.0		1.46	0.35	kg/m2	203.7	203.7	kg
Dæk, komplettering (33)	**GR04 - Linoleum**	582.13	Cement spartel /afretning	0.015	0.0	0.0		8.73	1900	kg/m3	16590.7	16590.7	kg
Dæk, komplettering (33)	**GR04 - Linoleum**	582.13	Cement spartel /afretning	0.070	0.0	0.0		40.75	1900	kg/m3	77423.3	77423.3	kg
Dæk, komplettering (33)	**GR04 - Linoleum**	582.13	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0	########	0.02	3.02	kg/m2	1758.0	1758.0	kg
Dæk, komplettering (33)	**GR04 - Linoleum**	582.13	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		0.12	0.38	kg/m2	221.2	582.1	m2
Dæk, komplettering (33)	**GR04 - Linoleum**	582.13	Thermotec 90r	0.060	0.0	0.0		34.93	104	kg/m3	3632.5	34.9	m3
Dæk og gulve, overflader (43)	**GR05 - Granitfliser 30mm**	113.67	Granitfliser	0.010	0.0	0.0		1.14	52	kg/m2	5910.6	113.7	m2
Dæk, komplettering (33)	**GR05 - Granitfliser 30mm**	227.33	Flise cement fuge - granitgulv	0.005	0.0	0.0		1.14	1.6	kg/m2	363.7	363.7	kg
Dæk, komplettering (33)	**GR05 - Granitfliser 30mm**	227.33	Flise lim	0.010	0.0	0.0		2.27	2.9	kg/m2	659.3	659.3	kg
Dæk, komplettering (33)	**GR05 - Granitfliser 30mm**	227.33	Cement spartel /afretning	0.010	0.0	0.0		2.27	1900	kg/m3	4319.3	4319.3	kg
Dæk, komplettering (33)	**GR05 - Granitfliser 30mm**	227.33	EPS	0.075	0.0	0.0		17.05	30	kg/m3	511.5	17.0	m3
Dæk og gulve, overflader (43)	**GR06 - Granitfliser 150mm**	**8.16**	Granitfliser	0.010	0.0	0.0		0.08	52	kg/m2	424.3	8.2	m2
Dæk, komplettering (33)	**GR06 - Granitfliser 150mm**	16.32	Flise cement fuge - granitgulv	0.005	0.0	0.0		0.08	1.6	kg/m2	26.1	26.1	kg
Dæk, komplettering (33)	**GR06 - Granitfliser 150mm**	16.32	Flise lim	0.010	0.0	0.0		0.16	2.9	kg/m2	47.3	47.3	kg
Dæk, komplettering (33)	**GR06 - Granitfliser 150mm**	16.32	Cement spartel /afretning	0.070	0.0	0.0		1.14	1900	kg/m3	2170.6	2170.6	kg
Dæk, komplettering (33)	**GR06 - Granitfliser 150mm**	16.32	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0		0.00	3.02	kg/m2	49.3	49.3	kg
Dæk, komplettering (33)	**GR06 - Granitfliser 150mm**	16.32	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		0.01	0.38	kg/m2	6.2	16.3	m2
Dæk, komplettering (33)	**GR06 - Granitfliser 150mm**	16.32	Thermotec 90r	0.060	0.0	0.0		0.98	104	kg/m3	101.8	1.0	m3
Dæk og gulve, overflader (43)	**GR07 - Fliser, vådrum 150mm**	**194.78**	Keramiskfliser, glaseret i m2	0.095	0.0	0.0		18.50	2000	kg/m3	37008.2	194.8	m2
Dæk, komplettering (33)	**GR07 - Fliser, vådrum 150mm**	194.78	Flise cement fuge - keramikfliser	0.005	0.0	0.0		0.97	1.1	kg/m2	214.3	214.3	kg
Dæk, komplettering (33)	**GR07 - Fliser, vådrum 150mm**	194.78	Flise lim	0.006	0.0	0.0		1.07	2.9	kg/m2	564.9	564.9	kg
Dæk, komplettering (33)	**GR07 - Fliser, vådrum 150mm**	194.78	ådrumsmembrane 2 lag acryl/cement	0.001	0.0	0.0		0.19	1.8	kg/m2	350.6	350.6	kg

MIDDELFART RÅDHUS - BUILDING COMPONENTS

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Her kan du definere de bygningsdele som indgår i bygningen

Sfb	Unikt navn [NAVN]	Areal [m²]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m³]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Dæk, komplettering (33)	GR07 - Fliser, vådrum 150mm	194.78	Cement spartel /afretning	0.005	0.0	0.0		0.97	1900	kg/m3	1850.4	1850.4	kg
Dæk, komplettering (33)	GR07 - Fliser, vådrum 150mm	194.78	Cement spartel /afretning	0.070	0.0	0.0		13.63	1900	kg/m3	25905.7	25905.7	kg
Dæk, komplettering (33)	GR07 - Fliser, vådrum 150mm	194.78	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0		0.01	3.02	kg/m2	588.2	588.2	kg
Dæk, komplettering (33)	GR07 - Fliser, vådrum 150mm	194.78	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		0.08	0.38	kg/m2	74.0	194.8	m2
Dæk, komplettering (33)	GR07 - Fliser, vådrum 150mm	194.78	thermotec 90r	0.060	0.0	0.0		11.69	104	kg/m3	1215.4	11.7	m3
Dæk og gulve, overflader (43)	GR08 - 200x200 fliser storkøkken 150mm	111.46	Keramiskfliser, glaseret i m2	0.095	0.0	0.0		10.59	2000	kg/m3	21177.4	111.5	m2
Dæk, komplettering (33)	GR08 - 200x200 fliser storkøkken 150mm	111.46	Flise cement fuge - keramikfliser	0.005	0.0	0.0		0.56	1.1	kg/m2	122.6	122.6	kg
Dæk, komplettering (33)	GR08 - 200x200 fliser storkøkken 150mm	111.46	Flise lim	0.006	0.0	0.0		0.61	2.9	kg/m2	323.2	323.2	kg
Dæk, komplettering (33)	GR08 - 200x200 fliser storkøkken 150mm	111.46	ådrumsmembrane 2 lag acryl/cement		0.0	0.0		0.00	1.8	kg/m2	200.6	200.6	kg
Dæk, komplettering (33)	GR08 - 200x200 fliser storkøkken 150mm	111.46	Cement spartel /afretning	0.125	0.0	0.0		13.93	1900	kg/m3	26471.8	26471.8	kg
Dæk, komplettering (33)	GR08 - 200x200 fliser storkøkken 150mm	111.46	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0		0.00	3.02	kg/m2	336.6	336.6	kg
Dæk og gulve, overflader (43)	GR09 - fliser, omklædning, vådrum 15mm	75.50	Keramiskfliser, glaseret i m2	0.095	0.0	0.0		7.17	2000	kg/m3	14345.0	75.5	m2
Dæk, komplettering (33)	GR09 - fliser, omklædning, vådrum 15mm	75.50	Flise cement fuge - keramikfliser	0.005	0.0	0.0		0.38	1.1	kg/m2	83.1	83.1	kg
Dæk, komplettering (33)	GR09 - fliser, omklædning, vådrum 15mm	75.50	Flise lim	0.006	0.0	0.0		0.42	2.9	kg/m2	219.0	219.0	kg
Dæk, komplettering (33)	GR09 - fliser, omklædning, vådrum 15mm	75.50	ådrumsmembrane 2 lag acryl/cement		0.0	0.0		0.00	1.8	kg/m2	135.9	135.9	kg
Dæk, komplettering (33)	GR09 - fliser, omklædning, vådrum 15mm	75.50	Gulvvarmeslanger	0.000	0.0	0.0							
Dæk, komplettering (33)	GR09 - fliser, omklædning, vådrum 15mm	75.50	Cement spartel /afretning	0.125	0.0	0.0		9.44	1900	kg/m3	17931.3	17931.3	kg
Dæk og gulve, overflader (43)	GR10 - Linoleum - 150mm	157.62	Linoleum	0.003	0.0	0.0		0.39	0.344	kg/m2	54.2	157.6	m2
Dæk, komplettering (33)	GR10 - Linoleum - 150mm	157.62	Lim - til linoleum	0.003	0.0	0.0		0.39	0.35	kg/m2	55.2	55.2	kg
Dæk, komplettering (33)	GR10 - Linoleum - 150mm	157.62	Cement spartel /afretning	0.015	0.0	0.0		2.36	1900	kg/m3	4492.2	4492.2	kg
Dæk, komplettering (33)	GR10 - Linoleum - 150mm	157.62	Cement spartel /afretning	0.070	0.0	0.0		11.03	1900	kg/m3	20963.5	20963.5	kg
Dæk, komplettering (33)	GR10 - Linoleum - 150mm	157.62	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0		0.00	3.02	kg/m2	476.0	476.0	kg
Dæk, komplettering (33)	GR10 - Linoleum - 150mm	157.62	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		0.03	0.38	kg/m2	59.9	157.6	m2
Dæk, komplettering (33)	GR10 - Linoleum - 150mm	157.62	thermotec 90r	0.060	0.0	0.0		9.46	104	kg/m3	983.5	9.5	m3
Dæk og gulve, overflader (43)	GR11 - Tæppefliser 150mm	832.90	Tæppefliser	0.005	0.0	0.0		4.16	4.138	kg/m2	3446.5	832.9	m2
Dæk, komplettering (33)	GR11 - Tæppefliser 150mm	832.90	Cement spartel /afretning	0.015	0.0	0.0		12.49	1900	kg/m3	23737.7	23737.7	kg
Dæk, komplettering (33)	GR11 - Tæppefliser 150mm	832.90	Cement spartel /afretning	0.070	0.0	0.0		58.30	1900	kg/m3	110775.7	110775.7	kg
Dæk, komplettering (33)	GR11 - Tæppefliser 150mm	832.90	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		0.17	0.38	kg/m2	316.5	832.9	m2
Dæk, komplettering (33)	GR11 - Tæppefliser 150mm	832.90	thermotec 90r	0.060	0.0	0.0		49.97	104	kg/m3	5197.3	50.0	m3
Dæk og gulve, overflader (43)	GR12 - Måtte 150mm	9.51	Måtte - Aluminium inkl vinkelramme	0.004	0.0	0.0		0.04	2600	kg/m3	98.9	0.0	m3
Dæk og gulve, overflader (43)	GR12 - Måtte 150mm	9.51	Måtte - Tæppefliser	0.000	0.0	0.0		0.00	4.138	kg/m2	39.4	9.5	m2
Dæk, komplettering (33)	GR12 - Måtte 150mm	9.51	Cement spartel /afretning	0.065	0.0	0.0		0.62	1900	kg/m3	1174.5	1174.5	kg
Dæk, komplettering (33)	GR12 - Måtte 150mm	9.51	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0		0.00	3.02	kg/m2	28.7	28.7	kg
Dæk, komplettering (33)	GR12 - Måtte 150mm	9.51	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		0.00	0.38	kg/m2	3.6	9.5	m2
Dæk, komplettering (33)	GR12 - Måtte 150mm	9.51	thermotec 90r	0.060	0.0	0.0		0.57	104	kg/m3	59.3	0.6	m3
Dæk og gulve, overflader (43)	GR13 - Måtte 50mm	23.82	Måtte - Aluminium inkl vinkelramme	0.004	0.0	0.0		0.10	2600	kg/m3	247.7	0.1	m3
Dæk og gulve, overflader (43)	GR12 - Måtte 150mm	23.82	Måtte - Tæppefliser	0.000	0.0	0.0		0.00	4.138	kg/m2	98.6	23.8	m2
Dæk, komplettering (33)	GR13 - Måtte 50mm	23.82	Cement spartel /afretning	0.025	0.0	0.0		0.60	1900	kg/m3	1131.5	1131.5	kg
Dæk og gulve, overflader (43)	GR14 - Måtte 30mm	10.75	Måtte - Aluminium inkl vinkelramme	0.004	0.0	0.0		0.04	2600	kg/m3	111.8	0.0	m3
Dæk og gulve, overflader (43)	GR14 - Måtte 30mm	10.75	Måtte - Tæppefliser	0.000	0.0	0.0		0.00	4.138	kg/m2	44.5	10.8	m2
Dæk, komplettering (33)	GR14 - Måtte 30mm	10.75	Cement spartel /afretning	0.005	0.0	0.0		0.05	1900	kg/m3	102.1	102.1	kg

MIDDELFART RÅDHUS - BUILDING COMPONENTS

Dette faneblad indeholder de bygningsdele som indgår i bygningen.

Her kan du definere de bygningsdele som indgår i bygningen

Sfb	Unikt navn [NAVN]	Areal [m²]	Materiale [-]	Tykkelse [m]	Længde [m]	Vægt [kg]	Stk. [-]	Volumen [m³]	Vægt [#]	Enhed [-]	Total vægt [kg]	Mængde	Mængde ang. [-]
Dæk og gulve, overflader (43)	GR15 - Terrazzo 40mm	64.05	Terrazzo	0.020	0.0	0.0		1.28	2000	kg/m3	2562.0	1.3	m3
Dæk, komplettering (33)	GR15 - Terrazzo 40mm	64.05	Flise cement fuge - granitgulv	0.005	0.0	0.0		0.32	1.6	kg/m2	102.5	102.5	kg
Dæk, komplettering (33)	GR15 - Terrazzo 40mm	64.05	Flise lim	0.008	0.0	0.0		0.51	2.9	kg/m2	185.7	185.7	kg
Dæk, komplettering (33)	GR15 - Terrazzo 40mm	64.05	Cement spartel /afretning	0.012	0.0	0.0		0.77	1900	kg/m3	1460.3	1460.3	kg
Dæk og gulve, overflader (43)	GR16 - Fliser i affaldsrum, 50mm	15.62	Keramiskfliser, glaseret i m2	0.010	0.0	0.0		0.15	2000	kg/m3	296.8	15.6	m2
Dæk, komplettering (33)	GR16 - Fliser i affaldsrum, 50mm	15.62	Flise cement fuge - keramikfliser	0.005	0.0	0.0		0.08	1.1	kg/m2	17.2	17.2	kg
Dæk, komplettering (33)	GR16 - Fliser i affaldsrum, 50mm	15.62	Flise lim	0.006	0.0	0.0		0.09	2.9	kg/m2	45.3	45.3	kg
Dæk, komplettering (33)	GR16 - Fliser i affaldsrum, 50mm	15.62	ådrumsmembrane 2 lag acryl/cement		0.0	0.0		0.00	1.8	kg/m2	28.1	28.1	kg
Dæk, komplettering (33)	GR16 - Fliser i affaldsrum, 50mm	15.62	Cement spartel /afretning	0.035	0.0	0.0		0.55	1900	kg/m3	1038.7	1038.7	kg
Dæk og gulve, overflader (43)	GR17 - Terrazzofliser 150mm	2.18	Terrazzo	0.020	0.0	0.0		0.04	2000	kg/m3	87.2	0.0	m3
Dæk, komplettering (33)	GR17 - Terrazzofliser 150mm	2.18	Flise cement fuge - granitgulv	0.005	0.0	0.0		0.01	1.6	kg/m2	3.5	3.5	kg
Dæk, komplettering (33)	GR17 - Terrazzofliser 150mm	2.18	Flise lim	0.008	0.0	0.0		0.02	2.9	kg/m2	6.3	6.3	kg
Dæk, komplettering (33)	GR17 - Terrazzofliser 150mm	2.18	Cement spartel /afretning	0.062	0.0	0.0		0.14	1900	kg/m3	256.8	256.8	kg
Dæk, komplettering (33)	GR17 - Terrazzofliser 150mm	2.18	Armeringsstål 6mm gulv 150 x 150	0.000	0.0	0.0		0.00	3.02	kg/m2	6.6	6.6	kg
Dæk, komplettering (33)	GR17 - Terrazzofliser 150mm	2.18	Glidelag 2 x0,20mm PE folie	0.000	0.0	0.0		0.00	0.38	kg/m2	0.8	2.2	m2
Dæk, komplettering (33)	GR17 - Terrazzofliser 150mm	2.18	thermotec 90r	0.060	0.0	0.0		0.13	104	kg/m3	13.6	0.1	m3
Lofter, komplettering (35)	LG01 - 95mm - plain gypsum ceiling	265.05	Stållægter 45mm	0.001	0.0	0.0	329	0.32	1	kg	329.3	329.3	kg
Lofter, komplettering (35)	LG01 - 95mm - plain gypsum ceiling	265.05	Stållægter 25mm Z	0.001	0.0	0.0	329	0.32	1	kg	329.3	329.3	kg
Lofter, overflader (45)	LG01 - 95mm - plain gypsum ceiling	265.05	Gipsplade 13mm	0.013	0.0	0.0		3.31	10	kg/m2	2650.5	265.1	m2
Lofter, overflader (45)	LG01 - 95mm - plain gypsum ceiling	265.05	Gipsplade 13mm	0.013	0.0	0.0		3.31	10	kg/m2	2650.5	265.1	m2
Lofter, overflader (45)	LB01 - Alu tilsætninger ved gangbro faca	29.22	Aluminiumsplader	0.002	0.0	0.0		0.06	2600	kg/m3	151.9	0.1	m3
Lofter, komplettering (35)	LB01 - Alu tilsætninger ved gangbro faca	29.22	Loft ophæng	0.013	0.0	0.0		0.37	1.5	kg/m2	43.8	43.8	kg
Lofter, overflader (45)	LH01 - 20/115mm - Ecophon Hygiene 60	101.08	Loft i glasuld Hygiene	0.095	0.0	0.0		9.60	3.5	kg/m2	353.8	101.1	m2
Lofter, komplettering (35)	LH01 - 20/115mm - Ecophon Hygiene 60	101.08	Loft ophæng		0.0	0.0		0.00	1.5	kg/m2	151.6	151.6	kg
Lofter, overflader (45)	LM01 - 40mm - Ecophon Focus 2400 x 12	1477.78	Loft i glasuld Focus		0.0	0.0		0.00	3.5	kg/m2	5172.2	1477.8	m2
Lofter, komplettering (35)	LM01 - 40mm - Ecophon Focus 2400 x 12	738.89	Loft ophæng		0.0	0.0		0.00	1.5	kg/m2	1108.3	1108.3	kg
Lofter, overflader (45)	LM02 - 350 mm Sorte industri Batts	170.00	Mineraluld indvendig	0.350				59.50	26	kg/m3	1547.0	59.5	m3
Lofter, komplettering (35)	LM02 - 350 mm Sorte industri Batts		Loft ophæng										
Lofter, overflader (45)	LS01 - 20/115mm - Ecophon Focus 600 x	4181.28	Loft i glasuld Focus	0.095	0.0	0.0		397.22	3.5	kg/m2	14634.5	4181.3	m2
Lofter, komplettering (35)	LS01 - 20/115mm - Ecophon Focus 600 x	4181.28	Loft ophæng	0.002	0.0	0.0		8.36	1.5	kg/m2	6271.9	6271.9	kg
Lofter, overflader (45)	LS02 - 20mm Ecophon Focus 600x600 m	178.33	Loft i glasuld Focus		0.0	0.0		0.00	3.5	kg/m2	624.2	178.3	m2
Lofter, komplettering (35)	LS02 - 20mm Ecophon Focus 600x600 m	178.33	Loft ophæng		0.0	0.0		0.00	1.5	kg/m2	267.5	267.5	kg
Lofter, overflader (45)	Loft under atriumtrappe 50mm	60.23	Loft i glasuld Focus	0.095	0.0	0.0		5.72	3.5	kg/m2	210.8	60.2	m2
Lofter, komplettering (35)	Loft under atriumtrappe 50mm	24.09	Loft ophæng	0.002	0.0	0.0		0.05	1.5	kg/m2	36.1	36.1	kg
Ventilation (57)	Ventilationsanlæg	0.00	ntilation med varmegenvinding 5.000	0.002	0.0	0.0	5	0.00	368	kg	1840.0	5.0	stk.
Ventilation (57)	Ventilationsanlæg	0.00	ntilation med varmegenvinding 10.00	0.002	0.0	0.0	3	0.00	703	kg	1827.8	2.6	stk.
Varme (56)	Circulationspumpe	0.00	Cirkulationspumpe	0.002	0.0	0.0	1	0.00	4.8	kg	4.8	1.0	stk.

C. Existing simplification models/tools

Tool	Developer	Geographical application	Functional application	Time period observed	System boundarie	Object boundaries	Databases used for LCI	Environmental indicators	Functional unit	Communication of results	Mode
BNB	Bundesinstitut für Bau-, Stadt- und Raumforschung and DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen e.V.)	Germany	All	50 years	A1-A3 B2-B5 C1-C4	Exterior walls incl. basement walls, windows Roof Floor slabs Foundations Interior walls Doors	Ökobau.dat	GWP ODP POCP AP EP Pe_{nr} PE_r Pe_{tot}	Whole building	Numerical	Screening
CAALA	CAALA GmbH	Germany	All (for embodied energy) Single/multi-family houses (operational energy)	50+ years	A1-A3 B2-B5 C1-C4 D	User-defined (everything included in the CAD model)	NOT CLEAR	GWP ODP POCP AP EP Pe_{nr} PE_r	Whole building	Graphical	Simplified
BREEAM LCA tool	Building Research Establishment UK	International	All	60 years	Depends on tool used	External walls (Foundations) (Structural frame) Upper floors (Basement/retaining walls) External solar shading Ground/lowest floor (Internal ceiling finishes) Roof (Stairs and ramps) Balustrades and handrails Internal doors (Internal wall finishes) (Internal windows) (Technical systems)	Depends on tool used	Embodied CO2 Embodied waste or embodied waste processing ANY two additional indicators	Whole building	Numerical	Simplified
ENSLIC	The European Commission for Intelligent Energy for Europe + 9 other European organizations	International	All	50 years	User-defined	User-defined	User-defined (EPDs or self-declared building product declarations)	GWP ODP POCP AP EP	m^2	Numerical Graphical	User-defined

Tool	Developer	Geographical application	Functional application	Time period observed	System boundarie	Object boundaries	Databases used for LCI	Environmental indicators	Functional unit	Communication of results	Mode
OI3	Österreichisches Institut für Bauen und Ökologie	Austria	All	100 years	A1-A3	Seven different levels (BG0-BG6) defined by IBO	IBO Baustoffdatenbank Baubook Ecoinvent v2.2	GWP AP Pe_{nr}	m^2	Numerical	Screening
SB Steel	Research Fund for Coal and Steel (funding) + independent LCA experts (development)	Europe	Offices Residential	User-defined (default: 50 years)	A1-A3 A4 B2-B6 C1-C4 D	Roof Interior floor Ground floor Exterior wall Interior wall	Ecoinvent (2007) Worldsteel Association (2002)	GWP ODP POCP AP EP ADPE ADPF	Whole building Area (m^2)	Numerical Graphical	Screening
The Dutch Approach	The Dutch Institution for Construction Quality	The Netherlands	All	50 years	All	User-defined	National Environmental Database NMD	GWP ODP POCP AP EP ADPE ADPF HTP FAETP MAETP TETP	m^2 GFA EUR/year/m^2 GFA	Numerical Graphical	N/A
DGNB	DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen e. V.)	Germany (or other DGNB-compliant countries)	Existing buildings New buildings (all types)	50 years	A1-A3 B4 B6 C3-C4 D	All (except exterior works)	EPD ESUCO Ökobau.dat	GWP ODP POCP AP EP Pe_{nr} PE_r	Whole building	Numerical Graphical	Simplified
LEED	U.S. Green Building Council	International	All	60+ years	A1-A3 B2-B4 B6 C2-C4	All	User-defined	GWP ODP POCP AP EP Pe_{nr}	User-defined	Numerical Graphical	Simplified
Tally	KT Innovations	USA	All	60 years	A1-A3 A4 B2-B5 B6 C2-C4	User-defined (everything included in the CAD model)	GaBi databases	GWP ODP POCP AP EP Pe_{nr} PE_r Pe_{tot}	m^2 UFA	Numerical Graphical	Simplified

Tool	Developer	Geographical application	Functional application	Time period observed	System boundarie	Object boundaries	Databases used for LCI	Environmental indicators	Functional unit	Communication of results	Mode
Green Guide (BREEAM)	Building Research Establishment UK	International	Commercial Educational Healthcare Retail Domestic Industrial	60 years	A1-A3	External walls Internal walls Roof Ground floor Upper floors Windows Insulation Landscaping Floor finishes	EPD	GWP Water extraction TMR ODP HTP Ecotoxicity to freshwater and land Nuclear waste Waste disposal ADPF EP POCP AP	Whole building	Numerical	Screening

D. Case study – Detailed Report One Click LCA

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Ventilator, central, 10.000 m3/h with heat recovery	1	unit	2,7E3	1,09E1	8,49E-1	5,16E-7	1,1E0	3,93E4	Building systems and installa	20	Oekobau.dat
A1-A3	Ventilator, central, 5.000m3/h with heat recovery	1	unit	1,4E3	5,67E0	4,43E-1	2,6E-7	5,78E-1	2,03E4	Building systems and installa	20	Oekobau.dat
A1-A3	Inverter, electrical, French average, Donnee par default (M	2	unit	2,56E2	1,93E0	1,08E0	1,69E-5	1,92E-1	4,23E3	Building systems and installa	20	MDEGD_FDES
A1-A3	Elevator basic component (independent of floor)	3	unit	1,59E4	6,77E1	5,13E0	4,39E-7	5,9E0	2,17E5	Building systems and installa	30	Oekobau.dat 201
A1-A3	Elevator, ground components (independent of storeys)	3	unit	1,63E4	7,43E1	5,73E0	8,06E-7	6,62E0	2,16E5	Building systems and installa	30	Oekobau.dat
A1-A3	Inlet/Outlet valve R-200, galvanized steel (RUUKKI)	3	unit	5,94E0	1,44E-2	1,48E-3	2,29E-8	1,37E-3	4,88E1	Building systems and installa	As building	Kuumasinkityt ra
A1-A3	Thermostatic water mixer, shower, ENTRAXE 150 (IDEAL	8	unit	3,9E2	4,78E2	4,26E-1	3,86E-5	1,91E1	4,34E2	Building systems and installa	20	FDES
A1-A3	Electrical junction box, French average, Donnee par defau	10	unit	8,25E0	3,49E-2	7,75E-3	3,23E-7	6E-3	1,38E2	Building systems and installa	20	MDEGD_FDES
A1-A3	Plastic metering board, RESI9, R9H13416 (Schneider Ele	12	unit	9,91E1	1,27E-1	3,6E-2	5,04E-6	1,67E-2	1,55E3	Building systems and installa	20	PEP
A1-A3	Circulator pump, 50 - 250 W	13	unit	3,78E2	1,74E0	1,42E-1	3,24E-8	1,28E-1	5,64E3	Building systems and installa	10	Oekobau.dat
A1-A3	Electricity meter, French average, Donnee par default (MD	15	unit	1,03E3	7,56E0	3,77E-2	7,4E-5	1,97E-1	9,56E3	Building systems and installa	10	MDEGD_FDES
A1-A3	Convection radiator, wall mounted, 1kW (MDEGD)	20	unit	1,1E3	4,75E0	5,07E-1	1,17E-4	2,75E-1	3,04E4	Building systems and installa	17	FDES
A1-A3	Ceramic toilet, French average, Donnee par default (MDE	37	unit	6,48E3	5,29E1	9,66E0	1,1E-3	3,11E0	1,03E5	Building systems and installa	20	MDEGD_FDES
A1-A3	Variable air volume controller, 34-5430 m3/h, rectangular,	48	unit	1,15E3	5,76E0	4,46E-1	3,98E-7	5,28E-1	1,63E4	Building systems and installa	As building	Oekobau.dat 201
A1-A3	Ceramic toilet, French average, Donnee par default (MDE	48	unit	8,4E3	6,86E1	1,25E1	1,43E-3	4,03E0	1,33E5	Building systems and installa	20	MDEGD_FDES
A1-A3	Steel drainage plumbing, sanitary, French average, DN=2(	48	m	1,62E4	1,06E2	2,69E1	1,03E-3	9,26E0	2,79E5	Building systems and installa	50	MDEGD_FDES
A1-A3	Ceramic sink, French average, Donnee par default (MDEC	54	unit	9,61E3	6,91E1	9,94E0	1,17E-3	3,84E0	1,67E5	Building systems and installa	20	MDEGD_FDES
A1-A3	Sanitary tapware, with electronic sensors, 2.7 kg/piece (Kc	54	unit	1,92E3	4,48E1	1,5E1	2,3E-4	2,4E0	3,01E4	Building systems and installa	10	FDES
A1-A3	Bath or shower tray, acrylic	90	kg	4,1E2	9,63E-1	1,24E-1	1,56E-8	9,06E-2	7,25E3	Building systems and installa	20	Oekobau.dat
A1-A3	Ceramic sink, French average, Donnee par default (MDEC	102	unit	1,82E4	1,31E2	1,88E1	2,2E-3	7,26E0	3,15E5	Building systems and installa	20	MDEGD_FDES
A1-A3	Heating system (plastic pipes), room area m2	229	m2	6,18E2	2,68E0	1,1E-1	1,1E-5	2,57E-1	1,24E4	Building systems and installa	50	Bionova
A1-A3	Convection radiator, wall mounted, 1kW (MDEGD)	308	unit	1,7E4	7,31E1	7,81E0	1,81E-3	4,24E0	4,69E5	Building systems and installa	17	FDES
A1-A3	Convector, HVAC, French average, P=1kW, Donnee par c	308	unit	1,01E5	6,84E2	1,67E2	8,19E-3	5,64E1	1,61E6	Building systems and installa	16	MDEGD_FDES
A1-A3	Cable ladder type ceiling cupport, French average, Donne	430	m	2,28E4	1,04E2	2,78E1	9,76E-4	1,2E1	3,38E5	Building systems and installa	20	MDEGD_FDES
A1-A3	Electric socket	533	unit	2,01E2	4,24E-1	5,29E-2	6,69E-10	4,99E-2	3E3	Building systems and installa	30	Oekobau.dat 201
A1-A3	Photovoltaic system, 1000 kWh/m2*a	700	m2	1,46E5	5,48E2	4,34E1	3,41E-5	7,57E1	2,89E6	Building systems and installa	20	Oekobau.dat
A1-A3	Waste water pipe, PE-HD	730	kg	1,63E3	2,89E0	3,08E-1	5,95E-8	6,38E-1	2,67E4	Building systems and installa	20	Oekobau.dat
A1-A3	Waste water pipe, PE-HD	1020	kg	2,28E3	4,04E0	4,31E-1	8,31E-8	8,92E-1	3,73E4	Building systems and installa	20	Oekobau.dat
A1-A3	Cable suspension trays, French average, Donnee par defa	2789	m	4,21E4	4,82E1	1,55E1	4,13E-3	8,34E0	1,24E6	Building systems and installa	20	MDEGD_FDES
A1-A3	Waste water pipe, PE-HD	2910	kg	6,52E3	1,15E1	1,23E0	2,37E-7	2,54E0	1,06E5	Building systems and installa	20	Oekobau.dat
A1-A3	Electricity cabling, room area m2	9251	m2	2,9E4	8,55E1	8,87E0	5,92E-4	7,57E0	4,77E5	Building systems and installa	50	Bionova
A1-A3	Drainage system, PP, room area m2 (Teppfa)	9251	m2	3,34E5	1,16E3	2,82E2	9,25E-3	6,94E1	3,92E6	Building systems and installa	50	Polypropylene (P
A4	Ventilator, central, 10.000 m3/h with heat recovery	1	unit	1,96E1	7,93E-2	1,7E-2	3,78E-6	1,64E-3	5,47E2	Building systems and installa	20	Oekobau.dat
A4	Ventilator, central, 5.000m3/h with heat recovery	1	unit	1,02E1	4,14E-2	8,9E-3	1,97E-6	8,55E-4	2,86E2	Building systems and installa	20	Oekobau.dat
A4	Inverter, electrical, French average, Donnee par default (M	2	unit	6,54E-1	2,65E-3	5,68E-4	1,26E-7	5,46E-5	1,83E1	Building systems and installa	20	MDEGD_FDES
A4	Elevator basic component (independent of floor)	3	unit	1,34E2	5,41E-1	1,16E-1	2,57E-5	1,12E-2	3,73E3	Building systems and installa	30	Oekobau.dat 201
A4	Elevator, ground components (independent of storeys)	3	unit	1,34E2	5,41E-1	1,16E-1	2,57E-5	1,12E-2	3,73E3	Building systems and installa	30	Oekobau.dat
A4	Inlet/Outlet valve R-200, galvanized steel (RUUKKI)	3	unit	6,01E-2	2,43E-4	5,22E-5	1,16E-8	5,02E-6	1,68E0	Building systems and installa	As building	Kuumasinkityt ra
A4	Thermostatic water mixer, shower, ENTRAXE 150 (IDEAL	8	unit	2,72E-1	1,1E-3	2,37E-4	5,25E-8	2,27E-5	7,6E0	Building systems and installa	20	FDES
A4	Electrical junction box, French average, Donnee par defau	10	unit	3,9E-2	1,58E-4	3,39E-5	7,51E-9	3,25E-6	1,09E0	Building systems and installa	20	MDEGD_FDES
A4	Plastic metering board, RESI9, R9H13416 (Schneider Ele	12	unit	3,48E-1	1,41E-3	3,03E-4	6,71E-8	2,91E-5	9,72E0	Building systems and installa	20	PEP
A4	Circulator pump, 50 - 250 W	13	unit	1,81E0	7,32E-3	1,57E-3	3,49E-7	1,51E-4	5,05E1	Building systems and installa	10	Oekobau.dat
A4	Electricity meter, French average, Donnee par default (MD	15	unit	8,35E-1	3,38E-3	7,26E-4	1,61E-7	6,97E-5	2,33E1	Building systems and installa	10	MDEGD_FDES
A4	Convection radiator, wall mounted, 1kW (MDEGD)	20	unit	5,57E-1	2,25E-3	4,84E-4	1,07E-7	4,65E-5	1,55E1	Building systems and installa	17	FDES
A4	Ceramic toilet, French average, Donnee par default (MDE	37	unit	3,09E1	1,25E-1	2,68E-2	5,95E-6	2,58E-3	8,62E2	Building systems and installa	20	MDEGD_FDES
A4	Variable air volume controller, 34-5430 m3/h, rectangular,	48	unit	6,56E0	2,65E-2	5,7E-3	1,26E-6	5,48E-4	1,83E2	Building systems and installa	As building	Oekobau.dat 201
A4	Ceramic toilet, French average, Donnee par default (MDE	48	unit	4,01E1	1,62E-1	3,48E-2	7,72E-6	3,35E-3	1,12E3	Building systems and installa	20	MDEGD_FDES
A4	Steel drainage plumbing, sanitary, French average, DN=2(	48	m	4,42E1	1,79E-1	3,84E-2	8,52E-6	3,69E-3	1,23E3	Building systems and installa	50	MDEGD_FDES
A4	Ceramic sink, French average, Donnee par default (MDEC	54	unit	2,25E1	9,12E-2	1,96E-2	4,34E-6	1,88E-3	6,29E2	Building systems and installa	20	MDEGD_FDES
A4	Sanitary tapware, with electronic sensors, 2.7 kg/piece (Kc	54	unit	4,06E0	1,64E-2	3,53E-3	7,82E-7	3,39E-4	1,13E2	Building systems and installa	10	FDES
A4	Bath or shower tray, acrylic	90	kg	2,5E0	1,01E-2	2,18E-3	4,83E-7	2,09E-4	6,99E1	Building systems and installa	20	Oekobau.dat
A4	Ceramic sink, French average, Donnee par default (MDEC	102	unit	4,26E1	1,72E-1	3,7E-2	8,21E-6	3,56E-3	1,19E3	Building systems and installa	20	MDEGD_FDES
A4	Heating system (plastic pipes), room area m2	229	m2	1,56E1	6,32E-2	1,36E-2	3,01E-6	1,3E-3	4,36E2	Building systems and installa	50	Bionova
A4	Convection radiator, wall mounted, 1kW (MDEGD)	308	unit	8,57E0	3,47E-2	7,45E-3	1,65E-6	7,16E-4	2,39E2	Building systems and installa	17	FDES
A4	Convector, HVAC, French average, P=1kW, Donnee par c	308	unit	4,29E2	1,73E0	3,72E-1	8,26E-5	3,58E-2	1,2E4	Building systems and installa	16	MDEGD_FDES
A4	Cable ladder type ceiling cupport, French average, Donne	430	m	1,23E2	4,99E-1	1,07E-1	2,38E-5	1,03E-2	3,44E3	Building systems and installa	20	MDEGD_FDES
A4	Electric socket	533	unit	2,97E0	1,2E-2	2,58E-3	5,72E-7	2,48E-4	8,28E1	Building systems and installa	30	Oekobau.dat 201
A4	Photovoltaic system, 1000 kWh/m2*a	700	m2	2,92E2	1,18E0	2,54E-1	5,63E-5	2,44E-2	8,16E3	Building systems and installa	20	Oekobau.dat

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Waste water pipe, PE-HD	730	kg	2,03E1	8,22E-2	1,77E-2	3,92E-6	1,7E-3	5,67E2	Building systems and installa	20	Oekobau.dat
A4	Waste water pipe, PE-HD	1020	kg	2,84E1	1,15E-1	2,47E-2	5,47E-6	2,37E-3	7,92E2	Building systems and installa	20	Oekobau.dat
A4	Cable suspension trays, French average, Donnee par defa	2789	m	1,16E2	4,71E-1	1,01E-1	2,24E-5	9,72E-3	3,25E3	Building systems and installa	20	MDEGD_FDES
A4	Waste water pipe, PE-HD	2910	kg	8,1E1	3,28E-1	7,04E-2	1,56E-5	6,76E-3	2,26E3	Building systems and installa	20	Oekobau.dat
A4	Electricity cabling, room area m2	9251	m2	5,82E2	2,35E0	5,06E-1	1,12E-4	4,86E-2	1,62E4	Building systems and installa	50	Bionova
A4	Drainage system, PP, room area m2 (Teppfa)	9251	m2	3,39E3	1,37E1	2,95E0	6,54E-4	2,83E-1	9,48E4	Building systems and installa	50	Polypropylene (P
B1-B5	Ventilator, central, 10.000 m3/h with heat recovery	1	unit	5,41E3	2,18E1	1,7E0	1,03E-6	2,21E0	7,87E4	Building systems and installa	20	Oekobau.dat
B1-B5	Ventilator, central, 5.000m3/h with heat recovery	1	unit	2,8E3	1,13E1	8,87E-1	5,19E-7	1,16E0	4,06E4	Building systems and installa	20	Oekobau.dat
B1-B5	Inverter, electrical, French average, Donnee par default (M	2	unit	5,12E2	3,87E0	2,15E0	3,38E-5	3,84E-1	8,45E3	Building systems and installa	20	MDEGD_FDES
B1-B5	Elevator basic component (independent of floor)	3	unit	1,59E4	6,77E1	5,13E0	4,39E-7	5,9E0	2,17E5	Building systems and installa	30	Oekobau.dat 201
B1-B5	Elevator, ground components (independent of storeys)	3	unit	1,63E4	7,43E1	5,73E0	8,06E-7	6,62E0	2,16E5	Building systems and installa	30	Oekobau.dat
B1-B5	Thermostatic water mixer, shower, ENTRAXE 150 (IDEAL	8	unit	7,81E2	9,57E2	8,51E-1	7,71E-5	3,82E1	8,68E2	Building systems and installa	20	FDES
B1-B5	Electrical junction box, French average, Donnee par defau	10	unit	1,65E1	6,98E-2	1,55E-2	6,46E-7	1,2E-2	2,76E2	Building systems and installa	20	MDEGD_FDES
B1-B5	Plastic metering board, RESI9, R9H13416 (Schneider Ele	12	unit	1,98E2	2,54E-1	7,19E-2	1,01E-5	3,34E-2	3,1E3	Building systems and installa	20	PEP
B1-B5	Circulator pump, 50 - 250 W	13	unit	1,51E3	6,97E0	5,69E-1	1,29E-7	5,14E-1	2,26E4	Building systems and installa	10	Oekobau.dat
B1-B5	Electricity meter, French average, Donnee par default (MD	15	unit	4,1E3	3,02E1	1,51E-1	2,96E-4	7,86E-1	3,83E4	Building systems and installa	10	MDEGD_FDES
B1-B5	Convection radiator, wall mounted, 1kW (MDEGD)	20	unit	2,21E3	9,5E0	1,01E0	2,35E-4	5,51E-1	6,08E4	Building systems and installa	17	FDES
B1-B5	Ceramic toilet, French average, Donnee par default (MDE	37	unit	1,3E4	1,06E2	1,93E1	2,2E-3	6,22E0	2,06E5	Building systems and installa	20	MDEGD_FDES
B1-B5	Ceramic toilet, French average, Donnee par default (MDE	48	unit	1,68E4	1,37E2	2,51E1	2,85E-3	8,06E0	2,67E5	Building systems and installa	20	MDEGD_FDES
B1-B5	Ceramic sink, French average, Donnee par default (MDEC	54	unit	1,92E4	1,38E2	1,99E1	2,33E-3	7,69E0	3,34E5	Building systems and installa	20	MDEGD_FDES
B1-B5	Sanitary tapware, with electronic sensors, 2.7 kg/piece (Kc	54	unit	7,67E3	1,79E2	6E1	9,2E-4	9,59E0	1,2E5	Building systems and installa	10	FDES
B1-B5	Bath or shower tray, acrylic	90	kg	8,2E2	1,93E0	2,49E-1	3,12E-8	1,81E-1	1,45E4	Building systems and installa	20	Oekobau.dat
B1-B5	Ceramic sink, French average, Donnee par default (MDEC	102	unit	3,63E4	2,61E2	3,75E1	4,41E-3	1,45E1	6,31E5	Building systems and installa	20	MDEGD_FDES
B1-B5	Convection radiator, wall mounted, 1kW (MDEGD)	308	unit	3,4E4	1,46E2	1,56E1	3,62E-3	8,48E0	9,37E5	Building systems and installa	17	FDES
B1-B5	Convector, HVAC, French average, P=1kW, Donnee par c	308	unit	3,04E5	2,05E3	5,01E2	2,46E-2	1,69E2	4,82E6	Building systems and installa	16	MDEGD_FDES
B1-B5	Cable ladder type ceiling cupport, French average, Donne	430	m	4,56E4	2,09E2	5,56E1	1,95E-3	2,41E1	6,75E5	Building systems and installa	20	MDEGD_FDES
B1-B5	Electric socket	533	unit	2,01E2	4,24E-1	5,29E-2	6,69E-10	4,99E-2	3E3	Building systems and installa	30	Oekobau.dat 201
B1-B5	Photovoltaic system, 1000 kWh/m2*a	700	m2	2,92E5	1,1E3	8,68E1	6,82E-5	1,51E2	5,77E6	Building systems and installa	20	Oekobau.dat
B1-B5	Waste water pipe, PE-HD	730	kg	3,27E3	5,79E0	6,16E-1	1,19E-7	1,28E0	5,33E4	Building systems and installa	20	Oekobau.dat
B1-B5	Waste water pipe, PE-HD	1020	kg	4,57E3	8,09E0	8,61E-1	1,66E-7	1,78E0	7,45E4	Building systems and installa	20	Oekobau.dat
B1-B5	Cable suspension trays, French average, Donnee par defa	2789	m	8,42E4	9,65E1	3,09E1	8,26E-3	1,67E1	2,48E6	Building systems and installa	20	MDEGD_FDES
B1-B5	Waste water pipe, PE-HD	2910	kg	1,3E4	2,31E1	2,46E0	4,74E-7	5,09E0	2,13E5	Building systems and installa	20	Oekobau.dat
C1-C4	Ventilator, central, 10.000 m3/h with heat recovery	1	unit	5,68E-1	3,36E-3	4,58E-4	5,35E-13	2,64E-4	8,5E0	Building systems and installa	20	Oekobau.dat
C1-C4	Ventilator, central, 5.000m3/h with heat recovery	1	unit	2,97E-1	1,76E-3	2,39E-4	2,8E-13	1,38E-4	4,44E0	Building systems and installa	20	Oekobau.dat
C1-C4	Inverter, electrical, French average, Donnee par default (M	2	unit	6,41E-2	5,03E-4	1,04E-4	5,12E-14	4,97E-5	1,34E0	Building systems and installa	20	MDEGD_FDES
C1-C4	Elevator basic component (independent of floor)	3	unit	3,87E0	2,29E-2	3,12E-3	3,65E-12	1,82E-3	5,79E1	Building systems and installa	30	Oekobau.dat 201
C1-C4	Elevator, ground components (independent of storeys)	3	unit	3,87E0	2,29E-2	3,12E-3	3,65E-12	1,8E-3	5,79E1	Building systems and installa	30	Oekobau.dat
C1-C4	Inlet/Outlet valve R-200, galvanized steel (RUUKKI)	3	unit	1,67E-2	6,65E-5	1,38E-5	3,26E-9	2,25E-6	4,76E-1	Building systems and installa	As building	Kuumasinkityt ra
C1-C4	Thermostatic water mixer, shower, ENTRAXE 150 (IDEAL	8	unit	7,89E-3	4,67E-5	6,36E-6	7,44E-15	3,67E-6	1,18E-1	Building systems and installa	20	FDES
C1-C4	Electrical junction box, French average, Donnee par defau	10	unit	3,82E-3	3E-5	6,21E-6	3,05E-15	2,96E-6	7,97E-2	Building systems and installa	20	MDEGD_FDES
C1-C4	Plastic metering board, RESI9, R9H13416 (Schneider Ele	12	unit	3,42E-2	2,68E-4	5,55E-5	2,73E-14	2,65E-5	7,12E-1	Building systems and installa	20	PEP
C1-C4	Circulator pump, 50 - 250 W	13	unit	5,24E-2	3,1E-4	4,23E-5	4,94E-14	2,47E-5	7,84E-1	Building systems and installa	10	Oekobau.dat
C1-C4	Electricity meter, French average, Donnee par default (MD	15	unit	8,19E-2	6,42E-4	1,33E-4	6,54E-14	6,35E-5	1,71E0	Building systems and installa	10	MDEGD_FDES
C1-C4	Convection radiator, wall mounted, 1kW (MDEGD)	20	unit	5,46E-2	4,28E-4	8,86E-5	4,36E-14	4,23E-5	1,14E0	Building systems and installa	17	FDES
C1-C4	Ceramic toilet, French average, Donnee par default (MDE	37	unit	3,03E0	2,37E-2	4,92E-3	2,42E-12	2,35E-3	6,32E1	Building systems and installa	20	MDEGD_FDES
C1-C4	Variable air volume controller, 34-5430 m3/h, rectangular,	48	unit	6,43E-1	5,04E-3	1,04E-3	5,14E-13	4,99E-4	1,34E1	Building systems and installa	As building	Oekobau.dat 201
C1-C4	Ceramic toilet, French average, Donnee par default (MDE	48	unit	3,93E0	3,08E-2	6,38E-3	3,14E-12	3,05E-3	8,19E1	Building systems and installa	20	MDEGD_FDES
C1-C4	Steel drainage plumbing, sanitary, French average, DN=2(	48	m	4,34E0	3,4E-2	7,04E-3	3,46E-12	3,36E-3	9,04E1	Building systems and installa	50	MDEGD_FDES
C1-C4	Ceramic sink, French average, Donnee par default (MDEC	54	unit	2,21E0	1,73E-2	3,59E-3	1,77E-12	1,71E-3	4,61E1	Building systems and installa	20	MDEGD_FDES
C1-C4	Sanitary tapware, with electronic sensors, 2.7 kg/piece (Kc	54	unit	3,98E-1	3,12E-3	6,46E-4	3,18E-13	3,08E-4	8,3E0	Building systems and installa	10	FDES
C1-C4	Bath or shower tray, acrylic	90	kg	2,27E2	5,32E-2	4,44E-3	1,83E-11	2,43E-3	1,24E2	Building systems and installa	20	Oekobau.dat
C1-C4	Ceramic sink, French average, Donnee par default (MDEC	102	unit	4,18E0	3,27E-2	6,78E-3	3,34E-12	3,24E-3	8,71E1	Building systems and installa	20	MDEGD_FDES
C1-C4	Heating system (plastic pipes), room area m2	229	m2	2,44E1	4,68E-2	2,33E-2	1,49E-6	6,56E-3	1,81E2	Building systems and installa	50	Bionova
C1-C4	Convection radiator, wall mounted, 1kW (MDEGD)	308	unit	8,41E-1	6,59E-3	1,37E-3	6,72E-13	6,52E-4	1,75E1	Building systems and installa	17	FDES
C1-C4	Convector, HVAC, French average, P=1kW, Donnee par c	308	unit	4,2E1	3,29E-1	6,83E-2	3,36E-11	3,26E-2	8,76E2	Building systems and installa	16	MDEGD_FDES
C1-C4	Cable ladder type ceiling cupport, French average, Donne	430	m	1,21E1	9,48E-2	1,96E-2	9,66E-12	9,37E-3	2,52E2	Building systems and installa	20	MDEGD_FDES
C1-C4	Electric socket	533	unit	8,6E-2	5,09E-4	6,93E-5	8,1E-14	4E-5	1,29E0	Building systems and installa	30	Oekobau.dat 201
C1-C4	Photovoltaic system, 1000 kWh/m2*a	700	m2	1,42E2	8,79E-1	1,27E-1	2,19E-9	8,53E-2	2,12E3	Building systems and installa	20	Oekobau.dat

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
C1-C4	Waste water pipe, PE-HD	730	kg	1,84E3	4,31E-1	3,6E-2	1,49E-10	1,98E-2	1E3	Building systems and installa	20	Oekobau.dat
C1-C4	Waste water pipe, PE-HD	1020	kg	2,58E3	6,03E-1	5,03E-2	2,07E-10	2,76E-2	1,4E3	Building systems and installa	20	Oekobau.dat
C1-C4	Cable suspension trays, French average, Donnee par defa	2789	m	1,14E1	8,95E-2	1,85E-2	9,12E-12	8,85E-3	2,38E2	Building systems and installa	20	MDEGD_FDES
C1-C4	Waste water pipe, PE-HD	2910	kg	7,35E3	1,72E0	1,44E-1	5,92E-10	7,87E-2	4E3	Building systems and installa	20	Oekobau.dat
C1-C4	Electricity cabling, room area m2	9251	m2	3,37E1	2E-1	2,72E-2	3,18E-11	1,57E-2	5,05E2	Building systems and installa	50	Bionova
C1-C4	Drainage system, PP, room area m2 (Teppfa)	9251	m2	5,32E3	1,02E1	5,06E0	3,23E-4	1,43E0	3,95E4	Building systems and installa	50	Polypropylene (P
D	Ventilator, central, 10.000 m3/h with heat recovery	1	unit	-6,85E2	-2,63E0	-2,06E-1	-3,13E-9	-3,79E-1	-5,78E3	Building systems and installa	20	Oekobau.dat
D	Ventilator, central, 5.000m3/h with heat recovery	1	unit	-3,58E2	-1,37E0	-1,08E-1	-1,64E-9	-1,98E-1	-3,02E3	Building systems and installa	20	Oekobau.dat
D	Elevator basic component (independent of floor)	3	unit	-8,88E2	-3,45E0	-2,9E-1	9,87E-9	-5,12E-1	-7,58E3	Building systems and installa	30	Oekobau.dat 201
D	Elevator, ground components (independent of storeys)	3	unit	-6,23E3	-2,39E1	-1,87E0	-2,85E-8	-3,44E0	-5,26E4	Building systems and installa	30	Oekobau.dat
D	Inlet/Outlet valve R-200, galvanized steel (RUUKKI)	3	unit	-1,8E0	-3,65E-3	-3,84E-4	-1,44E-10	-7,24E-4	-1,93E1	Building systems and installa	As building	Kuumasinkityt ra
D	Thermostatic water mixer, shower, ENTRAXE 150 (IDEAL	8	unit	-2,75E1	-1,52E-1	-9,43E-3	-2,87E-10	-8,84E-3	-3,57E2	Building systems and installa	20	FDES
D	Circulator pump, 50 - 250 W	13	unit	3,93E-2	2,33E-4	3,17E-5	3,71E-14	1,85E-5	5,88E-1	Building systems and installa	10	Oekobau.dat
D	Convection radiator, wall mounted, 1kW (MDEGD)	20	unit	-3,25E1	-1,24E-1	-9,76E-3	-1,48E-10	-1,79E-2	-2,74E2	Building systems and installa	17	FDES
D	Sanitary tapware, with electronic sensors, 2.7 kg/piece (Kc	54	unit	-1,64E1	-1,01E-1	-7,92E-3	-6,12E-10	-6,62E-3	-2,58E2	Building systems and installa	10	FDES
D	Bath or shower tray, acrylic	90	kg	-1,4E2	-1,51E-1	-2,42E-2	-2,52E-10	-1,57E-2	-2,48E3	Building systems and installa	20	Oekobau.dat
D	Heating system (plastic pipes), room area m2	229	m2	-1,04E2	-2,6E-1	-5,45E-2	-7,19E-7	-2,25E-2	-1,56E3	Building systems and installa	50	Bionova
D	Convection radiator, wall mounted, 1kW (MDEGD)	308	unit	-5E2	-1,92E0	-1,5E-1	-2,28E-9	-2,76E-1	-4,22E3	Building systems and installa	17	FDES
D	Electric socket	533	unit	-1,5E2	-8,31E-1	-5,14E-2	-1,56E-9	-4,82E-2	-1,95E3	Building systems and installa	30	Oekobau.dat 201
D	Waste water pipe, PE-HD	730	kg	-1,14E3	-1,23E0	-1,96E-1	-2,05E-9	-1,27E-1	-2,01E4	Building systems and installa	20	Oekobau.dat
D	Waste water pipe, PE-HD	1020	kg	-1,59E3	-1,71E0	-2,74E-1	-2,86E-9	-1,78E-1	-2,81E4	Building systems and installa	20	Oekobau.dat
D	Waste water pipe, PE-HD	2910	kg	-4,53E3	-4,89E0	-7,81E-1	-8,15E-9	-5,08E-1	-8,01E4	Building systems and installa	20	Oekobau.dat
D	Electricity cabling, room area m2	9251	m2	-1,98E4	-1,21E2	-9,55E0	-7,37E-7	-7,98E0	-3,1E5	Building systems and installa	50	Bionova
D	Drainage system, PP, room area m2 (Teppfa)	9251	m2	-3,9E5	-5,58E2	-1,71E2	-1,09E-1	-2,62E1	-1,2E7	Building systems and installa	50	Polypropylene (P
				1,75E6	**9,54E3**	**1,55E3**	**8,56E-2**	**7,85E2**	**3,02E7**	**Building systems and inst**		
A1-A3	Precast concrete external wall, incl. reinforcement, ép. 18c	121.18	m2	4,3E3	9,46E0	1,41E0	1,51E-4	4E-1	2,87E4	Columns and load-bearing v	100	FDES
A1-A3	Precast concrete external wall, incl. reinforcement, ép. 18c	306.36	m2	1,09E4	2,39E1	3,55E0	3,83E-4	1,01E0	7,26E4	Columns and load-bearing v	100	FDES
A1-A3	Precast concrete external wall, incl. reinforcement, ép. 18c	472.9	m2	1,68E4	3,69E1	5,49E0	5,91E-4	1,56E0	1,12E5	Columns and load-bearing v	100	FDES
A1-A3	Precast concrete external wall, incl. reinforcement, ép. 18c	895.18	m2	3,18E4	6,99E1	1,04E1	1,12E-3	2,95E0	2,12E5	Columns and load-bearing v	100	FDES
A1-A3	Precast concrete external wall, incl. reinforcement, ép. 18c	951.18	m2	3,38E4	7,43E1	1,1E1	1,19E-3	3,14E0	2,25E5	Columns and load-bearing v	100	FDES
A1-A3	Precast concrete external wall, incl. reinforcement, ép. 18c	1133.87	m2	4,03E4	8,86E1	1,32E1	1,42E-3	3,74E0	2,69E5	Columns and load-bearing v	100	FDES
A1-A3	Concrete column, precast, reinforced, C32/40 (Skonto Pre	107426.2	kg	2,01E4	4,82E1	1,99E1	1,02E-3	3,55E0	2,22E5	Columns and load-bearing v	As building	Columns, Skontc
A4	Precast concrete external wall, incl. reinforcement, ép. 18c	121.18	m2	6,03E2	2,78E0	6,05E-1	1,19E-4	3,4E-2	1,72E4	Columns and load-bearing v	100	FDES
A4	Precast concrete external wall, incl. reinforcement, ép. 18c	306.36	m2	1,52E3	7,02E0	1,53E0	3,01E-4	8,59E-2	4,34E4	Columns and load-bearing v	100	FDES
A4	Precast concrete external wall, incl. reinforcement, ép. 18c	472.9	m2	2,35E3	1,08E1	2,36E0	4,65E-4	1,33E-1	6,7E4	Columns and load-bearing v	100	FDES
A4	Precast concrete external wall, incl. reinforcement, ép. 18c	895.18	m2	4,45E3	2,05E1	4,47E0	8,8E-4	2,51E-1	1,27E5	Columns and load-bearing v	100	FDES
A4	Precast concrete external wall, incl. reinforcement, ép. 18c	951.18	m2	4,73E3	2,18E1	4,75E0	9,35E-4	2,67E-1	1,35E5	Columns and load-bearing v	100	FDES
A4	Precast concrete external wall, incl. reinforcement, ép. 18c	1133.87	m2	5,64E3	2,6E1	5,66E0	1,11E-3	3,18E-1	1,61E5	Columns and load-bearing v	100	FDES
A4	Concrete column, precast, reinforced, C32/40 (Skonto Pre	107426.2	kg	1,23E3	5,68E0	1,24E0	2,44E-4	6,96E-2	3,51E4	Columns and load-bearing v	As building	Columns, Skontc
C1-C4	Precast concrete external wall, incl. reinforcement, ép. 18c	121.18	m2	1,43E2	1,12E0	2,33E-1	1,14E-10	1,11E-1	2,99E3	Columns and load-bearing v	100	FDES
C1-C4	Precast concrete external wall, incl. reinforcement, ép. 18c	306.36	m2	3,62E2	2,84E0	5,88E-1	2,89E-10	2,81E-1	7,55E3	Columns and load-bearing v	100	FDES
C1-C4	Precast concrete external wall, incl. reinforcement, ép. 18c	472.9	m2	5,59E2	4,38E0	9,08E-1	4,47E-10	4,33E-1	1,17E4	Columns and load-bearing v	100	FDES
C1-C4	Precast concrete external wall, incl. reinforcement, ép. 18c	895.18	m2	1,06E3	8,29E0	1,72E0	8,45E-10	8,2E-1	2,21E4	Columns and load-bearing v	100	FDES
C1-C4	Precast concrete external wall, incl. reinforcement, ép. 18c	951.18	m2	1,12E3	8,81E0	1,83E0	8,98E-10	8,71E-1	2,34E4	Columns and load-bearing v	100	FDES
C1-C4	Precast concrete external wall, incl. reinforcement, ép. 18c	1133.87	m2	1,34E3	1,05E1	2,18E0	1,07E-9	1,04E0	2,79E4	Columns and load-bearing v	100	FDES
C1-C4	Concrete column, precast, reinforced, C32/40 (Skonto Pre	107426.2	kg	2,93E2	2,3E0	4,76E-1	2,34E-10	2,27E-1	6,11E3	Columns and load-bearing v	As building	Columns, Skontc
D	Precast concrete external wall, incl. reinforcement, ép. 18c	121.18	m2	-1,38E3	-2,87E0	-9,92E-1	-3,44E-5	-1,68E-1	-7,07E3	Columns and load-bearing v	100	FDES
D	Precast concrete external wall, incl. reinforcement, ép. 18c	306.36	m2	-3,49E3	-7,26E0	-2,51E0	-8,71E-5	-4,24E-1	-1,79E4	Columns and load-bearing v	100	FDES
D	Precast concrete external wall, incl. reinforcement, ép. 18c	472.9	m2	-5,38E3	-1,12E1	-3,87E0	-1,34E-4	-6,54E-1	-2,76E4	Columns and load-bearing v	100	FDES
D	Precast concrete external wall, incl. reinforcement, ép. 18c	895.18	m2	-1,02E4	-2,12E1	-7,33E0	-2,54E-4	-1,24E0	-5,22E4	Columns and load-bearing v	100	FDES
D	Precast concrete external wall, incl. reinforcement, ép. 18c	951.18	m2	-1,08E4	-2,25E1	-7,79E0	-2,7E-4	-1,32E0	-5,55E4	Columns and load-bearing v	100	FDES
D	Precast concrete external wall, incl. reinforcement, ép. 18c	1133.87	m2	-1,29E4	-2,69E1	-9,28E0	-3,22E-4	-1,57E0	-6,62E4	Columns and load-bearing v	100	FDES
D	Concrete column, precast, reinforced, C32/40 (Skonto Pre	107426.2	kg	-2,82E3	-5,88E0	-2,03E0	-7,05E-5	-3,43E-1	-1,45E4	Columns and load-bearing v	As building	Columns, Skontc
				1,83E5	**4,84E2**	**9,34E1**	**9,92E-3**	**2,13E1**	**1,83E6**	**Columns and load-bearing**		
B6	District heat, Denmark	148748	kWh	1,72E6	8,34E3	1,23E3	9,84E-2	4,79E2	1,98E7	District heat use		LCA study for co
				1,72E6	**8,34E3**	**1,23E3**	**9,84E-2**	**4,79E2**	**1,98E7**	**District heat use**		
B6	Electricity, Denmark	36728	kWh	3,8E5	2,31E3	4,05E2	2,99E-2	1,16E2	1,12E7	Electricity use		LCA study for co
B6	Electricity, Denmark	44405	kWh	4,6E5	2,79E3	4,89E2	3,61E-2	1,4E2	1,36E7	Electricity use		LCA study for co

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
B6	Electricity, Denmark	53725	kWh	5,56E5	3,38E3	5,92E2	4,37E-2	1,69E2	1,64E7	Electricity use		LCA study for co
				1,4E6	**8,47E3**	**1,49E3**	**1,1E-1**	**4,25E2**	**4,12E7**	**Electricity use**		
A1-A3	Plywood, spruce, uncoated (Metsä Wood)	3.3	m3	3,99E2	3E0	6,34E-1	1,78E-8	1,83E-1	2,11E4	External walls and facade	As building	Metsä wood spru
A1-A3	Plywood, spruce, uncoated (Metsä Wood)	4.7	m2	5,12E0	3,85E-2	8,12E-3	2,28E-10	2,35E-3	2,71E2	External walls and facade	As building	Metsä wood spru
A1-A3	Mineral wool (facade insulation)	11.6	m3	8,42E2	3,96E0	5,46E-1	1,96E-8	3,07E-1	1,07E4	External walls and facade	50	Oekobau.dat 201
A1-A3	Mineral wool (facade insulation)	15.2	m3	1,1E3	5,19E0	7,16E-1	2,57E-8	4,02E-1	1,4E4	External walls and facade	50	Oekobau.dat 201
A1-A3	Mineral wool (facade insulation)	57	m3	4,14E3	1,95E1	2,68E0	9,64E-8	1,51E0	5,26E4	External walls and facade	50	Oekobau.dat 201
A1-A3	Insulation with aluminium cladding and mineral filled polim	57.75	m2	2,14E3	9,82E0	5,78E-1	4,68E-5	6,93E-1	4,27E4	External walls and facade	As building	EPD ALUCOBOI
A1-A3	Insulation with aluminium cladding and mineral filled polim	75.8	m2	2,8E3	1,29E1	7,58E-1	6,14E-5	9,1E-1	5,61E4	External walls and facade	As building	EPD ALUCOBOI
A1-A3	Concrete, ready mix, DE avg., C 35/45 (IZB)	155.7	m3	4,13E4	5,67E1	8,91E0	1,24E-4	6,88E0	1,88E5	External walls and facade	As building	Oekobau.dat 201
A1-A3	Precast concrete wall elements (solid, uninsulated), generi	179.81	m2	1,22E4	3,34E1	4,09E0	3,68E-4	1,69E0	1,08E5	External walls and facade	As building	One Click LCA
A1-A3	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	246	m3	4,43E4	5,34E1	6,89E0	6,27E-7	4,82E0	3,1E5	External walls and facade	As building	EPD Unbewehrte
A1-A3	Sunshade sheet	248	m2	1,46E3	2,04E0	3,88E-1	7,27E-8	4,5E-1	2,96E4	External walls and facade	15	Oekobau.dat 201
A1-A3	Precast concrete wall elements (solid, uninsulated), generi	388	m2	2,19E4	6E1	7,36E0	6,62E-4	3,04E0	1,94E5	External walls and facade	As building	One Click LCA
A1-A3	Silicate dispersion exterior paint primer	391.1	kg	3,62E2	1,36E0	1,17E-1	2,46E-8	1,67E-1	8,32E3	External walls and facade	20	Oekobau.dat 201
A1-A3	Silicate dispersion exterior paint primer	429	kg	3,97E2	1,49E0	1,28E-1	2,69E-8	1,84E-1	9,12E3	External walls and facade	20	Oekobau.dat 201
A1-A3	Precast concrete wall elements (solid, uninsulated), generi	724.48	m2	4,92E4	1,34E2	1,65E1	1,48E-3	6,82E0	4,36E5	External walls and facade	As building	One Click LCA
A1-A3	Mineral wool (facade insulation)	738	m3	5,36E4	2,52E2	3,47E1	1,25E-6	1,95E1	6,81E5	External walls and facade	50	Oekobau.dat 201
A1-A3	Vapour retarder Polyamid (PA)	781	m2	6,75E2	6,29E0	1,53E-1	1,45E-8	3,78E-1	1,02E4	External walls and facade	20	Oekobau.dat 201
A1-A3	Sunshade sheet	850	m2	4,99E3	6,99E0	1,33E0	2,49E-7	1,54E0	1,01E5	External walls and facade	15	Oekobau.dat 201
A1-A3	Precast concrete wall elements (solid, uninsulated), generi	1376.53	m2	9,34E4	2,55E2	3,13E1	2,82E-3	1,3E1	8,28E5	External walls and facade	As building	One Click LCA
A1-A3	Precast concrete wall elements (solid, uninsulated), generi	1739.37	m2	1,18E5	3,23E2	3,96E1	3,56E-3	1,64E1	1,05E6	External walls and facade	As building	One Click LCA
A1-A3	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3099.6	m2	7,44E3	1,55E1	3,81E0	4,87E-4	8,18E-1	1,61E5	External walls and facade	As building	MD-16002-EN Si
A1-A3	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3272	kg	8,61E2	1,8E0	4,41E-1	5,63E-5	9,47E-2	1,87E4	External walls and facade	As building	MD-16002-EN Si
A1-A3	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3272	kg	8,61E2	1,8E0	4,41E-1	5,63E-5	9,47E-2	1,87E4	External walls and facade	As building	MD-16002-EN Si
A1-A3	Insulation with aluminium cladding and mineral filled polim	3392	m2	1,26E5	5,77E2	3,39E1	2,75E-3	4,07E1	2,51E6	External walls and facade	As building	EPD ALUCOBOI
A1-A3	Extruded polystyrene (XPS), m3	3520	kg	1,07E4	2,28E1	2,33E0	7,59E-7	1,02E1	1,52E5	External walls and facade	50	Oekobau.dat 201
A1-A3	Extruded polystyrene (XPS), m3	4710.3	kg	1,43E4	3,05E1	3,12E0	1,02E-6	1,36E1	2,03E5	External walls and facade	50	Oekobau.dat 201
A1-A3	Reinforcement steel	5210.2	kg	3,91E3	9,31E0	9,27E-1	2,58E-7	9,08E-1	6,56E4	External walls and facade	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	8108.2	kg	4,19E4	2,21E2	2,13E1	1,99E-3	1,5E1	6,96E5	External walls and facade	As building	One Click LCA
A1-A3	Masonry mortar (IWM)	14372.2	kg	1,26E3	2,49E0	3,92E-1	1,93E-7	1,49E-1	1,36E4	External walls and facade	45	Oekobau.dat 201
A1-A3	Facing bricks	34408.8	kg	1,03E4	1,41E1	1,84E0	1,47E-7	2,75E0	1,63E5	External walls and facade	50	Oekobau.dat 201
A4	Plywood, spruce, uncoated (Metsä Wood)	3.3	m3	1,74E1	8,03E-2	1,75E-2	3,44E-6	9,83E-4	4,96E2	External walls and facade	As building	Metsä wood spru
A4	Plywood, spruce, uncoated (Metsä Wood)	4.7	m2	2,24E-1	1,03E-3	2,24E-4	4,42E-8	1,26E-5	6,36E0	External walls and facade	As building	Metsä wood spru
A4	Mineral wool (facade insulation)	11.6	m3	6,16E0	2,84E-2	6,18E-3	1,22E-6	3,48E-4	1,75E2	External walls and facade	50	Oekobau.dat 201
A4	Mineral wool (facade insulation)	15.2	m3	8,08E0	3,72E-2	8,1E-3	1,6E-6	4,55E-4	2,3E2	External walls and facade	50	Oekobau.dat 201
A4	Mineral wool (facade insulation)	57	m3	3,03E1	1,39E-1	3,04E-2	5,98E-6	1,71E-3	8,62E2	External walls and facade	50	Oekobau.dat 201
A4	Insulation with aluminium cladding and mineral filled polim	57.75	m2	4,68E0	2,16E-2	4,7E-3	9,25E-7	2,64E-4	1,33E2	External walls and facade	As building	EPD ALUCOBOI
A4	Insulation with aluminium cladding and mineral filled polim	75.8	m2	6,15E0	2,83E-2	6,17E-3	1,21E-6	3,47E-4	1,75E2	External walls and facade	As building	EPD ALUCOBOI
A4	Concrete, ready mix, DE avg., C 35/45 (IZB)	155.7	m3	1,46E4	2,13E1	4,35E0	2,46E-3	2,19E0	2,22E5	External walls and facade	As building	Oekobau.dat 201
A4	Precast concrete wall elements (solid, uninsulated), generi	179.81	m2	8,92E2	4,11E0	8,95E-1	1,76E-4	5,03E-2	2,54E4	External walls and facade	As building	One Click LCA
A4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	246	m3	1,06E3	4,88E0	1,06E0	2,09E-4	5,96E-2	3,02E4	External walls and facade	As building	EPD Unbewehrte
A4	Sunshade sheet	248	m2	1,14E0	5,25E-3	1,14E-3	2,25E-7	6,43E-5	3,24E1	External walls and facade	15	Oekobau.dat 201
A4	Precast concrete wall elements (solid, uninsulated), generi	388	m2	1,6E3	7,39E0	1,61E0	3,17E-4	9,05E-2	4,57E4	External walls and facade	As building	One Click LCA
A4	Silicate dispersion exterior paint primer	391.1	kg	1,09E1	4,41E-2	9,46E-3	2,1E-6	9,09E-4	3,04E2	External walls and facade	20	Oekobau.dat 201
A4	Silicate dispersion exterior paint primer	429	kg	1,19E1	4,83E-2	1,04E-2	2,3E-6	9,97E-4	3,33E2	External walls and facade	20	Oekobau.dat 201
A4	Precast concrete wall elements (solid, uninsulated), generi	724.48	m2	3,6E3	1,66E1	3,61E0	7,1E-4	2,03E-1	1,02E5	External walls and facade	As building	One Click LCA
A4	Mineral wool (facade insulation)	738	m3	3,92E2	1,81E0	3,93E-1	7,74E-5	2,21E-2	1,12E4	External walls and facade	50	Oekobau.dat 201
A4	Vapour retarder Polyamid (PA)	781	m2	7,18E-1	3,31E-3	7,2E-4	1,42E-7	4,05E-5	2,04E1	External walls and facade	20	Oekobau.dat 201
A4	Sunshade sheet	850	m2	3,91E0	1,8E-2	3,92E-3	7,71E-7	2,2E-4	1,11E2	External walls and facade	15	Oekobau.dat 201
A4	Precast concrete wall elements (solid, uninsulated), generi	1376.53	m2	6,83E3	3,15E1	6,85E0	1,35E-3	3,85E-1	1,94E5	External walls and facade	As building	One Click LCA
A4	Precast concrete wall elements (solid, uninsulated), generi	1739.37	m2	8,63E3	3,98E1	8,66E0	1,71E-3	4,87E-1	2,46E5	External walls and facade	As building	One Click LCA
A4	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3099.6	m2	3,24E2	1,49E0	3,25E-1	6,4E-5	1,83E-2	9,22E3	External walls and facade	As building	MD-16002-EN Si
A4	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3272	kg	3,75E1	1,73E-1	3,76E-2	7,4E-6	2,11E-3	1,07E3	External walls and facade	As building	MD-16002-EN Si
A4	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3272	kg	3,75E1	1,73E-1	3,76E-2	7,4E-6	2,11E-3	1,07E3	External walls and facade	As building	MD-16002-EN Si
A4	Insulation with aluminium cladding and mineral filled polim	3392	m2	2,75E2	1,27E0	2,76E-1	5,43E-5	1,55E-2	7,83E3	External walls and facade	As building	EPD ALUCOBOI
A4	Extruded polystyrene (XPS), m3	3520	kg	4,04E1	1,86E-1	4,06E-2	7,99E-6	2,28E-3	1,15E3	External walls and facade	50	Oekobau.dat 201
A4	Extruded polystyrene (XPS), m3	4710.3	kg	5,41E1	2,49E-1	5,43E-2	1,07E-5	3,05E-3	1,54E3	External walls and facade	50	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Reinforcement steel	5210.2	kg	5,99E1	2,76E-1	6E-2	1,18E-5	3,37E-3	1,7E3	External walls and facade	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	8108.2	kg	9,31E1	4,29E-1	9,34E-2	1,84E-5	5,25E-3	2,65E3	External walls and facade	As building	One Click LCA
A4	Masonry mortar (IWM)	14372.2	kg	1,65E2	7,6E-1	1,66E-1	3,26E-5	9,31E-3	4,7E3	External walls and facade	45	Oekobau.dat 201
A4	Facing bricks	34408.8	kg	3,95E2	1,82E0	3,97E-1	7,81E-5	2,23E-2	1,13E4	External walls and facade	50	Oekobau.dat 201
B1-B5	Sunshade sheet	248	m2	4,37E3	6,12E0	1,16E0	2,18E-7	1,35E0	8,88E4	External walls and facade	15	Oekobau.dat 201
B1-B5	Silicate dispersion exterior paint primer	391.1	kg	7,23E2	2,72E0	2,34E-1	4,91E-8	3,35E-1	1,66E4	External walls and facade	20	Oekobau.dat 201
B1-B5	Silicate dispersion exterior paint primer	429	kg	7,93E2	2,98E0	2,57E-1	5,39E-8	3,67E-1	1,82E4	External walls and facade	20	Oekobau.dat 201
B1-B5	Vapour retarder Polyamid (PA)	781	m2	1,35E3	1,26E1	3,06E-1	2,9E-8	7,55E-1	2,04E4	External walls and facade	20	Oekobau.dat 201
B1-B5	Sunshade sheet	850	m2	1,5E4	2,1E1	3,99E0	7,48E-7	4,63E0	3,04E5	External walls and facade	15	Oekobau.dat 201
B1-B5	Masonry mortar (IWM)	14372.2	kg	1,26E3	2,49E0	3,92E-1	1,93E-7	1,49E-1	1,36E4	External walls and facade	45	Oekobau.dat 201
C1-C4	Plywood, spruce, uncoated (Metsä Wood)	3.3	m3	1,37E1	3,34E-1	4,4E-1	1,59E-6	4,45E-3	1,59E2	External walls and facade	As building	Metsä wood spru
C1-C4	Plywood, spruce, uncoated (Metsä Wood)	4.7	m2	1,76E-1	4,28E-3	5,64E-3	2,04E-8	5,7E-5	2,03E0	External walls and facade	As building	Metsä wood spru
C1-C4	Mineral wool (facade insulation)	11.6	m3	7,26E0	4,49E-2	6,48E-3	1,12E-10	4,36E-3	1,08E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Mineral wool (facade insulation)	15.2	m3	9,52E0	5,88E-2	8,49E-3	1,47E-10	5,71E-3	1,42E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Mineral wool (facade insulation)	57	m3	3,57E1	2,21E-1	3,18E-2	5,51E-10	2,14E-2	5,32E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Insulation with aluminium cladding and mineral filled polim	57.75	m2	5,52E0	3,41E-2	4,92E-3	8,52E-11	3,31E-3	8,24E1	External walls and facade	As building	EPD ALUCOBOI
C1-C4	Insulation with aluminium cladding and mineral filled polim	75.8	m2	7,24E0	4,48E-2	6,46E-3	1,12E-10	4,35E-3	1,08E2	External walls and facade	As building	EPD ALUCOBOI
C1-C4	Concrete, ready mix, DE avg., C 35/45 (IZB)	155.7	m3	1,02E3	7,99E0	1,66E0	8,15E-10	7,9E-1	2,13E4	External walls and facade	As building	Oekobau.dat 201
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	179.81	m2	8,61E2	2,78E0	6,67E-1	1,6E-4	7,74E-2	2,11E4	External walls and facade	As building	One Click LCA
C1-C4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	246	m3	2,52E2	1,97E0	4,09E-1	2,01E-10	1,95E-1	5,25E3	External walls and facade	As building	EPD Unbewehrte
C1-C4	Sunshade sheet	248	m2	1,34E0	8,3E-3	1,2E-3	2,07E-11	8,06E-4	2E1	External walls and facade	15	Oekobau.dat 201
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	388	m2	1,55E3	4,99E0	1,2E0	2,88E-4	1,39E-1	3,79E4	External walls and facade	As building	One Click LCA
C1-C4	Silicate dispersion exterior paint primer	391.1	kg	5,29E0	3,27E-2	4,72E-3	8,17E-11	3,18E-3	7,9E1	External walls and facade	20	Oekobau.dat 201
C1-C4	Silicate dispersion exterior paint primer	429	kg	5,81E0	3,59E-2	5,18E-3	8,96E-11	3,48E-3	8,67E1	External walls and facade	20	Oekobau.dat 201
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	724.48	m2	3,47E3	1,12E1	2,69E0	6,46E-4	3,12E-1	8,5E4	External walls and facade	As building	One Click LCA
C1-C4	Mineral wool (facade insulation)	738	m3	4,62E2	2,86E0	4,12E-1	7,13E-9	2,77E-1	6,89E3	External walls and facade	50	Oekobau.dat 201
C1-C4	Vapour retarder Polyamid (PA)	781	m2	1,58E2	3,69E-2	3,08E-3	1,27E-11	1,69E-3	8,58E1	External walls and facade	20	Oekobau.dat 201
C1-C4	Sunshade sheet	850	m2	4,6E0	2,85E-2	4,11E-3	7,1E-11	2,76E-3	6,87E1	External walls and facade	15	Oekobau.dat 201
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	1376.53	m2	6,59E3	2,13E1	5,11E0	1,23E-3	5,93E-1	1,62E5	External walls and facade	As building	One Click LCA
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	1739.37	m2	8,33E3	2,69E1	6,46E0	1,55E-3	7,49E-1	2,04E5	External walls and facade	As building	One Click LCA
C1-C4	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3099.6	m2	3,82E2	2,36E0	3,41E-1	5,89E-9	2,29E-1	5,7E3	External walls and facade	As building	MD-16002-EN Si
C1-C4	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3272	kg	4,42E1	2,73E-1	3,94E-2	6,82E-10	2,65E-2	6,59E2	External walls and facade	As building	MD-16002-EN Si
C1-C4	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3272	kg	4,42E1	2,73E-1	3,94E-2	6,82E-10	2,65E-2	6,59E2	External walls and facade	As building	MD-16002-EN Si
C1-C4	Insulation with aluminium cladding and mineral filled polim	3392	m2	3,24E2	2E0	2,89E-1	5E-9	1,94E-1	4,84E3	External walls and facade	As building	EPD ALUCOBOI
C1-C4	Extruded polystyrene (XPS), m3	3520	kg	4,77E1	2,95E-1	4,25E-2	7,35E-10	2,86E-2	7,11E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Extruded polystyrene (XPS), m3	4710.3	kg	6,38E1	3,94E-1	5,69E-2	9,84E-10	3,82E-2	9,51E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Reinforcement steel	5210.2	kg	4,2E0	2,49E-2	3,39E-3	3,96E-12	1,96E-3	6,29E1	External walls and facade	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	8108.2	kg	6,28E1	2,5E-1	5,19E-2	1,22E-5	8,43E-3	1,79E3	External walls and facade	As building	One Click LCA
C1-C4	Masonry mortar (IWM)	14372.2	kg	3,92E1	3,07E-1	6,37E-2	3,13E-11	3,04E-2	8,18E2	External walls and facade	45	Oekobau.dat 201
C1-C4	Facing bricks	34408.8	kg	9,39E1	7,36E-1	1,53E-1	7,5E-11	7,28E-2	1,96E3	External walls and facade	50	Oekobau.dat 201
D	Plywood, spruce, uncoated (Metsä Wood)	3.3	m3	-2,09E3	-2,99E0	-9,14E-1	-5,84E-4	-1,41E-1	-6,41E4	External walls and facade	As building	Metsä wood spru
D	Plywood, spruce, uncoated (Metsä Wood)	4.7	m2	-2,68E1	-3,84E-2	-1,17E-2	-7,49E-6	-1,8E-3	-8,22E2	External walls and facade	As building	Metsä wood spru
D	Concrete, ready mix, DE avg., C 35/45 (IZB)	155.7	m3	3,64E0	7,57E-3	2,62E-3	9,08E-8	4,42E-4	1,86E1	External walls and facade	As building	Oekobau.dat 201
D	Precast concrete wall elements (solid, uninsulated), generi	179.81	m2	-8,03E-1	-1,67E-3	-5,78E-4	-2,01E-8	-9,77E-5	-4,12E0	External walls and facade	As building	One Click LCA
D	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	246	m3	-6,46E0	-1,35E-2	-4,65E-3	-1,61E-7	-7,86E-4	-3,31E1	External walls and facade	As building	EPD Unbewehrte
D	Precast concrete wall elements (solid, uninsulated), generi	388	m2	-1,44E0	-3,01E-3	-1,04E-3	-3,61E-8	-1,76E-4	-7,41E0	External walls and facade	As building	One Click LCA
D	Precast concrete wall elements (solid, uninsulated), generi	724.48	m2	-3,24E0	-6,74E-3	-2,33E-3	-8,08E-8	-3,94E-4	-1,66E1	External walls and facade	As building	One Click LCA
D	Vapour retarder Polyamid (PA)	781	m2	-9,73E1	-1,05E-1	-1,68E-2	-1,75E-10	-1,09E-2	-1,72E3	External walls and facade	20	Oekobau.dat 201
D	Precast concrete wall elements (solid, uninsulated), generi	1376.53	m2	-6,15E0	-1,28E-2	-4,42E-3	-1,54E-7	-7,48E-4	-3,15E1	External walls and facade	As building	One Click LCA
D	Precast concrete wall elements (solid, uninsulated), generi	1739.37	m2	-7,77E0	-1,62E-2	-5,59E-3	-1,94E-7	-9,45E-4	-3,98E1	External walls and facade	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	8108.2	kg	-1,08E4	-4,66E1	-1,56E1	-5,43E-4	-8,06E0	-1,19E5	External walls and facade	As building	One Click LCA
D	Masonry mortar (IWM)	14372.2	kg	-1,21E-1	-1,99E-4	-3,78E-5	-3,59E-13	-8,69E-6	-2,21E0	External walls and facade	45	Oekobau.dat 201
D	Facing bricks	34408.8	kg	-2,41E-1	-3,97E-4	-7,55E-5	-7,16E-13	-1,73E-5	-4,4E0	External walls and facade	50	Oekobau.dat 201
				7,57E5	**2,41E3**	**2,82E2**	**2,57E-2**	**1,78E2**	**1,01E7**	**External walls and facade**		
A1-A3	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	0.4	m3	2,36E1	5,6E-2	6,4E-3	5,2E-7	1,16E-1	3,94E2	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A1-A3	Mineral wool (flat roof insulation)	1.3	m2	1,39E1	7,03E-2	8,73E-3	2,93E-10	5,99E-3	1,49E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Ready-mix concrete, low-strength, generic, C12/15 (1700/	1.7	m3	3,57E2	7,62E-1	1,02E-1	8,21E-6	3,16E-2	2,13E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Waterproofing fleece, PE-HD with PP	2.2	m2	7,42E0	1,32E-2	1,33E-3	2,12E-10	3,34E-3	1,18E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	2,18E2	4,86E0	1,18E0	2,88E-6	2,36E-1	1,11E4	Floor slabs, ceilings, roofing	15	EPD Marmoleum
A1-A3	Resin products for protection and repair of concrete compo	200.6	kg	8,37E2	2,85E0	1,92E-1	1,12E-7	8,65E-1	1,83E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 ((	203.7	kg	1,87E1	4,25E-1	1,1E-1	1,49E-5	7,1E-2	2,65E3	Floor slabs, ceilings, roofing	10	EPD
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	210.8	m2	6,32E2	3,58E0	5,27E-1	8,22E-5	2,11E-1	1,75E4	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	214.3	kg	9,58E1	7,46E-2	3,11E-2	3,96E-6	4,54E-2	1,12E3	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	219	kg	2,09E2	5,56E-1	6,66E-2	5,12E-8	1,29E-1	3,46E3	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A1-A3	Aluminium, sheet	247.7	kg	2,65E3	1,13E1	7,27E-1	1,12E-6	7,04E-1	4,69E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	256.8	kg	4,01E1	5,57E-2	1,03E-2	3,34E-9	3,26E-3	2,95E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	267.5	kg	1,38E3	7,28E0	7,04E-1	6,58E-5	4,95E-1	2,3E4	Floor slabs, ceilings, roofing As building		One Click LCA
A1-A3	Reinforcement steel	276.3	kg	2,07E2	4,93E-1	4,91E-2	1,37E-8	4,81E-2	3,48E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	279.4	kg	1,44E3	7,61E0	7,36E-1	6,87E-5	5,17E-1	2,4E4	Floor slabs, ceilings, roofing As building		One Click LCA
A1-A3	Stoneware tiles, glazed	296.8	kg	9,5E1	1,62E-1	1,9E-2	1,86E-9	1,02E-2	1,59E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	323.2	kg	3,09E2	8,21E-1	9,83E-2	7,56E-8	1,9E-1	5,1E3	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A1-A3	Reinforcement steel	336.6	kg	2,52E2	6,01E-1	5,99E-2	1,67E-8	5,86E-2	4,24E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Waterproofing roof membrane, EPDM	339.6	kg	1,51E3	2,08E0	2,43E-1	2,97E-8	3,36E-1	2,78E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Resin products for protection and repair of concrete compo	350.6	kg	1,46E3	4,98E0	3,36E-1	1,96E-7	1,51E0	3,2E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 2.5 kg/m2, Hyg	353.8	kg	3,2E2	1,79E0	2,26E-1	4,23E-5	1,13E-1	7,99E3	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A1-A3	Extruded polystyrene (XPS), m3	437	kg	1,32E3	2,83E0	2,89E-1	9,42E-8	1,27E0	1,89E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Reinforcement steel	462.5	kg	3,47E2	8,26E-1	8,23E-2	2,29E-8	8,06E-2	5,82E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Reinforcement steel	476	kg	3,57E2	8,5E-1	8,47E-2	2,36E-8	8,29E-2	5,99E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	530.2	m2	1,56E3	3,26E0	8,01E-1	1,02E-4	1,72E-1	3,39E4	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	556.4	m2	1,64E3	3,42E0	8,4E-1	1,07E-4	1,8E-1	3,56E4	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	564.9	kg	5,39E2	1,43E0	1,72E-1	1,32E-7	3,32E-1	8,91E3	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	582.1	m2	1,96E3	3,49E0	3,51E-1	5,6E-8	8,84E-1	3,13E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Reinforcement steel	588.2	kg	4,41E2	1,05E0	1,05E-1	2,91E-8	1,02E-1	7,41E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	624.2	kg	5,35E2	3,03E0	4,46E-1	6,96E-5	1,78E-1	1,48E4	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	658.6	kg	3,4E3	1,79E1	1,73E0	1,62E-4	1,22E0	5,65E4	Floor slabs, ceilings, roofing As building		One Click LCA
A1-A3	Thermoset resin insulation, glass tissue faced/backed, 5.0	658.7	kg	1,86E3	4,52E0	5,07E-1	1,47E-7	1,86E0	3,27E4	Floor slabs, ceilings, roofing As building		EPD Kooltherm I
A1-A3	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	713.5	kg	1,63E1	9,21E0	8,76E-1	9,06E-8	6,62E-1	2,43E4	Floor slabs, ceilings, roofing	40	EPD
A1-A3	Sealants for floor coatings and parquetes, DE avg., PU-ba	787.2	kg	3,42E3	1,22E1	1,75E0	2,57E-5	1,9E0	5,85E4	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	832.9	m2	2,81E3	5E0	5,02E-1	8,02E-8	1,27E0	4,47E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	8,83E3	1,59E1	2,19E0	5,17E-6	2,62E0	1,61E5	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	856.3	kg	2,39E2	6,83E-1	4,78E-1	1,96E0	1,87E-1	2,52E3	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	861	kg	4,13E2	4,98E-1	6,43E-2	5,85E-9	4,5E-2	2,9E3	Floor slabs, ceilings, roofing As building		EPD Unbewehrte
A1-A3	Mineral wool (flat roof insulation)	928.7	m3	1,99E5	1E3	1,25E2	4,19E-6	8,56E1	2,13E6	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	956.3	kg	2,67E2	7,62E-1	5,34E-1	2,19E0	2,09E-1	2,81E3	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	983.5	kg	2,74E2	7,84E-1	5,5E-1	2,26E0	2,15E-1	2,89E3	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	1023	kg	9,77E2	2,6E0	3,11E-1	2,39E-7	6,02E-1	1,61E4	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	1038.7	kg	1,62E2	2,25E-1	4,15E-2	1,35E-8	1,32E-2	1,19E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	1108.3	kg	5,72E3	3,02E1	2,92E0	2,73E-4	2,05E0	9,51E4	Floor slabs, ceilings, roofing As building		One Click LCA
A1-A3	Aluminium, anodised	1112.2	kg	7,43E3	1,31E1	2,45E0	4,82E-7	1,11E0	1,3E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	1131.5	kg	1,77E2	2,46E-1	4,53E-2	1,47E-8	1,44E-2	1,3E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	1174.5	kg	1,83E2	2,55E-1	4,7E-2	1,53E-8	1,49E-2	1,35E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	1195.4	m2	2,58E2	1,46E2	1,39E1	1,43E-6	1,05E1	3,85E5	Floor slabs, ceilings, roofing	40	EPD
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	1215.4	kg	3,39E2	9,69E-1	6,79E-1	2,79E0	2,66E-1	3,57E3	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Floor screed mortar, cement screed (IWM)	1460.3	kg	2,28E2	3,17E-1	5,84E-2	1,9E-8	1,85E-2	1,68E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Reinforcement steel	1758	kg	1,32E3	3,14E0	3,13E-1	8,7E-8	3,06E-1	2,21E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Bitumen membrane, V 60	1789.6	m2	3,9E3	1,58E1	1,3E0	3,61E-7	2,35E0	5,9E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	2170.6	kg	3,39E2	4,71E-1	8,68E-2	2,82E-8	2,76E-2	2,49E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Mineral wool (facade insulation)	2277	kg	3,57E3	1,68E1	2,32E0	8,32E-8	1,3E0	4,54E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Concrete wall blocks	2562	kg	3,36E2	5,89E-1	9,54E-2	5,33E-9	2,42E-2	1,89E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Thin sheet, steel, (0.3-3.0 mm)	2826	kg	6,11E3	2,27E1	2E0	4,54E-8	3,27E0	7,27E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Extruded polystyrene (XPS), m3	3211.9	kg	9,73E3	2,08E1	2,13E0	6,93E-7	9,3E0	1,39E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	3578.2	m2	1,21E4	2,15E1	2,16E0	3,44E-7	5,43E0	1,92E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	3632.5	kg	1,01E3	2,9E0	2,03E0	8,33E0	7,95E-1	1,07E4	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Reinforcement steel	3886.1	kg	2,91E3	6,94E0	6,91E-1	1,92E-7	6,77E-1	4,89E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	4319.3	kg	6,74E2	9,37E-1	1,73E-1	5,62E-8	5,49E-2	4,96E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	5172.2	kg	4,43E3	2,51E1	3,69E0	5,76E-4	1,48E0	1,23E5	Floor slabs, ceilings, roofing As building		EPD for Ecophor

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	3.5	kg	1,56E0	1,22E-3	5,08E-4	6,48E-8	7,42E-4	1,84E1	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	4.7	m3	8,46E2	1,02E0	1,32E-1	1,2E-8	9,21E-2	5,93E3	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A1-A3	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	5.4	m3	1,24E3	1,97E0	3,09E-1	4,31E-6	2,39E-1	6,52E3	Floor slabs, ceilings, roofing	As building	Beton der Druckf
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	6.3	kg	6,02E0	1,6E-2	1,92E-3	1,47E-9	3,7E-3	9,94E1	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A1-A3	Reinforcement steel	6.6	kg	4,95E0	1,18E-2	1,17E-3	3,27E-10	1,15E-3	8,31E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Natural stone tiles, hard, interior floors	8.2	m2	2,98E2	1,76E0	1,83E-1	6,12E-8	1,33E-1	4,38E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	9.5	m2	3,21E1	5,7E-2	5,73E-3	9,14E-10	1,44E-2	5,1E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	1,01E2	1,81E-1	2,5E-2	5,9E-8	2,98E-2	1,84E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A1-A3	Vapour retarder Polyamid (PA)	9.6	m2	8,3E0	7,73E-2	1,88E-3	1,78E-10	4,64E-3	1,26E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Thermoset resin insulation, glass tissue faced/backed, 5.0	10.6	m3	1,04E3	2,54E0	2,85E-1	8,3E-8	1,05E0	1,84E4	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
A1-A3	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	1,14E2	2,06E-1	2,84E-2	6,71E-8	3,39E-2	2,09E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A1-A3	Waterproofing roof membrane, EPDM	12.3	m2	1,1E2	1,51E-1	1,76E-2	2,15E-9	2,44E-2	2,01E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	13.6	kg	3,79E0	1,08E-2	7,6E-3	3,12E-2	2,98E-3	4E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A1-A3	Waterproofing fleece, PE-HD with PP	16.3	m2	5,5E1	9,78E-2	9,83E-3	1,57E-9	2,48E-2	8,76E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	17	m3	1E3	2,38E0	2,72E-1	2,21E-5	4,93E0	1,67E4	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	17.2	kg	7,69E0	5,99E-3	2,49E-3	3,18E-7	3,65E-3	9,03E1	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Sealants for floor coatings and parquetes, DE avg., PU-ba	20.1	kg	8,72E1	3,12E-1	4,46E-2	6,55E-7	4,84E-2	1,49E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A1-A3	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	2,52E2	4,55E-1	6,26E-2	1,48E-7	7,47E-2	4,61E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A1-A3	Thermoset resin insulation, glass tissue faced/backed, 5.0	25.1	kg	7,07E1	1,72E-1	1,93E-2	5,61E-9	7,1E-2	1,25E3	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
A1-A3	Resin products for protection and repair of concrete compo	28.1	kg	1,17E2	3,99E-1	2,69E-2	1,57E-8	1,21E-1	2,56E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Reinforcement steel	28.7	kg	2,15E1	5,13E-2	5,11E-3	1,42E-9	5E-3	3,61E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Sealants for floor coatings and parquetes, DE avg., PU-ba	33.7	kg	1,46E2	5,22E-1	7,48E-2	1,1E-6	8,12E-2	2,51E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	36.1	kg	1,86E2	9,83E-1	9,5E-2	8,88E-6	6,68E-2	3,1E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Waterproofing roof membrane, EPDM	43.2	m2	3,85E2	5,3E-1	6,18E-2	7,57E-9	8,55E-2	7,07E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	43.8	kg	2,26E2	1,19E0	1,15E-1	1,08E-5	8,1E-2	3,76E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	45.3	kg	4,33E1	1,15E-1	1,38E-2	1,06E-8	2,66E-2	7,15E2	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A1-A3	Reinforcement steel	49.3	kg	3,7E1	8,8E-2	8,77E-3	2,44E-9	8,59E-3	6,21E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	5,89E1	1,32E0	3,18E-1	7,79E-7	6,4E-2	3E3	Floor slabs, ceilings, roofing	15	EPD Marmoleum
A1-A3	Adhesives for parquetes and floor coverings, DE avg., PU	55.2	kg	2,57E2	7,89E-1	1,47E-1	1,88E-6	1,38E-1	4,01E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	59.3	kg	1,65E1	4,73E-2	3,31E-2	1,36E-1	1,3E-2	1,74E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A1-A3	Mineral wool (interior insulation)	59.5	m3	2,48E3	1,15E1	1,61E0	5,86E-8	8,76E-1	3,23E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	73.4	kg	7,01E1	1,86E-1	2,23E-2	1,72E-8	4,32E-2	1,16E3	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A1-A3	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	75.5	m2	9,77E2	1,83E0	2,03E-1	4,27E-8	1,59E-1	1,79E4	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A1-A3	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	81.3	m3	1,86E4	2,96E1	4,65E0	6,49E-5	3,59E0	9,82E4	Floor slabs, ceilings, roofing	As building	Beton der Druckf
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	83.1	kg	3,71E1	2,89E-2	1,2E-2	1,54E-6	1,76E-2	4,36E2	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Concrete wall blocks	87.2	kg	1,14E1	2,01E-2	3,25E-3	1,81E-10	8,22E-4	6,42E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	91.5	m2	3,09E2	5,49E-1	5,52E-2	8,81E-9	1,39E-1	4,92E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Bitumen membrane, V 60	94.4	m2	2,06E2	8,32E-1	6,85E-2	1,9E-8	1,24E-1	3,11E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Aluminium, sheet	98.9	kg	1,06E3	4,52E0	2,9E-1	4,47E-7	2,81E-1	1,87E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	101.8	kg	2,84E1	8,12E-2	5,69E-2	2,33E-1	2,23E-2	2,99E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A1-A3	Floor screed mortar, cement screed (IWM)	102.1	kg	1,59E1	2,22E-2	4,08E-3	1,33E-9	1,3E-3	1,17E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	102.5	kg	4,58E1	3,57E-2	1,49E-2	1,9E-6	2,17E-2	5,38E2	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Aluminium, anodised	107.4	kg	7,18E2	1,27E0	2,37E-1	4,65E-8	1,07E-1	1,26E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	111.5	m2	1,44E3	2,7E0	3E-1	6,31E-8	2,34E-1	2,65E4	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A1-A3	Aluminium, sheet	111.8	kg	1,19E3	5,11E0	3,28E-1	5,06E-7	3,18E-1	2,12E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Natural stone tiles, hard, interior floors	113.7	m2	4,13E3	2,44E1	2,54E0	8,48E-7	1,84E0	6,07E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	122.6	kg	5,48E1	4,27E-2	1,78E-2	2,27E-6	2,6E-2	6,43E2	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Resin products for protection and repair of concrete compo	135.9	kg	5,67E2	1,93E0	1,3E-1	7,6E-8	5,86E-1	1,24E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Bitumen membrane, V 60	141.6	m2	3,09E2	1,25E0	1,03E-1	2,86E-8	1,86E-1	4,67E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	141.8	m3	3,25E4	5,16E1	8,11E0	1,13E-4	6,27E0	1,71E5	Floor slabs, ceilings, roofing	As building	Beton der Druckf
A1-A3	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	143.1	m3	8,44E3	2E1	2,29E0	1,86E-4	4,15E1	1,41E5	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	151.6	kg	7,83E2	4,13E0	3,99E-1	3,73E-5	2,8E-1	1,3E4	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Aluminium, sheet	151.9	kg	1,62E3	6,94E0	4,46E-1	6,87E-7	4,32E-1	2,87E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	153.3	m2	5,17E2	9,2E-1	9,25E-2	1,48E-8	2,33E-1	8,24E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	157.6	m2	5,32E2	9,45E-1	9,51E-2	1,52E-8	2,39E-1	8,47E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	185.7	kg	1,77E2	4,72E-1	5,65E-2	4,35E-8	1,09E-1	2,93E3	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A1-A3	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	194.8	m2	2,52E3	4,71E0	5,24E-1	1,1E-7	4,09E-1	4,63E4	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	194.8	m2	6,57E2	1,17E0	1,18E-1	1,88E-8	2,96E-1	1,05E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	5197.3	kg	1,45E3	4,14E0	2,9E0	1,19E1	1,14E0	1,53E4	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A1-A3	Bitumen membrane, V 60	5572.5	m2	1,21E4	4,91E1	4,04E0	1,12E-6	7,32E0	1,84E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	6271.9	kg	3,24E4	1,71E2	1,65E1	1,54E-3	1,16E1	5,38E5	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Extruded polystyrene (XPS), m3	6504	kg	1,97E4	4,21E1	4,3E0	1,4E-6	1,88E1	2,81E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Reinforcement steel	6778	kg	5,08E3	1,21E1	1,21E0	3,36E-7	1,18E0	8,54E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Extruded polystyrene (XPS), m3	7158.9	kg	2,17E4	4,63E1	4,74E0	1,54E-6	2,07E1	3,09E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Prestressed concrete hollow deck, 200 mm, 272 kg/m3 (C	7937	m2	3,44E5	8,57E2	1,15E2	1,83E-2	4,29E1	3,2E6	Floor slabs, ceilings, roofing	100	FDES
A1-A3	Reinforcement steel	10806	kg	8,1E3	1,93E1	1,92E0	5,35E-7	1,88E0	1,36E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	11886	kg	5,71E3	6,88E0	8,87E-1	8,08E-8	6,21E-1	4E4	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A1-A3	Floor screed mortar, cement screed (IWM)	13904.9	kg	2,17E3	3,02E0	5,56E-1	1,81E-7	1,77E-1	1,6E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	14634.4	kg	1,25E4	7,11E1	1,05E1	1,63E-3	4,18E0	3,47E5	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
A1-A3	Floor screed mortar, cement screed (IWM)	17931.3	kg	2,8E3	3,89E0	7,17E-1	2,33E-7	2,28E-1	2,06E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	23295.5	kg	3,63E3	5,06E0	9,32E-1	3,03E-7	2,96E-1	2,68E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	25455.7	kg	3,97E3	5,52E0	1,02E0	3,31E-7	3,23E-1	2,93E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	26471.8	kg	4,13E3	5,74E0	1,06E0	3,44E-7	3,36E-1	3,04E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	27756.1	kg	4,33E3	6,02E0	1,11E0	3,61E-7	3,53E-1	3,19E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	27909.6	kg	6,38E2	3,6E2	3,43E1	3,54E-6	2,59E1	9,51E5	Floor slabs, ceilings, roofing	40	EPD
A1-A3	Aerated concrete P2 04, unreinforced	35966.8	kg	1,8E4	2,19E1	2,87E0	4,27E-7	1,41E0	1,34E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	94014	kg	1,47E4	2,04E1	3,76E0	1,22E-6	1,19E0	1,08E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	134513.4	kg	2,1E4	2,92E1	5,38E0	1,75E-6	1,71E0	1,55E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Structural steel sections (piles, beams, columns, joists), S	190900	kg	2,69E5	7,64E2	8,4E1	1,91E-2	1,32E2	3,55E6	Floor slabs, ceilings, roofing	100	FDES
A1-A3	Floor screed mortar, cement screed (IWM)	679850.4	kg	1,06E5	1,48E2	2,72E1	8,84E-6	8,63E0	7,81E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	0.4	m3	1,15E-1	5,29E-4	1,15E-4	2,27E-8	6,48E-6	3,27E0	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A4	Mineral wool (flat roof insulation)	1.3	m2	1,08E-1	4,99E-4	1,09E-4	2,14E-8	6,1E-6	3,08E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Ready-mix concrete, low-strength, generic, C12/15 (1700/	1.7	m3	1,46E2	2,13E-1	4,35E-2	2,46E-5	2,19E-2	2,22E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Waterproofing fleece, PE-HD with PP	2.2	m2	3,29E-2	1,51E-4	3,3E-5	6,49E-9	1,85E-6	9,35E-1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	3.5	kg	4,02E-2	1,85E-4	4,03E-5	7,94E-9	2,27E-6	1,14E0	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	4.7	m3	2,02E1	9,32E-2	2,03E-2	4E-6	1,14E-3	5,76E2	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	5.4	m3	5,05E2	7,39E-1	1,51E-1	8,51E-5	7,58E-2	7,7E3	Floor slabs, ceilings, roofing	As building	Beton der Druckf
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	6.3	kg	1,75E-1	7,1E-4	1,52E-4	3,38E-8	1,46E-5	4,89E0	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A4	Reinforcement steel	6.6	kg	7,58E-2	3,49E-4	7,61E-5	1,5E-8	4,28E-6	2,16E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Natural stone tiles, hard, interior floors	8.2	m2	4,71E0	2,17E-2	4,73E-3	9,3E-7	2,66E-4	1,34E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	9.5	m2	1,42E-1	6,53E-4	1,42E-4	2,8E-8	8E-6	4,04E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	4,75E-1	2,19E-3	4,76E-4	9,38E-8	2,68E-5	1,35E1	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A4	Vapour retarder Polyamid (PA)	9.6	m2	8,82E-3	4,06E-5	8,85E-6	1,74E-9	4,97E-7	2,51E-1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Thermoset resin insulation, glass tissue faced/backed, 5.0	10.6	m3	4,26E0	1,96E-2	4,28E-3	8,42E-7	2,4E-4	1,21E2	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
A4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	5,4E-1	2,49E-3	5,41E-4	1,07E-7	3,04E-5	1,54E1	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A4	Waterproofing roof membrane, EPDM	12.3	m2	2,83E-1	1,3E-3	2,84E-4	5,58E-8	1,59E-5	8,04E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	13.6	kg	1,56E-1	7,2E-4	1,57E-4	3,09E-8	8,81E-6	4,45E0	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Waterproofing fleece, PE-HD with PP	16.3	m2	2,43E-1	1,12E-3	2,44E-4	4,81E-8	1,37E-5	6,93E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	17	m3	4,88E0	2,25E-2	4,9E-3	9,64E-7	2,75E-4	1,39E2	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	17.2	kg	1,96E-1	9,1E-4	1,98E-4	3,9E-8	1,11E-5	5,62E0	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A4	Sealants for floor coatings and parquetes, DE avg., PU-ba	20.1	kg	5,59E-1	2,26E-3	4,86E-4	1,08E-7	4,67E-5	1,56E1	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	1,19E0	5,48E-3	1,19E-3	2,35E-7	6,71E-5	3,39E1	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A4	Thermoset resin insulation, glass tissue faced/backed, 5.0	25.1	kg	2,88E-1	1,33E-3	2,89E-4	5,7E-8	1,63E-5	8,21E0	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
A4	Resin products for protection and repair of concrete compo	28.1	kg	7,82E-1	3,17E-3	6,8E-4	1,51E-7	6,53E-5	2,18E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Reinforcement steel	28.7	kg	3,3E-1	1,52E-3	3,31E-4	6,51E-8	1,86E-5	9,38E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Sealants for floor coatings and parquetes, DE avg., PU-ba	33.7	kg	9,38E-1	3,8E-3	8,15E-4	1,81E-7	7,83E-5	2,62E1	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	36.1	kg	4,15E-1	1,91E-3	4,16E-4	8,19E-8	2,34E-5	1,18E1	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Waterproofing roof membrane, EPDM	43.2	m2	9,93E-1	4,57E-3	9,96E-4	1,96E-7	5,6E-5	2,83E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	43.8	kg	5,03E-1	2,32E-3	5,05E-4	9,94E-8	2,84E-5	1,43E1	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	45.3	kg	1,26E0	5,1E-3	1,1E-3	2,43E-7	1,05E-4	3,52E1	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A4	Reinforcement steel	49.3	kg	5,66E-1	2,61E-3	5,68E-4	1,12E-7	3,19E-5	1,61E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	6,23E-1	2,87E-3	6,25E-4	1,23E-7	3,51E-5	1,77E1	Floor slabs, ceilings, roofing	15	EPD Marmoleum
A4	Adhesives for parquetes and floor coverings, DE avg., PU	55.2	kg	1,54E0	6,22E-3	1,34E-3	2,96E-7	1,28E-4	4,29E1	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	59.3	kg	6,81E-1	3,14E-3	6,83E-4	1,35E-7	3,84E-5	1,94E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Mineral wool (interior insulation)	59.5	m3	1,79E1	8,26E-2	1,8E-2	3,54E-6	1,01E-3	5,11E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	73.4	kg	2,04E0	8,27E-3	1,78E-3	3,94E-7	1,71E-4	5,7E1	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	75.5	m2	1,62E1	7,45E-2	1,62E-2	3,2E-6	9,12E-4	4,6E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	81.3	m3	7,61E3	1,11E1	2,27E0	1,28E-3	1,14E0	1,16E5	Floor slabs, ceilings, roofing As building		Beton der Druckf
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	83.1	kg	9,55E-1	4,4E-3	9,58E-4	1,89E-7	5,38E-5	2,72E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A4	Concrete wall blocks	87.2	kg	1E0	4,61E-3	1E-3	1,98E-7	5,65E-5	2,85E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	91.5	m2	1,37E0	6,29E-3	1,37E-3	2,7E-7	7,7E-5	3,89E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Bitumen membrane, V 60	94.4	m2	5,42E0	2,5E-2	5,44E-3	1,07E-6	3,06E-4	1,54E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Aluminium, sheet	98.9	kg	1,14E0	5,23E-3	1,14E-3	2,24E-7	6,41E-5	3,23E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	101.8	kg	1,17E0	5,39E-3	1,17E-3	2,31E-7	6,59E-5	3,33E1	Floor slabs, ceilings, roofing As building		EPD Blokk Exak
A4	Floor screed mortar, cement screed (IWM)	102.1	kg	1,17E0	5,4E-3	1,18E-3	2,32E-7	6,61E-5	3,34E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	102.5	kg	1,18E0	5,42E-3	1,18E-3	2,33E-7	6,64E-5	3,35E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A4	Aluminium, anodised	107.4	kg	1,23E0	5,68E-3	1,24E-3	2,44E-7	6,96E-5	3,51E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	111.5	m2	2,39E1	1,1E-1	2,4E-2	4,72E-6	1,35E-3	6,8E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A4	Aluminium, sheet	111.8	kg	1,28E0	5,92E-3	1,29E-3	2,54E-7	7,24E-5	3,66E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Natural stone tiles, hard, interior floors	113.7	m2	6,53E1	3,01E-1	6,55E-2	1,29E-5	3,68E-3	1,86E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	122.6	kg	1,41E0	6,49E-3	1,41E-3	2,78E-7	7,94E-5	4,01E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A4	Resin products for protection and repair of concrete compo	135.9	kg	3,78E0	1,53E-2	3,29E-3	7,29E-7	3,16E-4	1,06E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Bitumen membrane, V 60	141.6	m2	8,13E0	3,75E-2	8,16E-3	1,61E-6	4,59E-4	2,32E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	141.8	m3	1,33E4	1,94E1	3,96E0	2,24E-3	1,99E0	2,02E5	Floor slabs, ceilings, roofing As building		Beton der Druckf
A4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	143.1	m3	4,11E1	1,89E-1	4,12E-2	8,12E-6	2,32E-3	1,17E3	Floor slabs, ceilings, roofing As building		Expanded Polyst
A4	Structural hollow steel sections (HSS), cold rolled, generic	151.6	kg	1,74E0	8,02E-3	1,75E-3	3,44E-7	9,82E-5	4,96E1	Floor slabs, ceilings, roofing As building		One Click LCA
A4	Aluminium, sheet	151.9	kg	1,74E0	8,04E-3	1,75E-3	3,45E-7	9,84E-5	4,97E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	153.3	m2	2,29E0	1,05E-2	2,3E-3	4,52E-7	1,29E-4	6,52E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	157.6	m2	2,35E0	1,08E-2	2,36E-3	4,65E-7	1,33E-4	6,7E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	185.7	kg	5,17E0	2,09E-2	4,49E-3	9,96E-7	4,32E-4	1,44E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	194.8	m2	4,17E1	1,92E-1	4,19E-2	8,24E-6	2,35E-3	1,19E3	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	194.8	m2	2,91E0	1,34E-2	2,92E-3	5,75E-7	1,64E-4	8,28E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	2,3E0	1,06E-2	2,31E-3	4,54E-7	1,3E-4	6,55E1	Floor slabs, ceilings, roofing	15	EPD Marmoleum
A4	Resin products for protection and repair of concrete compo	200.6	kg	5,58E0	2,26E-2	4,85E-3	1,08E-6	4,66E-4	1,56E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 (t	203.7	kg	5,67E0	2,29E-2	4,93E-3	1,09E-6	4,73E-4	1,58E2	Floor slabs, ceilings, roofing	10	EPD
A4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	210.8	m2	8,48E0	3,9E-2	8,5E-3	1,67E-6	4,78E-4	2,41E2	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	214.3	kg	2,46E0	1,13E-2	2,47E-3	4,86E-7	1,39E-4	7,01E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	219	kg	6,09E0	2,47E-2	5,3E-3	1,17E-6	5,09E-4	1,7E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A4	Aluminium, sheet	247.7	kg	2,85E0	1,31E-2	2,85E-3	5,62E-7	1,6E-4	8,1E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	256.8	kg	2,95E0	1,36E-2	2,96E-3	5,83E-7	1,66E-4	8,4E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	267.5	kg	3,07E0	1,42E-2	3,08E-3	6,07E-7	1,73E-4	8,75E1	Floor slabs, ceilings, roofing As building		One Click LCA
A4	Reinforcement steel	276.3	kg	3,17E0	1,46E-2	3,18E-3	6,27E-7	1,79E-4	9,04E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	279.4	kg	3,21E0	1,48E-2	3,22E-3	6,34E-7	1,81E-4	9,14E1	Floor slabs, ceilings, roofing As building		One Click LCA
A4	Stoneware tiles, glazed	296.8	kg	3,41E0	1,57E-2	3,42E-3	6,73E-7	1,92E-4	9,71E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	323.2	kg	8,99E0	3,64E-2	7,82E-3	1,73E-6	7,51E-4	2,51E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A4	Reinforcement steel	336.6	kg	3,87E0	1,78E-2	3,88E-3	7,64E-7	2,18E-4	1,1E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Waterproofing roof membrane, EPDM	339.6	kg	3,9E0	1,8E-2	3,91E-3	7,71E-7	2,2E-4	1,11E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Resin products for protection and repair of concrete compo	350.6	kg	9,76E0	3,95E-2	8,48E-3	1,88E-6	8,15E-4	2,72E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Glass wool, acoustic ceiling panel, 20 mm, 2.5 kg/m2, Hyg	353.8	kg	2,84E0	1,31E-2	2,84E-3	5,6E-7	1,6E-4	8,07E1	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A4	Extruded polystyrene (XPS), m3	437	kg	5,02E0	2,31E-2	5,04E-3	9,92E-7	2,83E-4	1,43E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Reinforcement steel	462.5	kg	5,31E0	2,45E-2	5,33E-3	1,05E-6	3E-4	1,51E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Reinforcement steel	476	kg	5,47E0	2,52E-2	5,49E-3	1,08E-6	3,08E-4	1,56E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	530.2	m2	6,82E1	3,14E-1	6,84E-2	1,35E-5	3,85E-3	1,94E3	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	556.4	m2	7,16E1	3,3E-1	7,18E-2	1,41E-5	4,04E-3	2,04E3	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	564.9	kg	1,57E1	6,36E-2	1,37E-2	3,03E-6	1,31E-3	4,39E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	582.1	m2	8,69E0	4E-2	8,72E-3	1,72E-6	4,9E-4	2,47E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Reinforcement steel	588.2	kg	6,76E0	3,11E-2	6,78E-3	1,33E-6	3,81E-4	1,92E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	624.2	kg	7,17E0	3,3E-2	7,19E-3	1,42E-6	4,04E-4	2,04E2	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A4	Structural hollow steel sections (HSS), cold rolled, generic	658.6	kg	7,57E0	3,48E-2	7,59E-3	1,49E-6	4,27E-4	2,15E2	Floor slabs, ceilings, roofing As building		One Click LCA
A4	Thermoset resin insulation, glass tissue faced/backed, 5.0	658.7	kg	7,57E0	3,49E-2	7,59E-3	1,49E-6	4,27E-4	2,15E2	Floor slabs, ceilings, roofing As building		EPD Kooltherm I
A4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	713.5	kg	8,26E0	3,8E-2	8,28E-3	1,63E-6	4,66E-4	2,35E2	Floor slabs, ceilings, roofing	40	EPD
A4	Sealants for floor coatings and parquetes, DE avg., PU-ba	787.2	kg	2,19E1	8,87E-2	1,9E-2	4,22E-6	1,83E-3	6,11E2	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	832.9	m2	1,24E1	5,73E-2	1,25E-2	2,46E-6	7,01E-4	3,54E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	4,16E1	1,92E-1	4,18E-2	8,22E-6	2,35E-3	1,18E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Lightweight boncrete block with EPS-insulation core, ceme	856.3	kg	9,84E0	4,53E-2	9,87E-3	1,94E-6	5,55E-4	2,8E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	861	kg	9,89E0	4,56E-2	9,92E-3	1,95E-6	5,58E-4	2,82E2	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A4	Mineral wool (flat roof insulation)	928.7	m3	1,55E3	7,12E0	1,55E0	3,06E-4	8,72E-2	4,4E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	956.3	kg	1,1E1	5,06E-2	1,1E-2	2,17E-6	6,19E-4	3,13E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Lightweight boncrete block with EPS-insulation core, ceme	983.5	kg	1,13E1	5,2E-2	1,13E-2	2,23E-6	6,37E-4	3,22E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	1023	kg	2,85E1	1,15E-1	2,47E-2	5,49E-6	2,38E-3	7,95E2	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	1038.7	kg	1,19E1	5,5E-2	1,2E-2	2,36E-6	6,73E-4	3,4E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	1108.3	kg	1,27E1	5,86E-2	1,28E-2	2,51E-6	7,18E-4	3,62E2	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Aluminium, anodised	1112.2	kg	1,28E1	5,88E-2	1,28E-2	2,52E-6	7,2E-4	3,64E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	1131.5	kg	1,3E1	5,99E-2	1,3E-2	2,57E-6	7,33E-4	3,7E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	1174.5	kg	1,35E1	6,21E-2	1,35E-2	2,67E-6	7,61E-4	3,84E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	1195.4	m2	1,31E2	6,02E-1	1,31E-1	2,58E-5	7,37E-3	3,72E3	Floor slabs, ceilings, roofing	40	EPD
A4	Lightweight boncrete block with EPS-insulation core, ceme	1215.4	kg	1,4E1	6,43E-2	1,4E-2	2,76E-6	7,87E-4	3,97E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Floor screed mortar, cement screed (IWM)	1460.3	kg	1,68E1	7,73E-2	1,68E-2	3,31E-6	9,46E-4	4,78E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Reinforcement steel	1758	kg	2,02E1	9,3E-2	2,03E-2	3,99E-6	1,14E-3	5,75E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Bitumen membrane, V 60	1789.6	m2	1,03E2	4,73E-1	1,03E-1	2,03E-5	5,8E-3	2,93E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	2170.6	kg	2,49E1	1,15E-1	2,5E-2	4,93E-6	1,41E-3	7,1E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Mineral wool (facade insulation)	2277	kg	2,62E1	1,2E-1	2,62E-2	5,17E-6	1,47E-3	7,45E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Concrete wall blocks	2562	kg	2,94E1	1,36E-1	2,95E-2	5,81E-6	1,66E-3	8,38E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Thin sheet, steel, (0.3-3.0 mm)	2826	kg	3,25E1	1,5E-1	3,26E-2	6,41E-6	1,83E-3	9,24E2	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Extruded polystyrene (XPS), m3	3211.9	kg	3,69E1	1,7E-1	3,7E-2	7,29E-6	2,08E-3	1,05E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	3578.2	m2	5,34E1	2,46E-1	5,36E-2	1,06E-5	3,01E-3	1,52E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	3632.5	kg	4,17E1	1,92E-1	4,19E-2	8,24E-6	2,35E-3	1,19E3	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Reinforcement steel	3886.1	kg	4,46E1	2,06E-1	4,48E-2	8,82E-6	2,52E-3	1,27E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	4319.3	kg	4,96E1	2,29E-1	4,98E-2	9,8E-6	2,8E-3	1,41E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	5172.2	kg	5,94E1	2,74E-1	5,96E-2	1,17E-5	3,35E-3	1,69E3	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
A4	Lightweight boncrete block with EPS-insulation core, ceme	5197.3	kg	5,97E1	2,75E-1	5,99E-2	1,18E-5	3,37E-3	1,7E3	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Bitumen membrane, V 60	5572.5	m2	3,2E2	1,47E0	3,21E-1	6,32E-5	1,8E-2	9,11E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	6271.9	kg	7,21E1	3,32E-1	7,23E-2	1,42E-5	4,06E-3	2,05E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Extruded polystyrene (XPS), m3	6504	kg	7,47E1	3,44E-1	7,5E-2	1,48E-5	4,21E-3	2,13E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Reinforcement steel	6778	kg	7,79E1	3,59E-1	7,81E-2	1,54E-5	4,39E-3	2,22E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Extruded polystyrene (XPS), m3	7158.9	kg	8,22E1	3,79E-1	8,25E-2	1,62E-5	4,64E-3	2,34E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Prestressed concrete hollow deck, 200 mm, 272 kg/m3 (C	7937	m2	2,48E4	1,14E2	2,49E1	4,9E-3	1,4E0	7,06E5	Floor slabs, ceilings, roofing	100	FDES
A4	Reinforcement steel	10806	kg	1,24E2	5,72E-1	1,25E-1	2,45E-5	7E-3	3,53E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	11886	kg	1,37E2	6,29E-1	1,37E-1	2,7E-5	7,7E-3	3,89E3	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A4	Floor screed mortar, cement screed (IWM)	13904.9	kg	1,6E2	7,36E-1	1,6E-1	3,16E-5	9,01E-3	4,55E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	14634.4	kg	1,68E2	7,74E-1	1,69E-1	3,32E-5	9,48E-3	4,79E3	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
A4	Floor screed mortar, cement screed (IWM)	17931.3	kg	2,06E2	9,49E-1	2,07E-1	4,07E-5	1,16E-2	5,86E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	23295.5	kg	2,68E2	1,23E0	2,68E-1	5,29E-5	1,51E-2	7,62E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	25455.7	kg	2,92E2	1,35E0	2,93E-1	5,78E-5	1,65E-2	8,32E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	26471.8	kg	3,04E2	1,4E0	3,05E-1	6,01E-5	1,71E-2	8,66E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	27756.1	kg	3,19E2	1,47E0	3,2E-1	6,3E-5	1,8E-2	9,08E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	27909.6	kg	3,23E2	1,49E0	3,24E-1	6,38E-5	1,82E-2	9,19E3	Floor slabs, ceilings, roofing	40	EPD
A4	Aerated concrete P2 04, unreinforced	35966.8	kg	4,13E2	1,9E0	4,15E-1	8,16E-5	2,33E-2	1,18E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	94014	kg	1,08E3	4,97E0	1,08E0	2,13E-4	6,09E-2	3,07E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	134513.4	kg	1,55E3	7,12E0	1,55E0	3,05E-4	8,71E-2	4,4E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Structural steel sections (piles, beams, columns, joists), S	190900	kg	2,19E3	1,01E1	2,2E0	4,33E-4	1,24E-1	6,24E4	Floor slabs, ceilings, roofing	100	FDES
A4	Floor screed mortar, cement screed (IWM)	679850.4	kg	7,81E3	3,6E1	7,84E0	1,54E-3	4,4E-1	2,22E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	2.2	m2	1,48E1	2,64E-2	2,65E-3	4,24E-10	6,68E-3	2,36E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	9.5	m2	6,41E1	1,14E-1	1,15E-2	1,83E-9	2,89E-2	1,02E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	4,03E2	7,26E-1	9,99E-2	2,36E-7	1,19E-1	7,36E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
B1-B5	Vapour retarder Polyamid (PA)	9.6	m2	1,66E1	1,55E-1	3,77E-3	3,56E-10	9,28E-3	2,51E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	4,58E2	8,25E-1	1,14E-1	2,68E-7	1,36E-1	8,36E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
B1-B5	Waterproofing roof membrane, EPDM	12.3	m2	2,19E2	3,02E-1	3,52E-2	4,31E-9	4,87E-2	4,03E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	16.3	m2	1,1E2	1,96E-1	1,97E-2	3,14E-9	4,95E-2	1,75E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Sealants for floor coatings and parquetes, DE avg., PU-ba	20.1	kg	2,62E2	9,35E-1	1,34E-1	1,97E-6	1,45E-1	4,48E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
B1-B5	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	1,01E3	1,82E0	2,5E-1	5,91E-7	2,99E-1	1,84E4	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
B1-B5	Resin products for protection and repair of concrete comp	28.1	kg	2,34E2	7,98E-1	5,39E-2	3,14E-8	2,42E-1	5,12E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
B1-B5	Sealants for floor coatings and parquetes, DE avg., PU-ba	33.7	kg	4,39E2	1,57E0	2,24E-1	3,3E-6	2,44E-1	7,52E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
B1-B5	Waterproofing roof membrane, EPDM	43.2	m2	7,7E2	1,06E0	1,24E-1	1,51E-8	1,71E-1	1,41E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	1,77E2	3,95E0	9,54E-1	2,34E-6	1,92E-1	9,01E3	Floor slabs, ceilings, roofing	15	EPD Marmoleum
B1-B5	Adhesives for parquetes and floor coverings, DE avg., PU	55.2	kg	7,72E2	2,37E0	4,42E-1	5,63E-6	4,14E-1	1,2E4	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	91.5	m2	6,17E2	1,1E0	1,1E-1	1,76E-8	2,78E-1	9,83E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Bitumen membrane, V 60	94.4	m2	4,11E2	1,66E0	1,37E-1	3,81E-8	2,48E-1	6,23E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Aluminium, sheet	98.9	kg	1,06E3	4,52E0	2,9E-1	4,47E-7	2,81E-1	1,87E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Aluminium, sheet	111.8	kg	1,19E3	5,11E0	3,28E-1	5,06E-7	3,18E-1	2,12E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Resin products for protection and repair of concrete compo	135.9	kg	1,13E3	3,86E0	2,61E-1	1,52E-7	1,17E0	2,48E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Bitumen membrane, V 60	141.6	m2	6,17E2	2,5E0	2,05E-1	5,71E-8	3,72E-1	9,34E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Aluminium, sheet	151.9	kg	1,62E3	6,94E0	4,46E-1	6,87E-7	4,32E-1	2,87E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	153.3	m2	1,03E3	1,84E0	1,85E-1	2,95E-8	4,66E-1	1,65E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	157.6	m2	1,06E3	1,89E0	1,9E-1	3,03E-8	4,79E-1	1,69E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	194.8	m2	1,31E3	2,34E0	2,35E-1	3,75E-8	5,92E-1	2,09E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	6,53E2	1,46E1	3,53E0	8,63E-6	7,09E-1	3,33E4	Floor slabs, ceilings, roofing	15	EPD Marmoleum
B1-B5	Resin products for protection and repair of concrete compo	200.6	kg	1,67E3	5,7E0	3,85E-1	2,24E-7	1,73E0	3,66E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 (l	203.7	kg	7,49E1	1,7E0	4,39E-1	5,97E-5	2,84E-1	1,06E4	Floor slabs, ceilings, roofing	10	EPD
B1-B5	Aluminium, sheet	247.7	kg	2,65E3	1,13E1	7,27E-1	1,12E-6	7,04E-1	4,69E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Waterproofing roof membrane, EPDM	339.6	kg	3,03E3	4,16E0	4,85E-1	5,95E-8	6,72E-1	5,56E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Resin products for protection and repair of concrete compo	350.6	kg	2,92E3	9,96E0	6,72E-1	3,92E-7	3,02E0	6,39E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	582.1	m2	3,93E3	6,98E0	7,02E-1	1,12E-7	1,77E0	6,25E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	713.5	kg	1,63E1	9,21E0	8,76E-1	9,06E-8	6,62E-1	2,43E4	Floor slabs, ceilings, roofing	40	EPD
B1-B5	Sealants for floor coatings and parquetes, DE avg., PU-ba	787.2	kg	1,02E4	3,66E1	5,24E0	7,7E-5	5,69E0	1,76E5	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	832.9	m2	5,62E3	9,99E0	1E0	1,6E-7	2,53E0	8,95E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	3,53E4	6,36E1	8,76E0	2,07E-5	1,05E1	6,45E5	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
B1-B5	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	1195.4	m2	2,58E2	1,46E2	1,39E1	1,43E-6	1,05E1	3,85E5	Floor slabs, ceilings, roofing	40	EPD
B1-B5	Bitumen membrane, V 60	1789.6	m2	7,8E3	3,15E1	2,6E0	7,22E-7	4,7E0	1,18E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Thin sheet, steel, (0.3-3.0 mm)	2826	kg	6,11E3	2,27E1	2E0	4,54E-8	3,27E0	7,27E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	3578.2	m2	2,41E4	4,29E1	4,32E0	6,89E-7	1,09E1	3,84E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Bitumen membrane, V 60	5572.5	m2	2,43E4	9,82E1	8,09E0	2,25E-6	1,46E1	3,68E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	27909.6	kg	6,38E2	3,6E2	3,43E1	3,54E-6	2,59E1	9,51E5	Floor slabs, ceilings, roofing	40	EPD
C1-C4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	0.4	m3	4,36E-1	8,34E-4	4,14E-4	2,65E-8	1,17E-4	3,23E0	Floor slabs, ceilings, roofing As building		Expanded Polyst
C1-C4	Mineral wool (flat roof insulation)	1.3	m2	1,28E-1	7,89E-4	1,14E-4	1,97E-12	7,65E-5	1,9E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Ready-mix concrete, low-strength, generic, C12/15 (1700/	1.7	m3	4,15E1	1,34E-1	3,21E-2	7,72E-6	3,73E-3	1,02E3	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Waterproofing fleece, PE-HD with PP	2.2	m2	7,22E0	1,69E-3	1,41E-4	5,82E-13	7,74E-5	3,93E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	3.5	kg	9,55E-3	7,49E-5	1,55E-5	7,63E-15	7,4E-6	1,99E-1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	4.7	m3	4,81E0	3,77E-2	7,81E-3	3,84E-12	3,73E-3	1E2	Floor slabs, ceilings, roofing As building		EPD Unbewehrte
C1-C4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	5.4	m3	3,54E1	2,77E-1	5,74E-2	2,83E-11	2,74E-2	7,37E2	Floor slabs, ceilings, roofing As building		Beton der Druckf
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	6.3	kg	8,53E-2	5,27E-4	7,61E-5	1,32E-12	5,12E-5	1,27E0	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Reinforcement steel	6.6	kg	5,32E-3	3,15E-5	4,29E-6	5,02E-15	2,48E-6	7,96E-2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Natural stone tiles, hard, interior floors	8.2	m2	1,12E0	8,77E-3	1,82E-3	8,94E-13	8,67E-4	2,33E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	9.5	m2	3,12E1	7,3E-3	6,09E-4	2,51E-12	3,34E-4	1,7E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	1,13E-1	8,84E-4	1,83E-4	9,01E-14	8,74E-5	2,35E0	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
C1-C4	Vapour retarder Polyamid (PA)	9.6	m2	1,94E0	4,54E-4	3,79E-5	1,56E-13	2,08E-5	1,05E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Thermoset resin insulation, glass tissue faced/backed, 5.0	10.6	m3	9,37E2	2,19E-1	1,83E-2	7,55E-11	1E-2	5,1E2	Floor slabs, ceilings, roofing As building		EPD Kooltherm I
C1-C4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	1,28E-1	1,01E-3	2,08E-4	1,02E-13	9,94E-5	2,67E0	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
C1-C4	Waterproofing roof membrane, EPDM	12.3	m2	3,33E-1	2,06E-3	2,97E-4	5,14E-12	2E-4	4,97E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	13.6	kg	3,71E-2	2,91E-4	6,03E-5	2,97E-14	2,88E-5	7,74E-1	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
C1-C4	Waterproofing fleece, PE-HD with PP	16.3	m2	5,35E1	1,25E-2	1,04E-3	4,31E-12	5,73E-4	2,91E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	17	m3	1,85E1	3,55E-2	1,76E-2	1,13E-6	4,97E-3	1,37E2	Floor slabs, ceilings, roofing As building		Expanded Polyst
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	17.2	kg	4,69E-2	3,68E-4	7,62E-5	3,75E-14	3,64E-5	9,79E-1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Sealants for floor coatings and parquetes, DE avg., PU-ba	20.1	kg	2,72E-1	1,68E-3	2,43E-4	4,2E-12	1,63E-4	4,06E0	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
C1-C4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	2,83E-1	2,22E-3	4,59E-4	2,26E-13	2,19E-4	5,89E0	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
C1-C4	Thermoset resin insulation, glass tissue faced/backed, 5.0	25.1	kg	6,34E1	1,48E-2	1,24E-3	5,11E-12	6,79E-4	3,45E1	Floor slabs, ceilings, roofing As building		EPD Kooltherm I
C1-C4	Resin products for protection and repair of concrete compo	28.1	kg	3,8E-1	2,35E-3	3,39E-4	5,87E-12	2,28E-4	5,68E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Reinforcement steel	28.7	kg	2,32E-2	1,37E-4	1,87E-5	2,18E-14	1,08E-5	3,46E-1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Sealants for floor coatings and parquetes, DE avg., PU-ba	33.7	kg	4,56E-1	2,82E-3	4,07E-4	7,04E-12	2,74E-4	6,81E0	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	36.1	kg	2,8E-1	1,11E-3	2,31E-4	5,45E-8	3,75E-5	7,95E0	Floor slabs, ceilings, roofing As building		One Click LCA

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
C1-C4	Waterproofing roof membrane, EPDM	43.2	m2	1,17E0	7,23E-3	1,04E-3	1,8E-11	7,02E-4	1,75E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	43.8	kg	3,39E-1	1,35E-3	2,8E-4	6,61E-8	4,56E-5	9,65E0	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	45.3	kg	6,13E-1	3,79E-3	5,47E-4	9,46E-12	3,68E-4	9,15E0	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Reinforcement steel	49.3	kg	3,98E-2	2,35E-4	3,21E-5	3,75E-14	1,85E-5	5,95E-1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	6,8E0	9,23E-3	2,02E-3	3,22E-12	7,61E-4	2,45E1	Floor slabs, ceilings, roofing	15	EPD Marmoleum
C1-C4	Adhesives for parquetes and floor coverings, DE avg., PU	55.2	kg	7,47E-1	4,62E-3	6,67E-4	1,15E-11	4,48E-4	1,11E1	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	59.3	kg	1,62E-1	1,27E-3	2,63E-4	1,29E-13	1,25E-4	3,37E0	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
C1-C4	Mineral wool (interior insulation)	59.5	m3	2,11E1	1,31E-1	1,89E-2	3,26E-10	1,27E-2	3,15E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	73.4	kg	9,94E-1	6,14E-3	8,86E-4	1,53E-11	5,96E-4	1,48E1	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	75.5	m2	3,84E0	3,01E-2	6,24E-3	3,07E-12	2,98E-3	8,01E1	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
C1-C4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	81.3	m3	5,33E2	4,17E0	8,65E-1	4,25E-10	4,13E-1	1,11E4	Floor slabs, ceilings, roofing As building		Beton der Druckf
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	83.1	kg	2,27E-1	1,78E-3	3,68E-4	1,81E-13	1,76E-4	4,73E0	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Concrete wall blocks	87.2	kg	2,38E-1	1,87E-3	3,87E-4	1,9E-13	1,84E-4	4,96E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	91.5	m2	3E2	7,03E-2	5,87E-3	2,42E-11	3,22E-3	1,63E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Bitumen membrane, V 60	94.4	m2	6,39E0	3,95E-2	5,7E-3	9,86E-11	3,83E-3	9,53E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Aluminium, sheet	98.9	kg	7,98E-2	4,72E-4	6,43E-5	7,52E-14	3,71E-5	1,19E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	101.8	kg	2,78E-1	2,18E-3	4,51E-4	2,22E-13	2,15E-4	5,79E0	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
C1-C4	Floor screed mortar, cement screed (IWM)	102.1	kg	2,79E-1	2,18E-3	4,53E-4	2,23E-13	2,16E-4	5,81E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	102.5	kg	2,8E-1	2,19E-3	4,54E-4	2,23E-13	2,17E-4	5,83E0	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Aluminium, anodised	107.4	kg	8,67E-2	5,12E-4	6,98E-5	8,16E-14	4,03E-5	1,3E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	111.5	m2	5,68E0	4,45E-2	9,22E-3	4,53E-12	4,4E-3	1,18E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
C1-C4	Aluminium, sheet	111.8	kg	9,02E-2	5,33E-4	7,27E-5	8,5E-14	4,2E-5	1,35E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Natural stone tiles, hard, interior floors	113.7	m2	1,55E1	1,22E-1	2,52E-2	1,24E-11	1,2E-2	3,24E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	122.6	kg	3,35E-1	2,62E-3	5,43E-4	2,67E-13	2,59E-4	6,98E0	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Resin products for protection and repair of concrete comp	135.9	kg	1,84E0	1,14E-2	1,64E-3	2,84E-11	1,1E-3	2,75E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Bitumen membrane, V 60	141.6	m2	9,58E0	5,92E-2	8,55E-3	1,48E-10	5,75E-3	1,43E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	141.8	m3	9,29E2	7,28E0	1,51E0	7,42E-10	7,2E-1	1,94E4	Floor slabs, ceilings, roofing As building		Beton der Druckf
C1-C4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	143.1	m3	1,56E2	2,98E-1	1,48E-1	9,48E-6	4,19E-2	1,16E3	Floor slabs, ceilings, roofing As building		Expanded Polyst
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	151.6	kg	1,17E0	4,67E-3	9,7E-4	2,29E-7	1,58E-4	3,34E1	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Aluminium, sheet	151.9	kg	1,23E-1	7,25E-4	9,88E-5	1,15E-13	5,7E-5	1,83E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	153.3	m2	5,03E2	1,18E-1	9,83E-3	4,05E-11	5,39E-3	2,74E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	157.6	m2	5,17E2	1,21E-1	1,01E-2	4,17E-11	5,54E-3	2,81E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	185.7	kg	2,51E0	1,55E-2	2,24E-3	3,88E-11	1,51E-3	3,75E1	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	194.8	m2	9,92E0	7,77E-2	1,61E-2	7,92E-12	7,68E-3	2,07E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	194.8	m2	6,4E2	1,5E-1	1,25E-2	5,15E-11	6,85E-3	3,48E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	2,51E1	3,41E-2	7,46E-3	1,19E-11	2,81E-3	9,07E1	Floor slabs, ceilings, roofing	15	EPD Marmoleum
C1-C4	Resin products for protection and repair of concrete comp	200.6	kg	2,72E0	1,68E-2	2,42E-3	4,19E-11	1,63E-3	4,05E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 (l	203.7	kg	5,56E-1	4,36E-3	9,03E-4	4,44E-13	4,31E-4	1,16E1	Floor slabs, ceilings, roofing	10	EPD
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	210.8	m2	2,01E0	1,58E-2	3,27E-3	1,61E-12	1,56E-3	4,2E1	Floor slabs, ceilings, roofing As building		EPD for Ecophor
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	214.3	kg	5,85E-1	4,58E-3	9,5E-4	4,67E-13	4,53E-4	1,22E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	219	kg	2,96E0	1,83E-2	2,64E-3	4,57E-11	1,78E-3	4,42E1	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Aluminium, sheet	247.7	kg	2E-1	1,18E-3	1,61E-4	1,88E-13	9,3E-5	2,99E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	256.8	kg	7,01E-1	5,49E-3	1,14E-3	5,6E-13	5,43E-4	1,46E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	267.5	kg	2,07E0	8,24E-3	1,71E-3	4,04E-7	2,78E-4	5,89E1	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Reinforcement steel	276.3	kg	2,23E-1	1,32E-3	1,8E-4	2,1E-13	1,04E-4	3,33E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	279.4	kg	2,17E0	8,61E-3	1,79E-3	4,22E-7	2,91E-4	6,16E1	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Stoneware tiles, glazed	296.8	kg	8,1E-1	6,35E-3	1,32E-3	6,47E-13	6,28E-4	1,69E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	323.2	kg	4,38E0	2,7E-2	3,9E-3	6,75E-11	2,62E-3	6,53E1	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Reinforcement steel	336.6	kg	2,72E-1	1,61E-3	2,19E-4	2,56E-13	1,26E-4	4,06E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Waterproofing roof membrane, EPDM	339.6	kg	4,6E0	2,84E-2	4,1E-3	7,09E-11	2,76E-3	6,86E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Resin products for protection and repair of concrete comp	350.6	kg	4,75E0	2,93E-2	4,23E-3	7,32E-11	2,85E-3	7,08E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 2.5 kg/m2, Hyg	353.8	kg	6,74E-1	5,28E-3	1,09E-3	5,38E-13	5,22E-4	1,4E1	Floor slabs, ceilings, roofing As building		EPD for Ecophor
C1-C4	Extruded polystyrene (XPS), m3	437	kg	5,92E0	3,66E-2	5,28E-3	9,13E-11	3,55E-3	8,83E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Reinforcement steel	462.5	kg	3,73E-1	2,21E-3	3,01E-4	3,52E-13	1,74E-4	5,58E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Reinforcement steel	476	kg	3,84E-1	2,27E-3	3,09E-4	3,62E-13	1,79E-4	5,74E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	530.2	m2	8,04E1	4,97E-1	7,17E-2	1,24E-9	4,82E-2	1,2E3	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	556.4	m2	8,44E1	5,21E-1	7,53E-2	1,3E-9	5,06E-2	1,26E3	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	564.9	kg	7,65E0	4,73E-2	6,82E-3	1,18E-10	4,59E-3	1,14E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
C1-C4	Waterproofing fleece, PE-HD with PP	582.1	m2	1,91E3	4,47E-1	3,73E-2	1,54E-10	2,05E-2	1,04E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Reinforcement steel	588.2	kg	4,75E-1	2,81E-3	3,82E-4	4,47E-13	2,21E-4	7,1E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	624.2	kg	1,7E0	1,34E-2	2,77E-3	1,36E-12	1,32E-3	3,55E1	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	658.6	kg	5,1E0	2,03E-2	4,22E-3	9,94E-7	6,85E-4	1,45E2	Floor slabs, ceilings, roofing	As building	One Click LCA
C1-C4	Thermoset resin insulation, glass tissue faced/backed, 5.0	658.7	kg	1,66E3	3,89E-1	3,25E-2	1,34E-10	1,78E-2	9,05E2	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
C1-C4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	713.5	kg	1,96E0	1,54E-2	3,19E-3	1,57E-12	1,52E-3	4,09E1	Floor slabs, ceilings, roofing	40	EPD
C1-C4	Sealants for floor coatings and parquetes, DE avg., PU-ba	787.2	kg	1,07E1	6,59E-2	9,51E-3	1,64E-10	6,39E-3	1,59E2	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	832.9	m2	2,73E3	6,4E-1	5,34E-2	2,2E-10	2,93E-2	1,49E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	9,89E0	7,75E-2	1,61E-2	7,9E-12	7,66E-3	2,06E2	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	856.3	kg	2,34E0	1,83E-2	3,8E-3	1,87E-12	1,81E-3	4,67E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	861	kg	2,35E0	1,84E-2	3,82E-3	1,88E-12	1,82E-3	4,9E1	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
C1-C4	Mineral wool (flat roof insulation)	928.7	m3	1,82E3	1,13E1	1,63E0	2,81E-8	1,09E0	2,72E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	956.3	kg	2,61E0	2,05E-2	4,24E-3	2,08E-12	2,02E-3	5,44E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	983.5	kg	2,68E0	2,1E-2	4,36E-3	2,14E-12	2,08E-3	5,6E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	1023	kg	1,38E1	8,56E-2	1,24E-2	2,14E-10	8,31E-3	2,07E2	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	1038.7	kg	2,83E0	2,22E-2	4,6E-3	2,26E-12	2,2E-3	5,91E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	1108.3	kg	8,59E0	3,41E-2	7,09E-3	1,67E-6	1,15E-3	2,44E2	Floor slabs, ceilings, roofing	As building	One Click LCA
C1-C4	Aluminium, anodised	1112.2	kg	8,97E-1	5,31E-3	7,23E-4	8,45E-13	4,18E-4	1,34E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	1131.5	kg	3,09E0	2,42E-2	5,02E-3	2,47E-12	2,39E-3	6,44E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	1174.5	kg	3,21E0	2,51E-2	5,21E-3	2,56E-12	2,48E-3	6,68E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	1195.4	m2	3,11E1	2,43E-1	5,04E-2	2,48E-11	2,41E-2	6,48E2	Floor slabs, ceilings, roofing	40	EPD
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	1215.4	kg	3,32E0	2,6E-2	5,39E-3	2,65E-12	2,57E-3	6,92E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Floor screed mortar, cement screed (IWM)	1460.3	kg	3,99E0	3,12E-2	6,47E-3	3,18E-12	3,09E-3	8,31E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Reinforcement steel	1758	kg	1,42E0	8,39E-3	1,14E-3	1,34E-12	6,6E-4	2,12E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Bitumen membrane, V 60	1789.6	m2	1,21E2	7,49E-1	1,08E-1	1,87E-9	7,27E-2	1,81E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	2170.6	kg	5,92E0	4,64E-2	9,62E-3	4,73E-12	4,59E-3	1,24E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Mineral wool (facade insulation)	2277	kg	3,08E1	1,91E-1	2,75E-2	4,76E-10	1,85E-2	4,6E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Concrete wall blocks	2562	kg	6,99E0	5,48E-2	1,14E-2	5,59E-12	5,42E-3	1,46E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Thin sheet, steel, (0.3-3.0 mm)	2826	kg	2,28E0	1,35E-2	1,84E-3	2,15E-12	1,06E-3	3,41E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Extruded polystyrene (XPS), m3	3211.9	kg	4,35E1	2,69E-1	3,88E-2	6,71E-10	2,61E-2	6,49E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	3578.2	m2	1,17E4	2,75E0	2,29E-1	9,46E-10	1,26E-1	6,39E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	3632.5	kg	9,91E0	7,77E-2	1,61E-2	7,92E-12	7,68E-3	2,07E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Reinforcement steel	3886.1	kg	3,14E0	1,85E-2	2,53E-3	2,95E-12	1,46E-3	4,69E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	4319.3	kg	1,18E1	9,24E-2	1,91E-2	9,42E-12	9,14E-3	2,46E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	5172.2	kg	1,41E1	1,11E-1	2,29E-2	1,13E-11	1,09E-2	2,94E2	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	5197.3	kg	1,42E1	1,11E-1	2,3E-2	1,13E-11	1,1E-2	2,96E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Bitumen membrane, V 60	5572.5	m2	3,77E2	2,33E0	3,37E-1	5,82E-9	2,26E-1	5,63E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	6271.9	kg	4,86E1	1,93E-1	4,01E-2	9,47E-6	6,52E-3	1,38E3	Floor slabs, ceilings, roofing	As building	One Click LCA
C1-C4	Extruded polystyrene (XPS), m3	6504	kg	8,8E1	5,44E-1	7,86E-2	1,36E-9	5,28E-2	1,31E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Reinforcement steel	6778	kg	5,47E0	3,23E-2	4,41E-3	5,15E-12	2,54E-3	8,18E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Extruded polystyrene (XPS), m3	7158.9	kg	9,69E1	5,99E-1	8,65E-2	1,5E-9	5,81E-2	1,45E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Prestressed concrete hollow deck, 200 mm, 272 kg/m3 (C	7937	m2	5,89E3	4,62E1	9,57E0	4,71E-9	4,57E0	1,23E5	Floor slabs, ceilings, roofing	100	FDES
C1-C4	Reinforcement steel	10806	kg	8,72E0	5,16E-2	7,03E-3	8,21E-12	4,06E-3	1,3E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	11886	kg	3,24E1	2,54E-1	5,27E-2	2,59E-11	2,51E-2	6,76E2	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
C1-C4	Floor screed mortar, cement screed (IWM)	13904.9	kg	3,79E1	2,97E-1	6,16E-2	3,03E-11	2,94E-2	7,91E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	14634.4	kg	3,99E1	3,13E-1	6,49E-2	3,19E-11	3,1E-2	8,33E2	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
C1-C4	Floor screed mortar, cement screed (IWM)	17931.3	kg	4,89E1	3,84E-1	7,95E-2	3,91E-11	3,79E-2	1,02E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	23295.5	kg	6,36E1	4,98E-1	1,03E-1	5,08E-11	4,93E-2	1,33E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	25455.7	kg	6,95E1	5,45E-1	1,13E-1	5,55E-11	5,38E-2	1,45E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	26471.8	kg	7,22E1	5,66E-1	1,17E-1	5,77E-11	5,6E-2	1,51E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	27756.1	kg	7,58E1	5,94E-1	1,23E-1	6,05E-11	5,87E-2	1,58E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	27909.6	kg	7,67E1	6,02E-1	1,25E-1	6,13E-11	5,95E-2	1,6E3	Floor slabs, ceilings, roofing	40	EPD
C1-C4	Aerated concrete P2 04, unreinforced	35966.8	kg	9,82E1	7,7E-1	1,59E-1	7,84E-11	7,61E-2	2,05E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	94014	kg	2,57E2	2,01E0	4,17E-1	2,05E-10	1,99E-1	5,35E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	134513.4	kg	3,67E2	2,88E0	5,96E-1	2,93E-10	2,85E-1	7,65E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Structural steel sections (piles, beams, columns, joists), S	190900	kg	1,54E2	9,11E-1	1,24E-1	1,45E-10	7,25E-2	2,3E3	Floor slabs, ceilings, roofing	100	FDES
C1-C4	Floor screed mortar, cement screed (IWM)	679850.4	kg	1,86E3	1,45E1	3,01E0	1,48E-9	1,44E0	3,87E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Ready-mix concrete, low-strength, generic, C12/15 (1700/	1.7	m3	-4,22E-2	-8,79E-5	-3,03E-5	-1,05E-9	-5,13E-6	-2,16E-'	Floor slabs, ceilings, roofing	As building	One Click LCA

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
D	Waterproofing fleece, PE-HD with PP	2.2	m2	-4,45E0	-4,8E-3	-7,68E-4	-8,01E-12	-4,99E-4	-7,87E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	4.7	m3	-1,24E-1	-2,57E-4	-8,88E-5	-3,08E-9	-1,5E-5	-6,33E-1	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
D	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	5.4	m3	-1,42E-1	-2,95E-4	-1,02E-4	-3,54E-9	-1,73E-5	-7,28E-1	Floor slabs, ceilings, roofing	As building	Beton der Druckf
D	Natural stone tiles, hard, interior floors	8.2	m2	-2,07E-3	-3,41E-6	-6,47E-7	-6,14E-15	-1,49E-7	-3,77E-2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	9.5	m2	-1,92E1	-2,07E-2	-3,31E-3	-3,46E-11	-2,16E-3	-3,4E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	-6,43E1	-6,94E-2	-1,11E-2	-1,16E-10	-7,22E-3	-1,14E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
D	Vapour retarder Polyamid (PA)	9.6	m2	-1,2E0	-1,29E-3	-2,06E-4	-2,15E-12	-1,34E-4	-2,11E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Thermoset resin insulation, glass tissue faced/backed, 5.0	10.6	m3	-5,78E2	-6,23E-1	-9,96E-2	-1,04E-9	-6,48E-2	-1,02E4	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
D	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	-7,31E1	-7,89E-2	-1,26E-2	-1,32E-10	-8,2E-3	-1,29E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
D	Lightweight boncrete block with EPS-insulation core, ceme	13.6	kg	-1,72E-1	-2,82E-4	-5,37E-5	-5,09E-13	-1,23E-5	-3,13E0	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Waterproofing fleece, PE-HD with PP	16.3	m2	-3,3E1	-3,56E-2	-5,69E-3	-5,94E-11	-3,7E-3	-5,83E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	-1,61E2	-1,74E-1	-2,78E-2	-2,9E-10	-1,81E-2	-2,85E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
D	Thermoset resin insulation, glass tissue faced/backed, 5.0	25.1	kg	-3,91E1	-4,21E-2	-6,74E-3	-7,03E-11	-4,38E-3	-6,91E2	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
D	Structural hollow steel sections (HSS), cold rolled, generic	36.1	kg	-4,81E1	-2,07E-1	-6,93E-2	-2,42E-6	-3,59E-2	-5,31E2	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	43.8	kg	-5,83E1	-2,52E-1	-8,41E-2	-2,94E-6	-4,36E-2	-6,45E2	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	-2,01E1	-2,13E-2	-3,41E-3	-3,49E-11	-2,25E-3	-3,53E2	Floor slabs, ceilings, roofing	15	EPD Marmoleum
D	Lightweight boncrete block with EPS-insulation core, ceme	59.3	kg	-7,48E-1	-1,23E-3	-2,34E-4	-2,22E-12	-5,38E-5	-1,36E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	75.5	m2	2E1	3,29E-2	6,25E-3	5,93E-11	1,44E-3	3,65E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
D	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	81.3	m3	-2,14E0	-4,45E-3	-1,54E-3	-5,33E-8	-2,6E-4	-1,1E1	Floor slabs, ceilings, roofing	As building	Beton der Druckf
D	Concrete wall blocks	87.2	kg	6,19E-4	1,02E-6	1,94E-7	1,84E-15	4,45E-8	1,13E-2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	91.5	m2	-1,85E2	-2E-1	-3,19E-2	-3,33E-10	-2,08E-2	-3,27E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Aluminium, sheet	98.9	kg	-3,07E-1	-1,17E-3	-7,83E-5	-2,97E-12	-6,81E-5	-5,52E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
D	Lightweight boncrete block with EPS-insulation core, ceme	101.8	kg	-1,28E0	-2,11E-3	-4,02E-4	-3,81E-12	-9,23E-5	-2,34E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Floor screed mortar, cement screed (IWM)	102.1	kg	-1,29E0	-2,12E-3	-4,03E-4	-3,82E-12	-9,26E-5	-2,35E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Aluminium, anodised	107.4	kg	-9E2	-3,42E0	-2,3E-1	-8,7E-9	-2E-1	-1,62E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	111.5	m2	2,95E1	4,86E-2	9,23E-3	8,76E-11	2,12E-3	5,38E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
D	Aluminium, sheet	111.8	kg	-3,47E-1	-1,32E-3	-8,85E-5	-3,35E-12	-7,7E-5	-6,24E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
D	Natural stone tiles, hard, interior floors	113.7	m2	-2,87E-2	-4,72E-5	-8,98E-6	-8,51E-14	-2,06E-6	-5,23E-1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	141.8	m3	-3,73E0	-7,76E-3	-2,68E-3	-9,3E-8	-4,53E-4	-1,91E1	Floor slabs, ceilings, roofing	As building	Beton der Druckf
D	Structural hollow steel sections (HSS), cold rolled, generic	151.6	kg	-2,02E2	-8,71E-1	-2,91E-1	-1,02E-5	-1,51E-1	-2,23E3	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Aluminium, sheet	151.9	kg	-4,72E-1	-1,79E-3	-1,2E-4	-4,56E-12	-1,05E-4	-8,47E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	153.3	m2	-3,1E2	-3,35E-1	-5,35E-2	-5,58E-10	-3,48E-2	-5,48E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	157.6	m2	-3,19E2	-3,44E-1	-5,5E-2	-5,74E-10	-3,58E-2	-5,64E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	194.8	m2	5,15E1	8,49E-2	1,61E-2	1,53E-10	3,71E-3	9,41E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	194.8	m2	-3,94E2	-4,25E-1	-6,8E-2	-7,1E-10	-4,42E-2	-6,97E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	-7,41E1	-7,89E-2	-1,26E-2	-1,29E-10	-8,33E-3	-1,31E3	Floor slabs, ceilings, roofing	15	EPD Marmoleum
D	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 (I	203.7	kg	-2,57E0	-4,23E-3	-8,04E-4	-7,63E-12	-1,85E-4	-4,69E1	Floor slabs, ceilings, roofing	10	EPD
D	Aluminium, sheet	247.7	kg	-7,69E-1	-2,92E-3	-1,96E-4	-7,43E-12	-1,71E-4	-1,38E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	256.8	kg	-3,24E0	-5,33E-3	-1,01E-3	-9,61E-12	-2,33E-4	-5,91E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	267.5	kg	-3,56E2	-1,54E0	-5,14E-1	-1,79E-5	-2,66E-1	-3,94E3	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	279.4	kg	-3,72E2	-1,61E0	-5,36E-1	-1,87E-5	-2,78E-1	-4,11E3	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Stoneware tiles, glazed	296.8	kg	-1,87E-3	-3,08E-6	-5,86E-7	-5,56E-15	-1,35E-7	-3,42E-2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	582.1	m2	-1,18E3	-1,27E0	-2,03E-1	-2,12E-9	-1,32E-1	-2,08E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	658.6	kg	-8,77E2	-3,78E0	-1,26E0	-4,41E-5	-6,55E-1	-9,7E3	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Thermoset resin insulation, glass tissue faced/backed, 5.0	658.7	kg	-1,03E3	-1,11E0	-1,77E-1	-1,85E-9	-1,15E-1	-1,81E4	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
D	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	713.5	kg	-4,21E2	-4,48E-1	-7,16E-2	-7,33E-10	-4,74E-2	-7,43E3	Floor slabs, ceilings, roofing	40	EPD
D	Waterproofing fleece, PE-HD with PP	832.9	m2	-1,69E3	-1,82E0	-2,91E-1	-3,03E-9	-1,89E-1	-2,98E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	-5,64E3	-6,08E0	-9,72E-1	-1,02E-8	-6,33E-1	-9,97E4	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
D	Lightweight boncrete block with EPS-insulation core, ceme	856.3	kg	-1,08E1	-1,78E-2	-3,38E-3	-3,21E-11	-7,76E-4	-1,97E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	861	kg	-6,03E-2	-1,26E-4	-4,34E-5	-1,51E-9	-7,34E-6	-3,09E-1	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
D	Lightweight boncrete block with EPS-insulation core, ceme	956.3	kg	-1,21E1	-1,99E-2	-3,77E-3	-3,58E-11	-8,67E-4	-2,2E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Lightweight boncrete block with EPS-insulation core, ceme	983.5	kg	-1,24E1	-2,04E-2	-3,88E-3	-3,68E-11	-8,92E-4	-2,26E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Floor screed mortar, cement screed (IWM)	1038.7	kg	-1,31E1	-2,16E-2	-4,1E-3	-3,89E-11	-9,42E-4	-2,39E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	1108.3	kg	-1,48E3	-6,37E0	-2,13E0	-7,43E-5	-1,1E0	-1,63E4	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Aluminium, anodised	1112.2	kg	-9,32E3	-3,54E1	-2,38E0	-9,01E-8	-2,07E0	-1,68E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	1131.5	kg	-1,43E1	-2,35E-2	-4,47E-3	-4,24E-11	-1,03E-3	-2,6E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	1174.5	kg	-1,48E1	-2,44E-2	-4,64E-3	-4,4E-11	-1,06E-3	-2,7E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	1195.4	m2	-6,67E3	-7,1E0	-1,13E0	-1,16E-8	-7,5E-1	-1,18E5	Floor slabs, ceilings, roofing	40	EPD

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Reinforcement steel	5210.2	kg	5,99E1	2,76E-1	6E-2	1,18E-5	3,37E-3	1,7E3	External walls and facade	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	8108.2	kg	9,31E1	4,29E-1	9,34E-2	1,84E-5	5,25E-3	2,65E3	External walls and facade	As building	One Click LCA
A4	Masonry mortar (IWM)	14372.2	kg	1,65E2	7,6E-1	1,66E-1	3,26E-5	9,31E-3	4,7E3	External walls and facade	45	Oekobau.dat 201
A4	Facing bricks	34408.8	kg	3,95E2	1,82E0	3,97E-1	7,81E-5	2,23E-2	1,13E4	External walls and facade	50	Oekobau.dat 201
B1-B5	Sunshade sheet	248	m2	4,37E3	6,12E0	1,16E0	2,18E-7	1,35E0	8,88E4	External walls and facade	15	Oekobau.dat 201
B1-B5	Silicate dispersion exterior paint primer	391.1	kg	7,23E2	2,72E0	2,34E-1	4,91E-8	3,35E-1	1,66E4	External walls and facade	20	Oekobau.dat 201
B1-B5	Silicate dispersion exterior paint primer	429	kg	7,93E2	2,98E0	2,57E-1	5,39E-8	3,67E-1	1,82E4	External walls and facade	20	Oekobau.dat 201
B1-B5	Vapour retarder Polyamid (PA)	781	m2	1,35E3	1,26E1	3,06E-1	2,9E-8	7,55E-1	2,04E4	External walls and facade	20	Oekobau.dat 201
B1-B5	Sunshade sheet	850	m2	1,5E4	2,1E1	3,99E0	7,48E-7	4,63E0	3,04E5	External walls and facade	15	Oekobau.dat 201
B1-B5	Masonry mortar (IWM)	14372.2	kg	1,26E3	2,49E0	3,92E-1	1,93E-7	1,49E-1	1,36E4	External walls and facade	45	Oekobau.dat 201
C1-C4	Plywood, spruce, uncoated (Metsä Wood)	3.3	m3	1,37E1	3,34E-1	4,4E-1	1,59E-6	4,45E-3	1,59E2	External walls and facade	As building	Metsä wood spru
C1-C4	Plywood, spruce, uncoated (Metsä Wood)	4.7	m2	1,76E-1	4,28E-3	5,64E-3	2,04E-8	5,7E-5	2,03E0	External walls and facade	As building	Metsä wood spru
C1-C4	Mineral wool (facade insulation)	11.6	m3	7,26E0	4,49E-2	6,48E-3	1,12E-10	4,36E-3	1,08E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Mineral wool (facade insulation)	15.2	m3	9,52E0	5,88E-2	8,49E-3	1,47E-10	5,71E-3	1,42E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Mineral wool (facade insulation)	57	m3	3,57E1	2,21E-1	3,18E-2	5,51E-10	2,14E-2	5,32E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Insulation with aluminium cladding and mineral filled polim	57.75	m2	5,52E0	3,41E-2	4,92E-3	8,52E-11	3,31E-3	8,24E1	External walls and facade	As building	EPD ALUCOBOI
C1-C4	Insulation with aluminium cladding and mineral filled polim	75.8	m2	7,24E0	4,48E-2	6,46E-3	1,12E-10	4,35E-3	1,08E2	External walls and facade	As building	EPD ALUCOBOI
C1-C4	Concrete, ready mix, DE avg., C 35/45 (IZB)	155.7	m3	1,02E3	7,99E0	1,66E0	8,15E-10	7,9E-1	2,13E4	External walls and facade	As building	Oekobau.dat 201
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	179.81	m2	8,61E2	2,78E0	6,67E-1	1,6E-4	7,74E-2	2,11E4	External walls and facade	As building	One Click LCA
C1-C4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	246	m3	2,52E2	1,97E0	4,09E-1	2,01E-10	1,95E-1	5,25E3	External walls and facade	As building	EPD Unbewehrte
C1-C4	Sunshade sheet	248	m2	1,34E0	8,3E-3	1,2E-3	2,07E-11	8,06E-4	2E1	External walls and facade	15	Oekobau.dat 201
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	388	m2	1,55E3	4,99E0	1,2E0	2,88E-4	1,39E-1	3,79E4	External walls and facade	As building	One Click LCA
C1-C4	Silicate dispersion exterior paint primer	391.1	kg	5,29E0	3,27E-2	4,72E-3	8,17E-11	3,18E-3	7,9E1	External walls and facade	20	Oekobau.dat 201
C1-C4	Silicate dispersion exterior paint primer	429	kg	5,81E0	3,59E-2	5,18E-3	8,96E-11	3,48E-3	8,67E1	External walls and facade	20	Oekobau.dat 201
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	724.48	m2	3,47E3	1,12E1	2,69E0	6,46E-4	3,12E-1	8,5E4	External walls and facade	As building	One Click LCA
C1-C4	Mineral wool (facade insulation)	738	m3	4,62E2	2,86E0	4,12E-1	7,13E-9	2,77E-1	6,89E3	External walls and facade	50	Oekobau.dat 201
C1-C4	Vapour retarder Polyamid (PA)	781	m2	1,58E2	3,69E-2	3,08E-3	1,27E-11	1,69E-3	8,58E1	External walls and facade	20	Oekobau.dat 201
C1-C4	Sunshade sheet	850	m2	4,6E0	2,85E-2	4,11E-3	7,1E-11	2,76E-3	6,87E1	External walls and facade	15	Oekobau.dat 201
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	1376.53	m2	6,59E3	2,13E1	5,11E0	1,23E-3	5,93E-1	1,62E5	External walls and facade	As building	One Click LCA
C1-C4	Precast concrete wall elements (solid, uninsulated), generi	1739.37	m2	8,33E3	2,69E1	6,46E0	1,55E-3	7,49E-1	2,04E5	External walls and facade	As building	One Click LCA
C1-C4	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3099.6	m2	3,82E2	2,36E0	3,41E-1	5,89E-9	2,29E-1	5,7E3	External walls and facade	As building	MD-16002-EN Si
C1-C4	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3272	kg	4,42E1	2,73E-1	3,94E-2	6,82E-10	2,65E-2	6,59E2	External walls and facade	As building	MD-16002-EN Si
C1-C4	Gypsum plasterboard, 12.5mm, 730 kg/m3, GKB Scan (Si	3272	kg	4,42E1	2,73E-1	3,94E-2	6,82E-10	2,65E-2	6,59E2	External walls and facade	As building	MD-16002-EN Si
C1-C4	Insulation with aluminium cladding and mineral filled polim	3392	m2	3,24E2	2E0	2,89E-1	5E-9	1,94E-1	4,84E3	External walls and facade	As building	EPD ALUCOBOI
C1-C4	Extruded polystyrene (XPS), m3	3520	kg	4,77E1	2,95E-1	4,25E-2	7,35E-10	2,86E-2	7,11E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Extruded polystyrene (XPS), m3	4710.3	kg	6,38E1	3,94E-1	5,69E-2	9,84E-10	3,82E-2	9,51E2	External walls and facade	50	Oekobau.dat 201
C1-C4	Reinforcement steel	5210.2	kg	4,2E0	2,49E-2	3,39E-3	3,96E-12	1,96E-3	6,29E1	External walls and facade	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	8108.2	kg	6,28E1	2,5E-1	5,19E-2	1,22E-5	8,43E-3	1,79E3	External walls and facade	As building	One Click LCA
C1-C4	Masonry mortar (IWM)	14372.2	kg	3,92E1	3,07E-1	6,37E-2	3,13E-11	3,04E-2	8,18E2	External walls and facade	45	Oekobau.dat 201
C1-C4	Facing bricks	34408.8	kg	9,39E1	7,36E-1	1,53E-1	7,5E-11	7,28E-2	1,96E3	External walls and facade	50	Oekobau.dat 201
D	Plywood, spruce, uncoated (Metsä Wood)	3.3	m3	-2,09E3	-2,99E0	-9,14E-1	-5,84E-4	-1,41E-1	-6,41E4	External walls and facade	As building	Metsä wood spru
D	Plywood, spruce, uncoated (Metsä Wood)	4.7	m2	-2,68E1	-3,84E-2	-1,17E-2	-7,49E-6	-1,8E-3	-8,22E2	External walls and facade	As building	Metsä wood spru
D	Concrete, ready mix, DE avg., C 35/45 (IZB)	155.7	m3	3,64E0	7,57E-3	2,62E-3	9,08E-8	4,42E-4	1,86E1	External walls and facade	As building	Oekobau.dat 201
D	Precast concrete wall elements (solid, uninsulated), generi	179.81	m2	-8,03E-1	-1,67E-3	-5,78E-4	-2,01E-8	-9,77E-5	-4,12E0	External walls and facade	As building	One Click LCA
D	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	246	m3	-6,46E0	-1,35E-2	-4,65E-3	-1,61E-7	-7,86E-4	-3,31E1	External walls and facade	As building	EPD Unbewehrte
D	Precast concrete wall elements (solid, uninsulated), generi	388	m2	-1,44E0	-3,01E-3	-1,04E-3	-3,61E-8	-1,76E-4	-7,41E0	External walls and facade	As building	One Click LCA
D	Precast concrete wall elements (solid, uninsulated), generi	724.48	m2	-3,24E0	-6,74E-3	-2,33E-3	-8,08E-8	-3,94E-4	-1,66E1	External walls and facade	As building	One Click LCA
D	Vapour retarder Polyamid (PA)	781	m2	-9,73E1	-1,05E-1	-1,68E-2	-1,75E-10	-1,09E-2	-1,72E3	External walls and facade	20	Oekobau.dat 201
D	Precast concrete wall elements (solid, uninsulated), generi	1376.53	m2	-6,15E0	-1,28E-2	-4,42E-3	-1,54E-7	-7,48E-4	-3,15E1	External walls and facade	As building	One Click LCA
D	Precast concrete wall elements (solid, uninsulated), generi	1739.37	m2	-7,77E0	-1,62E-2	-5,59E-3	-1,94E-7	-9,45E-4	-3,98E1	External walls and facade	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	8108.2	kg	-1,08E4	-4,66E1	-1,56E1	-5,43E-4	-8,06E0	-1,19E5	External walls and facade	As building	One Click LCA
D	Masonry mortar (IWM)	14372.2	kg	-1,21E-1	-1,99E-4	-3,78E-5	-3,59E-13	-8,69E-6	-2,21E0	External walls and facade	45	Oekobau.dat 201
D	Facing bricks	34408.8	kg	-2,41E-1	-3,97E-4	-7,55E-5	-7,16E-13	-1,73E-5	-4,4E0	External walls and facade	50	Oekobau.dat 201
				7,57E5	**2,41E3**	**2,82E2**	**2,57E-2**	**1,78E2**	**1,01E7**	**External walls and facade**		
A1-A3	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	0.4	m3	2,36E1	5,6E-2	6,4E-3	5,2E-7	1,16E-1	3,94E2	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A1-A3	Mineral wool (flat roof insulation)	1.3	m2	1,39E1	7,03E-2	8,73E-3	2,93E-10	5,99E-3	1,49E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Ready-mix concrete, low-strength, generic, C12/15 (1700/	1.7	m3	3,57E2	7,62E-1	1,02E-1	8,21E-6	3,16E-2	2,13E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Waterproofing fleece, PE-HD with PP	2.2	m2	7,42E0	1,32E-2	1,33E-3	2,12E-10	3,34E-3	1,18E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	3.5	kg	1,56E0	1,22E-3	5,08E-4	6,48E-8	7,42E-4	1,84E1	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	4.7	m3	8,46E2	1,02E0	1,32E-1	1,2E-8	9,21E-2	5,93E3	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A1-A3	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	5.4	m3	1,24E3	1,97E0	3,09E-1	4,31E-6	2,39E-1	6,52E3	Floor slabs, ceilings, roofing	As building	Beton der Druckf
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	6.3	kg	6,02E0	1,6E-2	1,92E-3	1,47E-9	3,7E-3	9,94E1	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A1-A3	Reinforcement steel	6.6	kg	4,95E0	1,18E-2	1,17E-3	3,27E-10	1,15E-3	8,31E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Natural stone tiles, hard, interior floors	8.2	m2	2,98E2	1,76E0	1,83E-1	6,12E-8	1,33E-1	4,38E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	9.5	m2	3,21E1	5,7E-2	5,73E-3	9,14E-10	1,44E-2	5,1E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	1,01E2	1,81E-1	2,5E-2	5,9E-8	2,98E-2	1,84E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A1-A3	Vapour retarder Polyamid (PA)	9.6	m2	8,3E0	7,73E-2	1,88E-3	1,78E-10	4,64E-3	1,26E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Thermoset resin insulation, glass tissue faced/backed, 5.0	10.6	m3	1,04E3	2,54E0	2,85E-1	8,3E-8	1,05E0	1,84E4	Floor slabs, ceilings, roofing	As building	EPD Kooltherm K
A1-A3	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	1,14E2	2,06E-1	2,84E-2	6,71E-8	3,39E-2	2,09E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A1-A3	Waterproofing roof membrane, EPDM	12.3	m2	1,1E2	1,51E-1	1,76E-2	2,15E-9	2,44E-2	2,01E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	13.6	kg	3,79E0	1,08E-2	7,6E-3	3,12E-2	2,98E-3	4E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A1-A3	Waterproofing fleece, PE-HD with PP	16.3	m2	5,5E1	9,78E-2	9,83E-3	1,57E-9	2,48E-2	8,76E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	17	m3	1E3	2,38E0	2,72E-1	2,21E-5	4,93E0	1,67E4	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	17.2	kg	7,69E0	5,99E-3	2,49E-3	3,18E-7	3,65E-3	9,03E1	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Sealants for floor coatings and parquetes, DE avg., PU-ba	20.1	kg	8,72E1	3,12E-1	4,46E-2	6,55E-7	4,84E-2	1,49E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A1-A3	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	2,52E2	4,55E-1	6,26E-2	1,48E-7	7,47E-2	4,61E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A1-A3	Thermoset resin insulation, glass tissue faced/backed, 5.0	25.1	kg	7,07E1	1,72E-1	1,93E-2	5,61E-9	7,1E-2	1,25E3	Floor slabs, ceilings, roofing	As building	EPD Kooltherm K
A1-A3	Resin products for protection and repair of concrete compo	28.1	kg	1,17E2	3,99E-1	2,69E-2	1,57E-8	1,21E-1	2,56E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Reinforcement steel	28.7	kg	2,15E1	5,13E-2	5,11E-3	1,42E-9	5E-3	3,61E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Sealants for floor coatings and parquetes, DE avg., PU-ba	33.7	kg	1,46E2	5,22E-1	7,48E-2	1,1E-6	8,12E-2	2,51E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	36.1	kg	1,86E2	9,83E-1	9,5E-2	8,88E-6	6,68E-2	3,1E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Waterproofing roof membrane, EPDM	43.2	m2	3,85E2	5,3E-1	6,18E-2	7,57E-9	8,55E-2	7,07E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	43.8	kg	2,26E2	1,19E0	1,15E-1	1,08E-5	8,1E-2	3,76E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	45.3	kg	4,33E1	1,15E-1	1,38E-2	1,06E-8	2,66E-2	7,15E2	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A1-A3	Reinforcement steel	49.3	kg	3,7E1	8,8E-2	8,77E-3	2,44E-9	8,59E-3	6,21E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	5,89E1	1,32E0	3,18E-1	7,79E-7	6,4E-2	3E3	Floor slabs, ceilings, roofing	15	EPD Marmoleum
A1-A3	Adhesives for parquetes and floor coverings, DE avg., PU	55.2	kg	2,57E2	7,89E-1	1,47E-1	1,88E-6	1,38E-1	4,01E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	59.3	kg	1,65E1	4,73E-2	3,31E-2	1,36E-1	1,3E-2	1,74E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A1-A3	Mineral wool (interior insulation)	59.5	m3	2,48E3	1,15E1	1,61E0	5,86E-8	8,76E-1	3,23E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	73.4	kg	7,01E1	1,86E-1	2,23E-2	1,72E-8	4,32E-2	1,16E3	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A1-A3	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	75.5	m2	9,77E2	1,83E0	2,03E-1	4,27E-8	1,59E-1	1,79E4	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A1-A3	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	81.3	m3	1,86E4	2,96E1	4,65E0	6,49E-5	3,59E0	9,82E4	Floor slabs, ceilings, roofing	As building	Beton der Druckf
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	83.1	kg	3,71E1	2,89E-2	1,2E-2	1,54E-6	1,76E-2	4,36E2	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Concrete wall blocks	87.2	kg	1,14E1	2,01E-2	3,25E-3	1,81E-10	8,22E-4	6,42E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	91.5	m2	3,09E2	5,49E-1	5,52E-2	8,81E-9	1,39E-1	4,92E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Bitumen membrane, V 60	94.4	m2	2,06E2	8,32E-1	6,85E-2	1,9E-8	1,24E-1	3,11E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Aluminium, sheet	98.9	kg	1,06E3	4,52E0	2,9E-1	4,47E-7	2,81E-1	1,87E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	101.8	kg	2,84E1	8,12E-2	5,69E-2	2,33E-1	2,23E-2	2,99E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A1-A3	Floor screed mortar, cement screed (IWM)	102.1	kg	1,59E1	2,22E-2	4,08E-3	1,33E-9	1,3E-3	1,17E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	102.5	kg	4,58E1	3,57E-2	1,49E-2	1,9E-6	2,17E-2	5,38E2	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Aluminium, anodised	107.4	kg	7,18E2	1,27E0	2,37E-1	4,65E-8	1,07E-1	1,26E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	111.5	m2	1,44E3	2,7E0	3E-1	6,31E-8	2,34E-1	2,65E4	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A1-A3	Aluminium, sheet	111.8	kg	1,19E3	5,11E0	3,28E-1	5,06E-7	3,18E-1	2,12E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Natural stone tiles, hard, interior floors	113.7	m2	4,13E3	2,44E1	2,54E0	8,48E-7	1,84E0	6,07E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	122.6	kg	5,48E1	4,27E-2	1,78E-2	2,27E-6	2,6E-2	6,43E2	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A1-A3	Resin products for protection and repair of concrete compo	135.9	kg	5,67E2	1,93E0	1,3E-1	7,6E-8	5,86E-1	1,24E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Bitumen membrane, V 60	141.6	m2	3,09E2	1,25E0	1,03E-1	2,86E-8	1,86E-1	4,67E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	141.8	m3	3,25E4	5,16E1	8,11E0	1,13E-4	6,27E0	1,71E5	Floor slabs, ceilings, roofing	As building	Beton der Druckf
A1-A3	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	143.1	m3	8,44E3	2E1	2,29E0	1,86E-4	4,15E1	1,41E5	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	151.6	kg	7,83E2	4,13E0	3,99E-1	3,73E-5	2,8E-1	1,3E4	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Aluminium, sheet	151.9	kg	1,62E3	6,94E0	4,46E-1	6,87E-7	4,32E-1	2,87E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	153.3	m2	5,17E2	9,2E-1	9,25E-2	1,48E-8	2,33E-1	8,24E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	157.6	m2	5,32E2	9,45E-1	9,51E-2	1,52E-8	2,39E-1	8,47E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	185.7	kg	1,77E2	4,72E-1	5,65E-2	4,35E-8	1,09E-1	2,93E3	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A1-A3	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	194.8	m2	2,52E3	4,71E0	5,24E-1	1,1E-7	4,09E-1	4,63E4	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	194.8	m2	6,57E2	1,17E0	1,18E-1	1,88E-8	2,96E-1	1,05E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	2,18E2	4,86E0	1,18E0	2,88E-6	2,36E-1	1,11E4	Floor slabs, ceilings, roofing	15	EPD Marmoleum
A1-A3	Resin products for protection and repair of concrete compo	200.6	kg	8,37E2	2,85E0	1,92E-1	1,12E-7	8,65E-1	1,83E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 ((	203.7	kg	1,87E1	4,25E-1	1,1E-1	1,49E-5	7,1E-2	2,65E3	Floor slabs, ceilings, roofing	10	EPD
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	210.8	m2	6,32E2	3,58E0	5,27E-1	8,22E-5	2,11E-1	1,75E4	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A1-A3	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	214.3	kg	9,58E1	7,46E-2	3,11E-2	3,96E-6	4,54E-2	1,12E3	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	219	kg	2,09E2	5,56E-1	6,66E-2	5,12E-8	1,29E-1	3,46E3	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A1-A3	Aluminium, sheet	247.7	kg	2,65E3	1,13E1	7,27E-1	1,12E-6	7,04E-1	4,69E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	256.8	kg	4,01E1	5,57E-2	1,03E-2	3,34E-9	3,26E-3	2,95E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	267.5	kg	1,38E3	7,28E0	7,04E-1	6,58E-5	4,95E-1	2,3E4	Floor slabs, ceilings, roofing As building		One Click LCA
A1-A3	Reinforcement steel	276.3	kg	2,07E2	4,93E-1	4,91E-2	1,37E-8	4,81E-2	3,48E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	279.4	kg	1,44E3	7,61E0	7,36E-1	6,87E-5	5,17E-1	2,4E4	Floor slabs, ceilings, roofing As building		One Click LCA
A1-A3	Stoneware tiles, glazed	296.8	kg	9,5E1	1,62E-1	1,9E-2	1,86E-9	1,02E-2	1,59E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	323.2	kg	3,09E2	8,21E-1	9,83E-2	7,56E-8	1,9E-1	5,1E3	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A1-A3	Reinforcement steel	336.6	kg	2,52E2	6,01E-1	5,99E-2	1,67E-8	5,86E-2	4,24E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Waterproofing roof membrane, EPDM	339.6	kg	1,51E3	2,08E0	2,43E-1	2,97E-8	3,36E-1	2,78E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Resin products for protection and repair of concrete compo	350.6	kg	1,46E3	4,98E0	3,36E-1	1,96E-7	1,51E0	3,2E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 2.5 kg/m2, Hyg	353.8	kg	3,2E2	1,79E0	2,26E-1	4,23E-5	1,13E-1	7,99E3	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A1-A3	Extruded polystyrene (XPS), m3	437	kg	1,32E3	2,83E0	2,89E-1	9,42E-8	1,27E0	1,89E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Reinforcement steel	462.5	kg	3,47E2	8,26E-1	8,23E-2	2,29E-8	8,06E-2	5,82E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Reinforcement steel	476	kg	3,57E2	8,5E-1	8,47E-2	2,36E-8	8,29E-2	5,99E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	530.2	m2	1,56E3	3,26E0	8,01E-1	1,02E-4	1,72E-1	3,39E4	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	556.4	m2	1,64E3	3,42E0	8,4E-1	1,07E-4	1,8E-1	3,56E4	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	564.9	kg	5,39E2	1,43E0	1,72E-1	1,32E-7	3,32E-1	8,91E3	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	582.1	m2	1,96E3	3,49E0	3,51E-1	5,6E-8	8,84E-1	3,13E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Reinforcement steel	588.2	kg	4,41E2	1,05E0	1,05E-1	2,91E-8	1,02E-1	7,41E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	624.2	kg	5,35E2	3,03E0	4,46E-1	6,96E-5	1,78E-1	1,48E4	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	658.6	kg	3,4E3	1,79E1	1,73E0	1,62E-4	1,22E0	5,65E4	Floor slabs, ceilings, roofing As building		One Click LCA
A1-A3	Thermoset resin insulation, glass tissue faced/backed, 5.0	658.7	kg	1,86E3	4,52E0	5,07E-1	1,47E-7	1,86E0	3,27E4	Floor slabs, ceilings, roofing As building		EPD Kooltherm I
A1-A3	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	713.5	kg	1,63E1	9,21E0	8,76E-1	9,06E-8	6,62E-1	2,43E4	Floor slabs, ceilings, roofing	40	EPD
A1-A3	Sealants for floor coatings and parquetes, DE avg., PU-ba	787.2	kg	3,42E3	1,22E1	1,75E0	2,57E-5	1,9E0	5,85E4	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	832.9	m2	2,81E3	5E0	5,02E-1	8,02E-8	1,27E0	4,47E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	8,83E3	1,59E1	2,19E0	5,17E-6	2,62E0	1,61E5	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	856.3	kg	2,39E2	6,83E-1	4,78E-1	1,96E0	1,87E-1	2,52E3	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	861	kg	4,13E2	4,98E-1	6,43E-2	5,85E-9	4,5E-2	2,9E3	Floor slabs, ceilings, roofing As building		EPD Unbewehrte
A1-A3	Mineral wool (flat roof insulation)	928.7	m3	1,99E5	1E3	1,25E2	4,19E-6	8,56E1	2,13E6	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	956.3	kg	2,67E2	7,62E-1	5,34E-1	2,19E0	2,09E-1	2,81E3	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	983.5	kg	2,74E2	7,84E-1	5,5E-1	2,26E0	2,15E-1	2,89E3	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	1023	kg	9,77E2	2,6E0	3,11E-1	2,39E-7	6,02E-1	1,61E4	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	1038.7	kg	1,62E2	2,25E-1	4,15E-2	1,35E-8	1,32E-2	1,19E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	1108.3	kg	5,72E3	3,02E1	2,92E0	2,73E-4	2,05E0	9,51E4	Floor slabs, ceilings, roofing As building		One Click LCA
A1-A3	Aluminium, anodised	1112.2	kg	7,43E3	1,31E1	2,45E0	4,82E-7	1,11E0	1,3E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	1131.5	kg	1,77E2	2,46E-1	4,53E-2	1,47E-8	1,44E-2	1,3E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	1174.5	kg	1,83E2	2,55E-1	4,7E-2	1,53E-8	1,49E-2	1,35E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	1195.4	m2	2,58E2	1,46E2	1,39E1	1,43E-6	1,05E1	3,85E5	Floor slabs, ceilings, roofing	40	EPD
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	1215.4	kg	3,39E2	9,69E-1	6,79E-1	2,79E0	2,66E-1	3,57E3	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Floor screed mortar, cement screed (IWM)	1460.3	kg	2,28E2	3,17E-1	5,84E-2	1,9E-8	1,85E-2	1,68E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Reinforcement steel	1758	kg	1,32E3	3,14E0	3,13E-1	8,7E-8	3,06E-1	2,21E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Bitumen membrane, V 60	1789.6	m2	3,9E3	1,58E1	1,3E0	3,61E-7	2,35E0	5,9E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	2170.6	kg	3,39E2	4,71E-1	8,68E-2	2,82E-8	2,76E-2	2,49E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Mineral wool (facade insulation)	2277	kg	3,57E3	1,68E1	2,32E0	8,32E-8	1,3E0	4,54E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Concrete wall blocks	2562	kg	3,36E2	5,89E-1	9,54E-2	5,33E-9	2,42E-2	1,89E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Thin sheet, steel, (0.3-3.0 mm)	2826	kg	6,11E3	2,27E1	2E0	4,54E-8	3,27E0	7,27E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A1-A3	Extruded polystyrene (XPS), m3	3211.9	kg	9,73E3	2,08E1	2,13E0	6,93E-7	9,3E0	1,39E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Waterproofing fleece, PE-HD with PP	3578.2	m2	1,21E4	2,15E1	2,16E0	3,44E-7	5,43E0	1,92E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	3632.5	kg	1,01E3	2,9E0	2,03E0	8,33E0	7,95E-1	1,07E4	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
A1-A3	Reinforcement steel	3886.1	kg	2,91E3	6,94E0	6,91E-1	1,92E-7	6,77E-1	4,89E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	4319.3	kg	6,74E2	9,37E-1	1,73E-1	5,62E-8	5,49E-2	4,96E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	5172.2	kg	4,43E3	2,51E1	3,69E0	5,76E-4	1,48E0	1,23E5	Floor slabs, ceilings, roofing As building		EPD for Ecophor

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Lightweight boncrete block with EPS-insulation core, ceme	5197.3	kg	1,45E3	4,14E0	2,9E0	1,19E1	1,14E0	1,53E4	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A1-A3	Bitumen membrane, V 60	5572.5	m2	1,21E4	4,91E1	4,04E0	1,12E-6	7,32E0	1,84E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	6271.9	kg	3,24E4	1,71E2	1,65E1	1,54E-3	1,16E1	5,38E5	Floor slabs, ceilings, roofing	As building	One Click LCA
A1-A3	Extruded polystyrene (XPS), m3	6504	kg	1,97E4	4,21E1	4,3E0	1,4E-6	1,88E1	2,81E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Reinforcement steel	6778	kg	5,08E3	1,21E1	1,21E0	3,36E-7	1,18E0	8,54E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Extruded polystyrene (XPS), m3	7158.9	kg	2,17E4	4,63E1	4,74E0	1,54E-6	2,07E1	3,09E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Prestressed concrete hollow deck, 200 mm, 272 kg/m3 (C	7937	m2	3,44E5	8,57E2	1,15E2	1,83E-2	4,29E1	3,2E6	Floor slabs, ceilings, roofing	100	FDES
A1-A3	Reinforcement steel	10806	kg	8,1E3	1,93E1	1,92E0	5,35E-7	1,88E0	1,36E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	11886	kg	5,71E3	6,88E0	8,87E-1	8,08E-8	6,21E-1	4E4	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A1-A3	Floor screed mortar, cement screed (IWM)	13904.9	kg	2,17E3	3,02E0	5,56E-1	1,81E-7	1,77E-1	1,6E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	14634.4	kg	1,25E4	7,11E1	1,05E1	1,63E-3	4,18E0	3,47E5	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
A1-A3	Floor screed mortar, cement screed (IWM)	17931.3	kg	2,8E3	3,89E0	7,17E-1	2,33E-7	2,28E-1	2,06E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	23295.5	kg	3,63E3	5,06E0	9,32E-1	3,03E-7	2,96E-1	2,68E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	25455.7	kg	3,97E3	5,52E0	1,02E0	3,31E-7	3,23E-1	2,93E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	26471.8	kg	4,13E3	5,74E0	1,06E0	3,44E-7	3,36E-1	3,04E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	27756.1	kg	4,33E3	6,02E0	1,11E0	3,61E-7	3,53E-1	3,19E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	27909.6	kg	6,38E2	3,6E2	3,43E1	3,54E-6	2,59E1	9,51E5	Floor slabs, ceilings, roofing	40	EPD
A1-A3	Aerated concrete P2 04, unreinforced	35966.8	kg	1,8E4	2,19E1	2,87E0	4,27E-7	1,41E0	1,34E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	94014	kg	1,47E4	2,04E1	3,76E0	1,22E-6	1,19E0	1,08E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Floor screed mortar, cement screed (IWM)	134513.4	kg	2,1E4	2,92E1	5,38E0	1,75E-6	1,71E0	1,55E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A1-A3	Structural steel sections (piles, beams, columns, joists), S	190900	kg	2,69E5	7,64E2	8,4E1	1,91E-2	1,32E2	3,55E6	Floor slabs, ceilings, roofing	100	FDES
A1-A3	Floor screed mortar, cement screed (IWM)	679850.4	kg	1,06E5	1,48E2	2,72E1	8,84E-6	8,63E0	7,81E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	0.4	m3	1,15E-1	5,29E-4	1,15E-4	2,27E-8	6,48E-6	3,27E0	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A4	Mineral wool (flat roof insulation)	1.3	m2	1,08E-1	4,99E-4	1,09E-4	2,14E-8	6,1E-6	3,08E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Ready-mix concrete, low-strength, generic, C12/15 (1700/	1.7	m3	1,46E2	2,13E-1	4,35E-2	2,46E-5	2,19E-2	2,22E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Waterproofing fleece, PE-HD with PP	2.2	m2	3,29E-2	1,51E-4	3,3E-5	6,49E-9	1,85E-6	9,35E-1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	3.5	kg	4,02E-2	1,85E-4	4,03E-5	7,94E-9	2,27E-6	1,14E0	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	4.7	m3	2,02E1	9,32E-2	2,03E-2	4E-6	1,14E-3	5,76E2	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	5.4	m3	5,05E2	7,39E-1	1,51E-1	8,51E-5	7,58E-2	7,7E3	Floor slabs, ceilings, roofing	As building	Beton der Druckf
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	6.3	kg	1,75E-1	7,1E-4	1,52E-4	3,38E-8	1,46E-5	4,89E0	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A4	Reinforcement steel	6.6	kg	7,58E-2	3,49E-4	7,61E-5	1,5E-8	4,28E-6	2,16E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Natural stone tiles, hard, interior floors	8.2	m2	4,71E0	2,17E-2	4,73E-3	9,3E-7	2,66E-4	1,34E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	9.5	m2	1,42E-1	6,53E-4	1,42E-4	2,8E-8	8E-6	4,04E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	4,75E-1	2,19E-3	4,76E-4	9,38E-8	2,68E-5	1,35E1	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A4	Vapour retarder Polyamid (PA)	9.6	m2	8,82E-3	4,06E-5	8,85E-6	1,74E-9	4,97E-7	2,51E-1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Thermoset resin insulation, glass tissue faced/backed, 5.0	10.6	m3	4,26E0	1,96E-2	4,28E-3	8,42E-7	2,4E-4	1,21E2	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
A4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	5,4E-1	2,49E-3	5,41E-4	1,07E-7	3,04E-5	1,54E1	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A4	Waterproofing roof membrane, EPDM	12.3	m2	2,83E-1	1,3E-3	2,84E-4	5,58E-8	1,59E-5	8,04E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	13.6	kg	1,56E-1	7,2E-4	1,57E-4	3,09E-8	8,81E-6	4,45E0	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Waterproofing fleece, PE-HD with PP	16.3	m2	2,43E-1	1,12E-3	2,44E-4	4,81E-8	1,37E-5	6,93E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	17	m3	4,88E0	2,25E-2	4,9E-3	9,64E-7	2,75E-4	1,39E2	Floor slabs, ceilings, roofing	As building	Expanded Polyst
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	17.2	kg	1,96E-1	9,1E-4	1,98E-4	3,9E-8	1,11E-5	5,62E0	Floor slabs, ceilings, roofing	As building	EPD for Keraflex
A4	Sealants for floor coatings and parquetes, DE avg., PU-ba	20.1	kg	5,59E-1	2,26E-3	4,86E-4	1,08E-7	4,67E-5	1,56E1	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	1,19E0	5,48E-3	1,19E-3	2,35E-7	6,71E-5	3,39E1	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
A4	Thermoset resin insulation, glass tissue faced/backed, 5.0	25.1	kg	2,88E-1	1,33E-3	2,89E-4	5,7E-8	1,63E-5	8,21E0	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
A4	Resin products for protection and repair of concrete compo	28.1	kg	7,82E-1	3,17E-3	6,8E-4	1,51E-7	6,53E-5	2,18E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Reinforcement steel	28.7	kg	3,3E-1	1,52E-3	3,31E-4	6,51E-8	1,86E-5	9,38E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Sealants for floor coatings and parquetes, DE avg., PU-ba	33.7	kg	9,38E-1	3,8E-3	8,15E-4	1,81E-7	7,83E-5	2,62E1	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	36.1	kg	4,15E-1	1,91E-3	4,16E-4	8,19E-8	2,34E-5	1,18E1	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Waterproofing roof membrane, EPDM	43.2	m2	9,93E-1	4,57E-3	9,96E-4	1,96E-7	5,6E-5	2,83E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	43.8	kg	5,03E-1	2,32E-3	5,05E-4	9,94E-8	2,84E-5	1,43E1	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	45.3	kg	1,26E0	5,1E-3	1,1E-3	2,43E-7	1,05E-4	3,52E1	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A4	Reinforcement steel	49.3	kg	5,66E-1	2,61E-3	5,68E-4	1,12E-7	3,19E-5	1,61E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	6,23E-1	2,87E-3	6,25E-4	1,23E-7	3,51E-5	1,77E1	Floor slabs, ceilings, roofing	15	EPD Marmoleum
A4	Adhesives for parquetes and floor coverings, DE avg., PU	55.2	kg	1,54E0	6,22E-3	1,34E-3	2,96E-7	1,28E-4	4,29E1	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	59.3	kg	6,81E-1	3,14E-3	6,83E-4	1,35E-7	3,84E-5	1,94E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Mineral wool (interior insulation)	59.5	m3	1,79E1	8,26E-2	1,8E-2	3,54E-6	1,01E-3	5,11E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	73.4	kg	2,04E0	8,27E-3	1,78E-3	3,94E-7	1,71E-4	5,7E1	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	75.5	m2	1,62E1	7,45E-2	1,62E-2	3,2E-6	9,12E-4	4,6E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	81.3	m3	7,61E3	1,11E1	2,27E0	1,28E-3	1,14E0	1,16E5	Floor slabs, ceilings, roofing As building		Beton der Druckf
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	83.1	kg	9,55E-1	4,4E-3	9,58E-4	1,89E-7	5,38E-5	2,72E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A4	Concrete wall blocks	87.2	kg	1E0	4,61E-3	1E-3	1,98E-7	5,65E-5	2,85E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	91.5	m2	1,37E0	6,29E-3	1,37E-3	2,7E-7	7,7E-5	3,89E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Bitumen membrane, V 60	94.4	m2	5,42E0	2,5E-2	5,44E-3	1,07E-6	3,06E-4	1,54E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Aluminium, sheet	98.9	kg	1,14E0	5,23E-3	1,14E-3	2,24E-7	6,41E-5	3,23E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	101.8	kg	1,17E0	5,39E-3	1,17E-3	2,31E-7	6,59E-5	3,33E1	Floor slabs, ceilings, roofing As building		EPD Blokk Exak
A4	Floor screed mortar, cement screed (IWM)	102.1	kg	1,17E0	5,4E-3	1,18E-3	2,32E-7	6,61E-5	3,34E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	102.5	kg	1,18E0	5,42E-3	1,18E-3	2,33E-7	6,64E-5	3,35E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A4	Aluminium, anodised	107.4	kg	1,23E0	5,68E-3	1,24E-3	2,44E-7	6,96E-5	3,51E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	111.5	m2	2,39E1	1,1E-1	2,4E-2	4,72E-6	1,35E-3	6,8E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A4	Aluminium, sheet	111.8	kg	1,28E0	5,92E-3	1,29E-3	2,54E-7	7,24E-5	3,66E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Natural stone tiles, hard, interior floors	113.7	m2	6,53E1	3,01E-1	6,55E-2	1,29E-5	3,68E-3	1,86E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	122.6	kg	1,41E0	6,49E-3	1,41E-3	2,78E-7	7,94E-5	4,01E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A4	Resin products for protection and repair of concrete compo	135.9	kg	3,78E0	1,53E-2	3,29E-3	7,29E-7	3,16E-4	1,06E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Bitumen membrane, V 60	141.6	m2	8,13E0	3,75E-2	8,16E-3	1,61E-6	4,59E-4	2,32E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	141.8	m3	1,33E4	1,94E1	3,96E0	2,24E-3	1,99E0	2,02E5	Floor slabs, ceilings, roofing As building		Beton der Druckf
A4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	143.1	m3	4,11E1	1,89E-1	4,12E-2	8,12E-6	2,32E-3	1,17E3	Floor slabs, ceilings, roofing As building		Expanded Polyst
A4	Structural hollow steel sections (HSS), cold rolled, generic	151.6	kg	1,74E0	8,02E-3	1,75E-3	3,44E-7	9,82E-5	4,96E1	Floor slabs, ceilings, roofing As building		One Click LCA
A4	Aluminium, sheet	151.9	kg	1,74E0	8,04E-3	1,75E-3	3,45E-7	9,84E-5	4,97E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	153.3	m2	2,29E0	1,05E-2	2,3E-3	4,52E-7	1,29E-4	6,52E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	157.6	m2	2,35E0	1,08E-2	2,36E-3	4,65E-7	1,33E-4	6,7E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	185.7	kg	5,17E0	2,09E-2	4,49E-3	9,96E-7	4,32E-4	1,44E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	194.8	m2	4,17E1	1,92E-1	4,19E-2	8,24E-6	2,35E-3	1,19E3	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	194.8	m2	2,91E0	1,34E-2	2,92E-3	5,75E-7	1,64E-4	8,28E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	2,3E0	1,06E-2	2,31E-3	4,54E-7	1,3E-4	6,55E1	Floor slabs, ceilings, roofing	15	EPD Marmoleum
A4	Resin products for protection and repair of concrete compo	200.6	kg	5,58E0	2,26E-2	4,85E-3	1,08E-6	4,66E-4	1,56E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 (t	203.7	kg	5,67E0	2,29E-2	4,93E-3	1,09E-6	4,73E-4	1,58E2	Floor slabs, ceilings, roofing	10	EPD
A4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	210.8	m2	8,48E0	3,9E-2	8,5E-3	1,67E-6	4,78E-4	2,41E2	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	214.3	kg	2,46E0	1,13E-2	2,47E-3	4,86E-7	1,39E-4	7,01E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	219	kg	6,09E0	2,47E-2	5,3E-3	1,17E-6	5,09E-4	1,7E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A4	Aluminium, sheet	247.7	kg	2,85E0	1,31E-2	2,85E-3	5,62E-7	1,6E-4	8,1E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	256.8	kg	2,95E0	1,36E-2	2,96E-3	5,83E-7	1,66E-4	8,4E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	267.5	kg	3,07E0	1,42E-2	3,08E-3	6,07E-7	1,73E-4	8,75E1	Floor slabs, ceilings, roofing As building		One Click LCA
A4	Reinforcement steel	276.3	kg	3,17E0	1,46E-2	3,18E-3	6,27E-7	1,79E-4	9,04E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	279.4	kg	3,21E0	1,48E-2	3,22E-3	6,34E-7	1,81E-4	9,14E1	Floor slabs, ceilings, roofing As building		One Click LCA
A4	Stoneware tiles, glazed	296.8	kg	3,41E0	1,57E-2	3,42E-3	6,73E-7	1,92E-4	9,71E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	323.2	kg	8,99E0	3,64E-2	7,82E-3	1,73E-6	7,51E-4	2,51E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A4	Reinforcement steel	336.6	kg	3,87E0	1,78E-2	3,88E-3	7,64E-7	2,18E-4	1,1E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Waterproofing roof membrane, EPDM	339.6	kg	3,9E0	1,8E-2	3,91E-3	7,71E-7	2,2E-4	1,11E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Resin products for protection and repair of concrete compo	350.6	kg	9,76E0	3,95E-2	8,48E-3	1,88E-6	8,15E-4	2,72E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Glass wool, acoustic ceiling panel, 20 mm, 2.5 kg/m2, Hyg	353.8	kg	2,84E0	1,31E-2	2,84E-3	5,6E-7	1,6E-4	8,07E1	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A4	Extruded polystyrene (XPS), m3	437	kg	5,02E0	2,31E-2	5,04E-3	9,92E-7	2,83E-4	1,43E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Reinforcement steel	462.5	kg	5,31E0	2,45E-2	5,33E-3	1,05E-6	3E-4	1,51E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Reinforcement steel	476	kg	5,47E0	2,52E-2	5,49E-3	1,08E-6	3,08E-4	1,56E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	530.2	m2	6,82E1	3,14E-1	6,84E-2	1,35E-5	3,85E-3	1,94E3	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	556.4	m2	7,16E1	3,3E-1	7,18E-2	1,41E-5	4,04E-3	2,04E3	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	564.9	kg	1,57E1	6,36E-2	1,37E-2	3,03E-6	1,31E-3	4,39E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	582.1	m2	8,69E0	4E-2	8,72E-3	1,72E-6	4,9E-4	2,47E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Reinforcement steel	588.2	kg	6,76E0	3,11E-2	6,78E-3	1,33E-6	3,81E-4	1,92E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	624.2	kg	7,17E0	3,3E-2	7,19E-3	1,42E-6	4,04E-4	2,04E2	Floor slabs, ceilings, roofing As building		EPD for Ecophor
A4	Structural hollow steel sections (HSS), cold rolled, generic	658.6	kg	7,57E0	3,48E-2	7,59E-3	1,49E-6	4,27E-4	2,15E2	Floor slabs, ceilings, roofing As building		One Click LCA
A4	Thermoset resin insulation, glass tissue faced/backed, 5.0	658.7	kg	7,57E0	3,49E-2	7,59E-3	1,49E-6	4,27E-4	2,15E2	Floor slabs, ceilings, roofing As building		EPD Kooltherm I
A4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	713.5	kg	8,26E0	3,8E-2	8,28E-3	1,63E-6	4,66E-4	2,35E2	Floor slabs, ceilings, roofing	40	EPD
A4	Sealants for floor coatings and parquetes, DE avg., PU-ba	787.2	kg	2,19E1	8,87E-2	1,9E-2	4,22E-6	1,83E-3	6,11E2	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	832.9	m2	1,24E1	5,73E-2	1,25E-2	2,46E-6	7,01E-4	3,54E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	4,16E1	1,92E-1	4,18E-2	8,22E-6	2,35E-3	1,18E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Lightweight boncrete block with EPS-insulation core, ceme	856.3	kg	9,84E0	4,53E-2	9,87E-3	1,94E-6	5,55E-4	2,8E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	861	kg	9,89E0	4,56E-2	9,92E-3	1,95E-6	5,58E-4	2,82E2	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A4	Mineral wool (flat roof insulation)	928.7	m3	1,55E3	7,12E0	1,55E0	3,06E-4	8,72E-2	4,4E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	956.3	kg	1,1E1	5,06E-2	1,1E-2	2,17E-6	6,19E-4	3,13E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Lightweight boncrete block with EPS-insulation core, ceme	983.5	kg	1,13E1	5,2E-2	1,13E-2	2,23E-6	6,37E-4	3,22E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	1023	kg	2,85E1	1,15E-1	2,47E-2	5,49E-6	2,38E-3	7,95E2	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	1038.7	kg	1,19E1	5,5E-2	1,2E-2	2,36E-6	6,73E-4	3,4E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	1108.3	kg	1,27E1	5,86E-2	1,28E-2	2,51E-6	7,18E-4	3,62E2	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Aluminium, anodised	1112.2	kg	1,28E1	5,88E-2	1,28E-2	2,52E-6	7,2E-4	3,64E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	1131.5	kg	1,3E1	5,99E-2	1,3E-2	2,57E-6	7,33E-4	3,7E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	1174.5	kg	1,35E1	6,21E-2	1,35E-2	2,67E-6	7,61E-4	3,84E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	1195.4	m2	1,31E2	6,02E-1	1,31E-1	2,58E-5	7,37E-3	3,72E3	Floor slabs, ceilings, roofing	40	EPD
A4	Lightweight boncrete block with EPS-insulation core, ceme	1215.4	kg	1,4E1	6,43E-2	1,4E-2	2,76E-6	7,87E-4	3,97E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Floor screed mortar, cement screed (IWM)	1460.3	kg	1,68E1	7,73E-2	1,68E-2	3,31E-6	9,46E-4	4,78E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Reinforcement steel	1758	kg	2,02E1	9,3E-2	2,03E-2	3,99E-6	1,14E-3	5,75E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Bitumen membrane, V 60	1789.6	m2	1,03E2	4,73E-1	1,03E-1	2,03E-5	5,8E-3	2,93E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	2170.6	kg	2,49E1	1,15E-1	2,5E-2	4,93E-6	1,41E-3	7,1E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Mineral wool (facade insulation)	2277	kg	2,62E1	1,2E-1	2,62E-2	5,17E-6	1,47E-3	7,45E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Concrete wall blocks	2562	kg	2,94E1	1,36E-1	2,95E-2	5,81E-6	1,66E-3	8,38E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Thin sheet, steel, (0.3-3.0 mm)	2826	kg	3,25E1	1,5E-1	3,26E-2	6,41E-6	1,83E-3	9,24E2	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
A4	Extruded polystyrene (XPS), m3	3211.9	kg	3,69E1	1,7E-1	3,7E-2	7,29E-6	2,08E-3	1,05E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Waterproofing fleece, PE-HD with PP	3578.2	m2	5,34E1	2,46E-1	5,36E-2	1,06E-5	3,01E-3	1,52E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Lightweight boncrete block with EPS-insulation core, ceme	3632.5	kg	4,17E1	1,92E-1	4,19E-2	8,24E-6	2,35E-3	1,19E3	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Reinforcement steel	3886.1	kg	4,46E1	2,06E-1	4,48E-2	8,82E-6	2,52E-3	1,27E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	4319.3	kg	4,96E1	2,29E-1	4,98E-2	9,8E-6	2,8E-3	1,41E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	5172.2	kg	5,94E1	2,74E-1	5,96E-2	1,17E-5	3,35E-3	1,69E3	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
A4	Lightweight boncrete block with EPS-insulation core, ceme	5197.3	kg	5,97E1	2,75E-1	5,99E-2	1,18E-5	3,37E-3	1,7E3	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
A4	Bitumen membrane, V 60	5572.5	m2	3,2E2	1,47E0	3,21E-1	6,32E-5	1,8E-2	9,11E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	6271.9	kg	7,21E1	3,32E-1	7,23E-2	1,42E-5	4,06E-3	2,05E3	Floor slabs, ceilings, roofing	As building	One Click LCA
A4	Extruded polystyrene (XPS), m3	6504	kg	7,47E1	3,44E-1	7,5E-2	1,48E-5	4,21E-3	2,13E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Reinforcement steel	6778	kg	7,79E1	3,59E-1	7,81E-2	1,54E-5	4,39E-3	2,22E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Extruded polystyrene (XPS), m3	7158.9	kg	8,22E1	3,79E-1	8,25E-2	1,62E-5	4,64E-3	2,34E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Prestressed concrete hollow deck, 200 mm, 272 kg/m3 (C	7937	m2	2,48E4	1,14E2	2,49E1	4,9E-3	1,4E0	7,06E5	Floor slabs, ceilings, roofing	100	FDES
A4	Reinforcement steel	10806	kg	1,24E2	5,72E-1	1,25E-1	2,45E-5	7E-3	3,53E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	11886	kg	1,37E2	6,29E-1	1,37E-1	2,7E-5	7,7E-3	3,89E3	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
A4	Floor screed mortar, cement screed (IWM)	13904.9	kg	1,6E2	7,36E-1	1,6E-1	3,16E-5	9,01E-3	4,55E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	14634.4	kg	1,68E2	7,74E-1	1,69E-1	3,32E-5	9,48E-3	4,79E3	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
A4	Floor screed mortar, cement screed (IWM)	17931.3	kg	2,06E2	9,49E-1	2,07E-1	4,07E-5	1,16E-2	5,86E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	23295.5	kg	2,68E2	1,23E0	2,68E-1	5,29E-5	1,51E-2	7,62E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	25455.7	kg	2,92E2	1,35E0	2,93E-1	5,78E-5	1,65E-2	8,32E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	26471.8	kg	3,04E2	1,4E0	3,05E-1	6,01E-5	1,71E-2	8,66E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	27756.1	kg	3,19E2	1,47E0	3,2E-1	6,3E-5	1,8E-2	9,08E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	27909.6	kg	3,23E2	1,49E0	3,24E-1	6,38E-5	1,82E-2	9,19E3	Floor slabs, ceilings, roofing	40	EPD
A4	Aerated concrete P2 04, unreinforced	35966.8	kg	4,13E2	1,9E0	4,15E-1	8,16E-5	2,33E-2	1,18E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	94014	kg	1,08E3	4,97E0	1,08E0	2,13E-4	6,09E-2	3,07E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Floor screed mortar, cement screed (IWM)	134513.4	kg	1,55E3	7,12E0	1,55E0	3,05E-4	8,71E-2	4,4E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
A4	Structural steel sections (piles, beams, columns, joists), S	190900	kg	2,19E3	1,01E1	2,2E0	4,33E-4	1,24E-1	6,24E4	Floor slabs, ceilings, roofing	100	FDES
A4	Floor screed mortar, cement screed (IWM)	679850.4	kg	7,81E3	3,6E1	7,84E0	1,54E-3	4,4E-1	2,22E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	2.2	m2	1,48E1	2,64E-2	2,65E-3	4,24E-10	6,68E-3	2,36E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	9.5	m2	6,41E1	1,14E-1	1,15E-2	1,83E-9	2,89E-2	1,02E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	4,03E2	7,26E-1	9,99E-2	2,36E-7	1,19E-1	7,36E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
B1-B5	Vapour retarder Polyamid (PA)	9.6	m2	1,66E1	1,55E-1	3,77E-3	3,56E-10	9,28E-3	2,51E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	4,58E2	8,25E-1	1,14E-1	2,68E-7	1,36E-1	8,36E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
B1-B5	Waterproofing roof membrane, EPDM	12.3	m2	2,19E2	3,02E-1	3,52E-2	4,31E-9	4,87E-2	4,03E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	16.3	m2	1,1E2	1,96E-1	1,97E-2	3,14E-9	4,95E-2	1,75E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Sealants for floor coatings and parquetes, DE avg., PU-ba	20.1	kg	2,62E2	9,35E-1	1,34E-1	1,97E-6	1,45E-1	4,48E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
B1-B5	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	1,01E3	1,82E0	2,5E-1	5,91E-7	2,99E-1	1,84E4	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
B1-B5	Resin products for protection and repair of concrete comp	28.1	kg	2,34E2	7,98E-1	5,39E-2	3,14E-8	2,42E-1	5,12E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
B1-B5	Sealants for floor coatings and parquetes, DE avg., PU-ba	33.7	kg	4,39E2	1,57E0	2,24E-1	3,3E-6	2,44E-1	7,52E3	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
B1-B5	Waterproofing roof membrane, EPDM	43.2	m2	7,7E2	1,06E0	1,24E-1	1,51E-8	1,71E-1	1,41E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	1,77E2	3,95E0	9,54E-1	2,34E-6	1,92E-1	9,01E3	Floor slabs, ceilings, roofing	15	EPD Marmoleum
B1-B5	Adhesives for parquetes and floor coverings, DE avg., PU	55.2	kg	7,72E2	2,37E0	4,42E-1	5,63E-6	4,14E-1	1,2E4	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	91.5	m2	6,17E2	1,1E0	1,1E-1	1,76E-8	2,78E-1	9,83E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Bitumen membrane, V 60	94.4	m2	4,11E2	1,66E0	1,37E-1	3,81E-8	2,48E-1	6,23E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Aluminium, sheet	98.9	kg	1,06E3	4,52E0	2,9E-1	4,47E-7	2,81E-1	1,87E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Aluminium, sheet	111.8	kg	1,19E3	5,11E0	3,28E-1	5,06E-7	3,18E-1	2,12E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Resin products for protection and repair of concrete compo	135.9	kg	1,13E3	3,86E0	2,61E-1	1,52E-7	1,17E0	2,48E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Bitumen membrane, V 60	141.6	m2	6,17E2	2,5E0	2,05E-1	5,71E-8	3,72E-1	9,34E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Aluminium, sheet	151.9	kg	1,62E3	6,94E0	4,46E-1	6,87E-7	4,32E-1	2,87E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	153.3	m2	1,03E3	1,84E0	1,85E-1	2,95E-8	4,66E-1	1,65E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	157.6	m2	1,06E3	1,89E0	1,9E-1	3,03E-8	4,79E-1	1,69E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	194.8	m2	1,31E3	2,34E0	2,35E-1	3,75E-8	5,92E-1	2,09E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	6,53E2	1,46E1	3,53E0	8,63E-6	7,09E-1	3,33E4	Floor slabs, ceilings, roofing	15	EPD Marmoleum
B1-B5	Resin products for protection and repair of concrete compo	200.6	kg	1,67E3	5,7E0	3,85E-1	2,24E-7	1,73E0	3,66E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 (I	203.7	kg	7,49E1	1,7E0	4,39E-1	5,97E-5	2,84E-1	1,06E4	Floor slabs, ceilings, roofing	10	EPD
B1-B5	Aluminium, sheet	247.7	kg	2,65E3	1,13E1	7,27E-1	1,12E-6	7,04E-1	4,69E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Waterproofing roof membrane, EPDM	339.6	kg	3,03E3	4,16E0	4,85E-1	5,95E-8	6,72E-1	5,56E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Resin products for protection and repair of concrete compo	350.6	kg	2,92E3	9,96E0	6,72E-1	3,92E-7	3,02E0	6,39E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	582.1	m2	3,93E3	6,98E0	7,02E-1	1,12E-7	1,77E0	6,25E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	713.5	kg	1,63E1	9,21E0	8,76E-1	9,06E-8	6,62E-1	2,43E4	Floor slabs, ceilings, roofing	40	EPD
B1-B5	Sealants for floor coatings and parquetes, DE avg., PU-ba	787.2	kg	1,02E4	3,66E1	5,24E0	7,7E-5	5,69E0	1,76E5	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	832.9	m2	5,62E3	9,99E0	1E0	1,6E-7	2,53E0	8,95E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	3,53E4	6,36E1	8,76E0	2,07E-5	1,05E1	6,45E5	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
B1-B5	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	1195.4	m2	2,58E2	1,46E2	1,39E1	1,43E-6	1,05E1	3,85E5	Floor slabs, ceilings, roofing	40	EPD
B1-B5	Bitumen membrane, V 60	1789.6	m2	7,8E3	3,15E1	2,6E0	7,22E-7	4,7E0	1,18E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Thin sheet, steel, (0.3-3.0 mm)	2826	kg	6,11E3	2,27E1	2E0	4,54E-8	3,27E0	7,27E4	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
B1-B5	Waterproofing fleece, PE-HD with PP	3578.2	m2	2,41E4	4,29E1	4,32E0	6,89E-7	1,09E1	3,84E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Bitumen membrane, V 60	5572.5	m2	2,43E4	9,82E1	8,09E0	2,25E-6	1,46E1	3,68E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
B1-B5	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	27909.6	kg	6,38E2	3,6E2	3,43E1	3,54E-6	2,59E1	9,51E5	Floor slabs, ceilings, roofing	40	EPD
C1-C4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	0.4	m3	4,36E-1	8,34E-4	4,14E-4	2,65E-8	1,17E-4	3,23E0	Floor slabs, ceilings, roofing As building		Expanded Polyst
C1-C4	Mineral wool (flat roof insulation)	1.3	m2	1,28E-1	7,89E-4	1,14E-4	1,97E-12	7,65E-5	1,9E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Ready-mix concrete, low-strength, generic, C12/15 (1700/	1.7	m3	4,15E1	1,34E-1	3,21E-2	7,72E-6	3,73E-3	1,02E3	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Waterproofing fleece, PE-HD with PP	2.2	m2	7,22E0	1,69E-3	1,41E-4	5,82E-13	7,74E-5	3,93E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	3.5	kg	9,55E-3	7,49E-5	1,55E-5	7,63E-15	7,4E-6	1,99E-1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	4.7	m3	4,81E0	3,77E-2	7,81E-3	3,84E-12	3,73E-3	1E2	Floor slabs, ceilings, roofing As building		EPD Unbewehrte
C1-C4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	5.4	m3	3,54E1	2,77E-1	5,74E-2	2,83E-11	2,74E-2	7,37E2	Floor slabs, ceilings, roofing As building		Beton der Druckf
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	6.3	kg	8,53E-2	5,27E-4	7,61E-5	1,32E-12	5,12E-5	1,27E0	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Reinforcement steel	6.6	kg	5,32E-3	3,15E-5	4,29E-6	5,02E-15	2,48E-6	7,96E-2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Natural stone tiles, hard, interior floors	8.2	m2	1,12E0	8,77E-3	1,82E-3	8,94E-13	8,67E-4	2,33E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	9.5	m2	3,12E1	7,3E-3	6,09E-4	2,51E-12	3,34E-4	1,7E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	1,13E-1	8,84E-4	1,83E-4	9,01E-14	8,74E-5	2,35E0	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
C1-C4	Vapour retarder Polyamid (PA)	9.6	m2	1,94E0	4,54E-4	3,79E-5	1,56E-13	2,08E-5	1,05E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Thermoset resin insulation, glass tissue faced/backed, 5.0	10.6	m3	9,37E2	2,19E-1	1,83E-2	7,55E-11	1E-2	5,1E2	Floor slabs, ceilings, roofing As building		EPD Kooltherm I
C1-C4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	1,28E-1	1,01E-3	2,08E-4	1,02E-13	9,94E-5	2,67E0	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
C1-C4	Waterproofing roof membrane, EPDM	12.3	m2	3,33E-1	2,06E-3	2,97E-4	5,14E-12	2E-4	4,97E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	13.6	kg	3,71E-2	2,91E-4	6,03E-5	2,97E-14	2,88E-5	7,74E-1	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
C1-C4	Waterproofing fleece, PE-HD with PP	16.3	m2	5,35E1	1,25E-2	1,04E-3	4,31E-12	5,73E-4	2,91E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	17	m3	1,85E1	3,55E-2	1,76E-2	1,13E-6	4,97E-3	1,37E2	Floor slabs, ceilings, roofing As building		Expanded Polyst
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	17.2	kg	4,69E-2	3,68E-4	7,62E-5	3,75E-14	3,64E-5	9,79E-1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Sealants for floor coatings and parquetes, DE avg., PU-ba	20.1	kg	2,72E-1	1,68E-3	2,43E-4	4,2E-12	1,63E-4	4,06E0	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
C1-C4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	2,83E-1	2,22E-3	4,59E-4	2,26E-13	2,19E-4	5,89E0	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
C1-C4	Thermoset resin insulation, glass tissue faced/backed, 5.0	25.1	kg	6,34E1	1,48E-2	1,24E-3	5,11E-12	6,79E-4	3,45E1	Floor slabs, ceilings, roofing As building		EPD Kooltherm I
C1-C4	Resin products for protection and repair of concrete compo	28.1	kg	3,8E-1	2,35E-3	3,39E-4	5,87E-12	2,28E-4	5,68E0	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Reinforcement steel	28.7	kg	2,32E-2	1,37E-4	1,87E-5	2,18E-14	1,08E-5	3,46E-1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Sealants for floor coatings and parquetes, DE avg., PU-ba	33.7	kg	4,56E-1	2,82E-3	4,07E-4	7,04E-12	2,74E-4	6,81E0	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	36.1	kg	2,8E-1	1,11E-3	2,31E-4	5,45E-8	3,75E-5	7,95E0	Floor slabs, ceilings, roofing As building		One Click LCA

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
C1-C4	Waterproofing roof membrane, EPDM	43.2	m2	1,17E0	7,23E-3	1,04E-3	1,8E-11	7,02E-4	1,75E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	43.8	kg	3,39E-1	1,35E-3	2,8E-4	6,61E-8	4,56E-5	9,65E0	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	45.3	kg	6,13E-1	3,79E-3	5,47E-4	9,46E-12	3,68E-4	9,15E0	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Reinforcement steel	49.3	kg	3,98E-2	2,35E-4	3,21E-5	3,75E-14	1,85E-5	5,95E-1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	6,8E0	9,23E-3	2,02E-3	3,22E-12	7,61E-4	2,45E1	Floor slabs, ceilings, roofing	15	EPD Marmoleum
C1-C4	Adhesives for parquetes and floor coverings, DE avg., PU	55.2	kg	7,47E-1	4,62E-3	6,67E-4	1,15E-11	4,48E-4	1,11E1	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	59.3	kg	1,62E-1	1,27E-3	2,63E-4	1,29E-13	1,25E-4	3,37E0	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
C1-C4	Mineral wool (interior insulation)	59.5	m3	2,11E1	1,31E-1	1,89E-2	3,26E-10	1,27E-2	3,15E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	73.4	kg	9,94E-1	6,14E-3	8,86E-4	1,53E-11	5,96E-4	1,48E1	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	75.5	m2	3,84E0	3,01E-2	6,24E-3	3,07E-12	2,98E-3	8,01E1	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
C1-C4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	81.3	m3	5,33E2	4,17E0	8,65E-1	4,25E-10	4,13E-1	1,11E4	Floor slabs, ceilings, roofing As building		Beton der Druckf
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	83.1	kg	2,27E-1	1,78E-3	3,68E-4	1,81E-13	1,76E-4	4,73E0	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Concrete wall blocks	87.2	kg	2,38E-1	1,87E-3	3,87E-4	1,9E-13	1,84E-4	4,96E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	91.5	m2	3E2	7,03E-2	5,87E-3	2,42E-11	3,22E-3	1,63E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Bitumen membrane, V 60	94.4	m2	6,39E0	3,95E-2	5,7E-3	9,86E-11	3,83E-3	9,53E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Aluminium, sheet	98.9	kg	7,98E-2	4,72E-4	6,43E-5	7,52E-14	3,71E-5	1,19E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	101.8	kg	2,78E-1	2,18E-3	4,51E-4	2,22E-13	2,15E-4	5,79E0	Floor slabs, ceilings, roofing As building		EPD Blokk Exakt
C1-C4	Floor screed mortar, cement screed (IWM)	102.1	kg	2,79E-1	2,18E-3	4,53E-4	2,23E-13	2,16E-4	5,81E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	102.5	kg	2,8E-1	2,19E-3	4,54E-4	2,23E-13	2,17E-4	5,83E0	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Aluminium, anodised	107.4	kg	8,67E-2	5,12E-4	6,98E-5	8,16E-14	4,03E-5	1,3E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	111.5	m2	5,68E0	4,45E-2	9,22E-3	4,53E-12	4,4E-3	1,18E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
C1-C4	Aluminium, sheet	111.8	kg	9,02E-2	5,33E-4	7,27E-5	8,5E-14	4,2E-5	1,35E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Natural stone tiles, hard, interior floors	113.7	m2	1,55E1	1,22E-1	2,52E-2	1,24E-11	1,2E-2	3,24E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	122.6	kg	3,35E-1	2,62E-3	5,43E-4	2,67E-13	2,59E-4	6,98E0	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Resin products for protection and repair of concrete comp	135.9	kg	1,84E0	1,14E-2	1,64E-3	2,84E-11	1,1E-3	2,75E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Bitumen membrane, V 60	141.6	m2	9,58E0	5,92E-2	8,55E-3	1,48E-10	5,75E-3	1,43E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	141.8	m3	9,29E2	7,28E0	1,51E0	7,42E-10	7,2E-1	1,94E4	Floor slabs, ceilings, roofing As building		Beton der Druckf
C1-C4	Insulation, EPS 150, 0.034 W/mK, 23-27 kg/m3 (150 kPa)	143.1	m3	1,56E2	2,98E-1	1,48E-1	9,48E-6	4,19E-2	1,16E3	Floor slabs, ceilings, roofing As building		Expanded Polyst
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	151.6	kg	1,17E0	4,67E-3	9,7E-4	2,29E-7	1,58E-4	3,34E1	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Aluminium, sheet	151.9	kg	1,23E-1	7,25E-4	9,88E-5	1,15E-13	5,7E-5	1,83E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	153.3	m2	5,03E2	1,18E-1	9,83E-3	4,05E-11	5,39E-3	2,74E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	157.6	m2	5,17E2	1,21E-1	1,01E-2	4,17E-11	5,54E-3	2,81E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	185.7	kg	2,51E0	1,55E-2	2,24E-3	3,88E-11	1,51E-3	3,75E1	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	194.8	m2	9,92E0	7,77E-2	1,61E-2	7,92E-12	7,68E-3	2,07E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	194.8	m2	6,4E2	1,5E-1	1,25E-2	5,15E-11	6,85E-3	3,48E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	2,51E1	3,41E-2	7,46E-3	1,19E-11	2,81E-3	9,07E1	Floor slabs, ceilings, roofing	15	EPD Marmoleum
C1-C4	Resin products for protection and repair of concrete comp	200.6	kg	2,72E0	1,68E-2	2,42E-3	4,19E-11	1,63E-3	4,05E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 ((	203.7	kg	5,56E-1	4,36E-3	9,03E-4	4,44E-13	4,31E-4	1,16E1	Floor slabs, ceilings, roofing	10	EPD
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	210.8	m2	2,01E0	1,58E-2	3,27E-3	1,61E-12	1,56E-3	4,2E1	Floor slabs, ceilings, roofing As building		EPD for Ecophor
C1-C4	Adhesive, cementitious, for tiles, 1300 kg/m3 (bulk), 1500	214.3	kg	5,85E-1	4,58E-3	9,5E-4	4,67E-13	4,53E-4	1,22E1	Floor slabs, ceilings, roofing As building		EPD for Keraflex
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	219	kg	2,96E0	1,83E-2	2,64E-3	4,57E-11	1,78E-3	4,42E1	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Aluminium, sheet	247.7	kg	2E-1	1,18E-3	1,61E-4	1,88E-13	9,3E-5	2,99E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	256.8	kg	7,01E-1	5,49E-3	1,14E-3	5,6E-13	5,43E-4	1,46E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	267.5	kg	2,07E0	8,24E-3	1,71E-3	4,04E-7	2,78E-4	5,89E1	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Reinforcement steel	276.3	kg	2,23E-1	1,32E-3	1,8E-4	2,1E-13	1,04E-4	3,33E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	279.4	kg	2,17E0	8,61E-3	1,79E-3	4,22E-7	2,91E-4	6,16E1	Floor slabs, ceilings, roofing As building		One Click LCA
C1-C4	Stoneware tiles, glazed	296.8	kg	8,1E-1	6,35E-3	1,32E-3	6,47E-13	6,28E-4	1,69E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	323.2	kg	4,38E0	2,7E-2	3,9E-3	6,75E-11	2,62E-3	6,53E1	Floor slabs, ceilings, roofing As building		Oekobau.dat 201
C1-C4	Reinforcement steel	336.6	kg	2,72E-1	1,61E-3	2,19E-4	2,56E-13	1,26E-4	4,06E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Waterproofing roof membrane, EPDM	339.6	kg	4,6E0	2,84E-2	4,1E-3	7,09E-11	2,76E-3	6,86E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Resin products for protection and repair of concrete comp	350.6	kg	4,75E0	2,93E-2	4,23E-3	7,32E-11	2,85E-3	7,08E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 2.5 kg/m2, Hyg	353.8	kg	6,74E-1	5,28E-3	1,09E-3	5,38E-13	5,22E-4	1,4E1	Floor slabs, ceilings, roofing As building		EPD for Ecophor
C1-C4	Extruded polystyrene (XPS), m3	437	kg	5,92E0	3,66E-2	5,28E-3	9,13E-11	3,55E-3	8,83E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Reinforcement steel	462.5	kg	3,73E-1	2,21E-3	3,01E-4	3,52E-13	1,74E-4	5,58E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Reinforcement steel	476	kg	3,84E-1	2,27E-3	3,09E-4	3,62E-13	1,79E-4	5,74E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	530.2	m2	8,04E1	4,97E-1	7,17E-2	1,24E-9	4,82E-2	1,2E3	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	556.4	m2	8,44E1	5,21E-1	7,53E-2	1,3E-9	5,06E-2	1,26E3	Floor slabs, ceilings, roofing As building		MD-16002-EN Si
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	564.9	kg	7,65E0	4,73E-2	6,82E-3	1,18E-10	4,59E-3	1,14E2	Floor slabs, ceilings, roofing As building		Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
C1-C4	Waterproofing fleece, PE-HD with PP	582.1	m2	1,91E3	4,47E-1	3,73E-2	1,54E-10	2,05E-2	1,04E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Reinforcement steel	588.2	kg	4,75E-1	2,81E-3	3,82E-4	4,47E-13	2,21E-4	7,1E0	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	624.2	kg	1,7E0	1,34E-2	2,77E-3	1,36E-12	1,32E-3	3,55E1	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	658.6	kg	5,1E0	2,03E-2	4,22E-3	9,94E-7	6,85E-4	1,45E2	Floor slabs, ceilings, roofing	As building	One Click LCA
C1-C4	Thermoset resin insulation, glass tissue faced/backed, 5.0	658.7	kg	1,66E3	3,89E-1	3,25E-2	1,34E-10	1,78E-2	9,05E2	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
C1-C4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	713.5	kg	1,96E0	1,54E-2	3,19E-3	1,57E-12	1,52E-3	4,09E1	Floor slabs, ceilings, roofing	40	EPD
C1-C4	Sealants for floor coatings and parquetes, DE avg., PU-ba	787.2	kg	1,07E1	6,59E-2	9,51E-3	1,64E-10	6,39E-3	1,59E2	Floor slabs, ceilings, roofing	15	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	832.9	m2	2,73E3	6,4E-1	5,34E-2	2,2E-10	2,93E-2	1,49E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	9,89E0	7,75E-2	1,61E-2	7,9E-12	7,66E-3	2,06E2	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	856.3	kg	2,34E0	1,83E-2	3,8E-3	1,87E-12	1,81E-3	4,67E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	861	kg	2,35E0	1,84E-2	3,82E-3	1,88E-12	1,82E-3	4,9E1	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
C1-C4	Mineral wool (flat roof insulation)	928.7	m3	1,82E3	1,13E1	1,63E0	2,81E-8	1,09E0	2,72E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	956.3	kg	2,61E0	2,05E-2	4,24E-3	2,08E-12	2,02E-3	5,44E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	983.5	kg	2,68E0	2,1E-2	4,36E-3	2,14E-12	2,08E-3	5,6E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Adhesive, for tiles, dispersive, DE avg., 1.000 -1.500 kg/m	1023	kg	1,38E1	8,56E-2	1,24E-2	2,14E-10	8,31E-3	2,07E2	Floor slabs, ceilings, roofing	As building	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	1038.7	kg	2,83E0	2,22E-2	4,6E-3	2,26E-12	2,2E-3	5,91E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	1108.3	kg	8,59E0	3,41E-2	7,09E-3	1,67E-6	1,15E-3	2,44E2	Floor slabs, ceilings, roofing	As building	One Click LCA
C1-C4	Aluminium, anodised	1112.2	kg	8,97E-1	5,31E-3	7,23E-4	8,45E-13	4,18E-4	1,34E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	1131.5	kg	3,09E0	2,42E-2	5,02E-3	2,47E-12	2,39E-3	6,44E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	1174.5	kg	3,21E0	2,51E-2	5,21E-3	2,56E-12	2,48E-3	6,68E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	1195.4	m2	3,11E1	2,43E-1	5,04E-2	2,48E-11	2,41E-2	6,48E2	Floor slabs, ceilings, roofing	40	EPD
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	1215.4	kg	3,32E0	2,6E-2	5,39E-3	2,65E-12	2,57E-3	6,92E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Floor screed mortar, cement screed (IWM)	1460.3	kg	3,99E0	3,12E-2	6,47E-3	3,18E-12	3,09E-3	8,31E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Reinforcement steel	1758	kg	1,42E0	8,39E-3	1,14E-3	1,34E-12	6,6E-4	2,12E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Bitumen membrane, V 60	1789.6	m2	1,21E2	7,49E-1	1,08E-1	1,87E-9	7,27E-2	1,81E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	2170.6	kg	5,92E0	4,64E-2	9,62E-3	4,73E-12	4,59E-3	1,24E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Mineral wool (facade insulation)	2277	kg	3,08E1	1,91E-1	2,75E-2	4,76E-10	1,85E-2	4,6E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Concrete wall blocks	2562	kg	6,99E0	5,48E-2	1,14E-2	5,59E-12	5,42E-3	1,46E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Thin sheet, steel, (0.3-3.0 mm)	2826	kg	2,28E0	1,35E-2	1,84E-3	2,15E-12	1,06E-3	3,41E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
C1-C4	Extruded polystyrene (XPS), m3	3211.9	kg	4,35E1	2,69E-1	3,88E-2	6,71E-10	2,61E-2	6,49E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Waterproofing fleece, PE-HD with PP	3578.2	m2	1,17E4	2,75E0	2,29E-1	9,46E-10	1,26E-1	6,39E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	3632.5	kg	9,91E0	7,77E-2	1,61E-2	7,92E-12	7,68E-3	2,07E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Reinforcement steel	3886.1	kg	3,14E0	1,85E-2	2,53E-3	2,95E-12	1,46E-3	4,69E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	4319.3	kg	1,18E1	9,24E-2	1,91E-2	9,42E-12	9,14E-3	2,46E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	5172.2	kg	1,41E1	1,11E-1	2,29E-2	1,13E-11	1,09E-2	2,94E2	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
C1-C4	Lightweight boncrete block with EPS-insulation core, ceme	5197.3	kg	1,42E1	1,11E-1	2,3E-2	1,13E-11	1,1E-2	2,96E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
C1-C4	Bitumen membrane, V 60	5572.5	m2	3,77E2	2,33E0	3,37E-1	5,82E-9	2,26E-1	5,63E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	6271.9	kg	4,86E1	1,93E-1	4,01E-2	9,47E-6	6,52E-3	1,38E3	Floor slabs, ceilings, roofing	As building	One Click LCA
C1-C4	Extruded polystyrene (XPS), m3	6504	kg	8,8E1	5,44E-1	7,86E-2	1,36E-9	5,28E-2	1,31E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Reinforcement steel	6778	kg	5,47E0	3,23E-2	4,41E-3	5,15E-12	2,54E-3	8,18E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Extruded polystyrene (XPS), m3	7158.9	kg	9,69E1	5,99E-1	8,65E-2	1,5E-9	5,81E-2	1,45E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Prestressed concrete hollow deck, 200 mm, 272 kg/m3 (C	7937	m2	5,89E3	4,62E1	9,57E0	4,71E-9	4,57E0	1,23E5	Floor slabs, ceilings, roofing	100	FDES
C1-C4	Reinforcement steel	10806	kg	8,72E0	5,16E-2	7,03E-3	8,21E-12	4,06E-3	1,3E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	11886	kg	3,24E1	2,54E-1	5,27E-2	2,59E-11	2,51E-2	6,76E2	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
C1-C4	Floor screed mortar, cement screed (IWM)	13904.9	kg	3,79E1	2,97E-1	6,16E-2	3,03E-11	2,94E-2	7,91E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Glass wool, acoustic ceiling panel, 20 mm, 3.0-4.0 kg/m2,	14634.4	kg	3,99E1	3,13E-1	6,49E-2	3,19E-11	3,1E-2	8,33E2	Floor slabs, ceilings, roofing	As building	EPD for Ecophor
C1-C4	Floor screed mortar, cement screed (IWM)	17931.3	kg	4,89E1	3,84E-1	7,95E-2	3,91E-11	3,79E-2	1,02E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	23295.5	kg	6,36E1	4,98E-1	1,03E-1	5,08E-11	4,93E-2	1,33E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	25455.7	kg	6,95E1	5,45E-1	1,13E-1	5,55E-11	5,38E-2	1,45E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	26471.8	kg	7,22E1	5,66E-1	1,17E-1	5,77E-11	5,6E-2	1,51E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	27756.1	kg	7,58E1	5,94E-1	1,23E-1	6,05E-11	5,87E-2	1,58E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	27909.6	kg	7,67E1	6,02E-1	1,25E-1	6,13E-11	5,95E-2	1,6E3	Floor slabs, ceilings, roofing	40	EPD
C1-C4	Aerated concrete P2 04, unreinforced	35966.8	kg	9,82E1	7,7E-1	1,59E-1	7,84E-11	7,61E-2	2,05E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	94014	kg	2,57E2	2,01E0	4,17E-1	2,05E-10	1,99E-1	5,35E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Floor screed mortar, cement screed (IWM)	134513.4	kg	3,67E2	2,88E0	5,96E-1	2,93E-10	2,85E-1	7,65E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
C1-C4	Structural steel sections (piles, beams, columns, joists), S	190900	kg	1,54E2	9,11E-1	1,24E-1	1,45E-10	7,25E-2	2,3E3	Floor slabs, ceilings, roofing	100	FDES
C1-C4	Floor screed mortar, cement screed (IWM)	679850.4	kg	1,86E3	1,45E1	3,01E0	1,48E-9	1,44E0	3,87E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Ready-mix concrete, low-strength, generic, C12/15 (1700/	1.7	m3	-4,22E-2	-8,79E-5	-3,03E-5	-1,05E-9	-5,13E-6	-2,16E-'	Floor slabs, ceilings, roofing	As building	One Click LCA

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
D	Waterproofing fleece, PE-HD with PP	2.2	m2	-4,45E0	-4,8E-3	-7,68E-4	-8,01E-12	-4,99E-4	-7,87E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	4.7	m3	-1,24E-1	-2,57E-4	-8,88E-5	-3,08E-9	-1,5E-5	-6,33E-'	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
D	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	5.4	m3	-1,42E-1	-2,95E-4	-1,02E-4	-3,54E-9	-1,73E-5	-7,28E-'	Floor slabs, ceilings, roofing	As building	Beton der Druckf
D	Natural stone tiles, hard, interior floors	8.2	m2	-2,07E-3	-3,41E-6	-6,47E-7	-6,14E-15	-1,49E-7	-3,77E-'	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	9.5	m2	-1,92E1	-2,07E-2	-3,31E-3	-3,46E-11	-2,16E-3	-3,4E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	9.5	m2	-6,43E1	-6,94E-2	-1,11E-2	-1,16E-10	-7,22E-3	-1,14E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
D	Vapour retarder Polyamid (PA)	9.6	m2	-1,2E0	-1,29E-3	-2,06E-4	-2,15E-12	-1,34E-4	-2,11E1	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Thermoset resin insulation, glass tissue faced/backed, 5.0	10.6	m3	-5,78E2	-6,23E-1	-9,96E-2	-1,04E-9	-6,48E-2	-1,02E4	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
D	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	10.8	m2	-7,31E1	-7,89E-2	-1,26E-2	-1,32E-10	-8,2E-3	-1,29E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
D	Lightweight boncrete block with EPS-insulation core, ceme	13.6	kg	-1,72E-1	-2,82E-4	-5,37E-5	-5,09E-13	-1,23E-5	-3,13E0	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Waterproofing fleece, PE-HD with PP	16.3	m2	-3,3E1	-3,56E-2	-5,69E-3	-5,94E-11	-3,7E-3	-5,83E2	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	23.8	m2	-1,61E2	-1,74E-1	-2,78E-2	-2,9E-10	-1,81E-2	-2,85E3	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
D	Thermoset resin insulation, glass tissue faced/backed, 5.0	25.1	kg	-3,91E1	-4,21E-2	-6,74E-3	-7,03E-11	-4,38E-3	-6,91E2	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
D	Structural hollow steel sections (HSS), cold rolled, generic	36.1	kg	-4,81E1	-2,07E-1	-6,93E-2	-2,42E-6	-3,59E-2	-5,31E2	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	43.8	kg	-5,83E1	-2,52E-1	-8,41E-2	-2,94E-6	-4,36E-2	-6,45E2	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	54.2	kg	-2,01E1	-2,13E-2	-3,41E-3	-3,49E-11	-2,25E-3	-3,53E2	Floor slabs, ceilings, roofing	15	EPD Marmoleum
D	Lightweight boncrete block with EPS-insulation core, ceme	59.3	kg	-7,48E-1	-1,23E-3	-2,34E-4	-2,22E-12	-5,38E-5	-1,36E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	75.5	m2	2E1	3,29E-2	6,25E-3	5,93E-11	1,44E-3	3,65E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
D	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	81.3	m3	-2,14E0	-4,45E-3	-1,54E-3	-5,33E-8	-2,6E-4	-1,1E1	Floor slabs, ceilings, roofing	As building	Beton der Druckf
D	Concrete wall blocks	87.2	kg	6,19E-4	1,02E-6	1,94E-7	1,84E-15	4,45E-8	1,13E-2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	91.5	m2	-1,85E2	-2E-1	-3,19E-2	-3,33E-10	-2,08E-2	-3,27E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Aluminium, sheet	98.9	kg	-3,07E-1	-1,17E-3	-7,83E-5	-2,97E-12	-6,81E-5	-5,52E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
D	Lightweight boncrete block with EPS-insulation core, ceme	101.8	kg	-1,28E0	-2,11E-3	-4,02E-4	-3,81E-12	-9,23E-5	-2,34E1	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Floor screed mortar, cement screed (IWM)	102.1	kg	-1,29E0	-2,12E-3	-4,03E-4	-3,82E-12	-9,26E-5	-2,35E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Aluminium, anodised	107.4	kg	-9E2	-3,42E0	-2,3E-1	-8,7E-9	-2E-1	-1,62E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	111.5	m2	2,95E1	4,86E-2	9,23E-3	8,76E-11	2,12E-3	5,38E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
D	Aluminium, sheet	111.8	kg	-3,47E-1	-1,32E-3	-8,85E-5	-3,35E-12	-7,7E-5	-6,24E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
D	Natural stone tiles, hard, interior floors	113.7	m2	-2,87E-2	-4,72E-5	-8,98E-6	-8,51E-14	-2,06E-6	-5,23E-'	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	141.8	m3	-3,73E0	-7,76E-3	-2,68E-3	-9,3E-8	-4,53E-4	-1,91E1	Floor slabs, ceilings, roofing	As building	Beton der Druckf
D	Structural hollow steel sections (HSS), cold rolled, generic	151.6	kg	-2,02E2	-8,71E-1	-2,91E-1	-1,02E-5	-1,51E-1	-2,23E3	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Aluminium, sheet	151.9	kg	-4,72E-1	-1,79E-3	-1,2E-4	-4,56E-12	-1,05E-4	-8,47E0	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	153.3	m2	-3,1E2	-3,35E-1	-5,35E-2	-5,58E-10	-3,48E-2	-5,48E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	157.6	m2	-3,19E2	-3,44E-1	-5,5E-2	-5,74E-10	-3,58E-2	-5,64E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Ceramic tiles and plates, 18.65 kg/m2 (Bundesverband Ke	194.8	m2	5,15E1	8,49E-2	1,61E-2	1,53E-10	3,71E-3	9,41E2	Floor slabs, ceilings, roofing	80	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	194.8	m2	-3,94E2	-4,25E-1	-6,8E-2	-7,1E-10	-4,42E-2	-6,97E3	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Resilient linoleum floor covering, 3.5mm, 3 kg/m2, Marmol	200.3	kg	-7,41E1	-7,89E-2	-1,26E-2	-1,29E-10	-8,33E-3	-1,31E3	Floor slabs, ceilings, roofing	15	EPD Marmoleum
D	Dispersion adhesive, 0.35-0.55 kg/m2, TERRACOLL 30 (I	203.7	kg	-2,57E0	-4,23E-3	-8,04E-4	-7,63E-12	-1,85E-4	-4,69E1	Floor slabs, ceilings, roofing	10	EPD
D	Aluminium, sheet	247.7	kg	-7,69E-1	-2,92E-3	-1,96E-4	-7,43E-12	-1,71E-4	-1,38E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	256.8	kg	-3,24E0	-5,33E-3	-1,01E-3	-9,61E-12	-2,33E-4	-5,91E1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	267.5	kg	-3,56E2	-1,54E0	-5,14E-1	-1,79E-5	-2,66E-1	-3,94E3	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	279.4	kg	-3,72E2	-1,61E0	-5,36E-1	-1,87E-5	-2,78E-1	-4,11E3	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Stoneware tiles, glazed	296.8	kg	-1,87E-3	-3,08E-6	-5,86E-7	-5,56E-15	-1,35E-7	-3,42E-'	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	582.1	m2	-1,18E3	-1,27E0	-2,03E-1	-2,12E-9	-1,32E-1	-2,08E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	658.6	kg	-8,77E2	-3,78E0	-1,26E0	-4,41E-5	-6,55E-1	-9,7E3	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Thermoset resin insulation, glass tissue faced/backed, 5.0	658.7	kg	-1,03E3	-1,11E0	-1,77E-1	-1,85E-9	-1,15E-1	-1,81E4	Floor slabs, ceilings, roofing	As building	EPD Kooltherm I
D	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	713.5	kg	-4,21E2	-4,48E-1	-7,16E-2	-7,33E-10	-4,74E-2	-7,43E3	Floor slabs, ceilings, roofing	40	EPD
D	Waterproofing fleece, PE-HD with PP	832.9	m2	-1,69E3	-1,82E0	-2,91E-1	-3,03E-9	-1,89E-1	-2,98E4	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Woven carpet tiles, bitumen-based backing, Sigma tiles; V	832.9	m2	-5,64E3	-6,08E0	-9,72E-1	-1,02E-8	-6,33E-1	-9,97E4	Floor slabs, ceilings, roofing	10	EPD Sigma tiles
D	Lightweight boncrete block with EPS-insulation core, ceme	856.3	kg	-1,08E1	-1,78E-2	-3,38E-3	-3,21E-11	-7,76E-4	-1,97E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	861	kg	-6,03E-2	-1,26E-4	-4,34E-5	-1,51E-9	-7,34E-6	-3,09E-'	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
D	Lightweight boncrete block with EPS-insulation core, ceme	956.3	kg	-1,21E1	-1,99E-2	-3,77E-3	-3,58E-11	-8,67E-4	-2,2E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Lightweight boncrete block with EPS-insulation core, ceme	983.5	kg	-1,24E1	-2,04E-2	-3,88E-3	-3,68E-11	-8,92E-4	-2,26E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Floor screed mortar, cement screed (IWM)	1038.7	kg	-1,31E1	-2,16E-2	-4,1E-3	-3,89E-11	-9,42E-4	-2,39E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	1108.3	kg	-1,48E3	-6,37E0	-2,13E0	-7,43E-5	-1,1E0	-1,63E4	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Aluminium, anodised	1112.2	kg	-9,32E3	-3,54E1	-2,38E0	-9,01E-8	-2,07E0	-1,68E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	1131.5	kg	-1,43E1	-2,35E-2	-4,47E-3	-4,24E-11	-1,03E-3	-2,6E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	1174.5	kg	-1,48E1	-2,44E-2	-4,64E-3	-4,4E-11	-1,06E-3	-2,7E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	1195.4	m2	-6,67E3	-7,1E0	-1,13E0	-1,16E-8	-7,5E-1	-1,18E5	Floor slabs, ceilings, roofing	40	EPD

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
D	Lightweight boncrete block with EPS-insulation core, ceme	1215.4	kg	-1,53E1	-2,52E-2	-4,8E-3	-4,55E-11	-1,1E-3	-2,8E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Floor screed mortar, cement screed (IWM)	1460.3	kg	-1,84E1	-3,03E-2	-5,76E-3	-5,47E-11	-1,32E-3	-3,36E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	2170.6	kg	-2,74E1	-4,51E-2	-8,57E-3	-8,13E-11	-1,97E-3	-5E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Concrete wall blocks	2562	kg	1,82E-2	2,99E-5	5,69E-6	5,4E-14	1,31E-6	3,32E-1	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Thin sheet, steel, (0.3-3.0 mm)	2826	kg	-1,01E0	-5,61E-3	-3,47E-4	-1,05E-11	-3,25E-4	-1,31E1	Floor slabs, ceilings, roofing	40	Oekobau.dat 201
D	Waterproofing fleece, PE-HD with PP	3578.2	m2	-7,24E3	-7,81E0	-1,25E0	-1,3E-8	-8,12E-1	-1,28E5	Floor slabs, ceilings, roofing	20	Oekobau.dat 201
D	Lightweight boncrete block with EPS-insulation core, ceme	3632.5	kg	-4,58E1	-7,54E-2	-1,43E-2	-1,36E-10	-3,29E-3	-8,36E2	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Floor screed mortar, cement screed (IWM)	4319.3	kg	-5,45E1	-8,97E-2	-1,7E-2	-1,62E-10	-3,92E-3	-9,94E2	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Lightweight boncrete block with EPS-insulation core, ceme	5197.3	kg	-6,55E1	-1,08E-1	-2,05E-2	-1,95E-10	-4,71E-3	-1,2E3	Floor slabs, ceilings, roofing	As building	EPD Blokk Exakt
D	Structural hollow steel sections (HSS), cold rolled, generic	6271.9	kg	-8,35E3	-3,6E1	-1,2E1	-4,2E-4	-6,24E0	-9,23E4	Floor slabs, ceilings, roofing	As building	One Click LCA
D	Prestressed concrete hollow deck, 200 mm, 272 kg/m3 (C	7937	m2	-5,67E4	-1,18E2	-4,08E1	-1,42E-3	-6,9E0	-2,91E5	Floor slabs, ceilings, roofing	100	FDES
D	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	11886	kg	-8,33E-1	-1,73E-3	-5,99E-4	-2,08E-8	-1,01E-4	-4,27E0	Floor slabs, ceilings, roofing	As building	EPD Unbewehrte
D	Floor screed mortar, cement screed (IWM)	13904.9	kg	-1,75E2	-2,89E-1	-5,49E-2	-5,21E-10	-1,26E-2	-3,2E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	17931.3	kg	-2,26E2	-3,72E-1	-7,08E-2	-6,71E-10	-1,63E-2	-4,13E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	23295.5	kg	-2,94E2	-4,84E-1	-9,2E-2	-8,72E-10	-2,11E-2	-5,36E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	25455.7	kg	-3,21E2	-5,29E-1	-1E-1	-9,53E-10	-2,31E-2	-5,86E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	26471.8	kg	-3,34E2	-5,5E-1	-1,04E-1	-9,91E-10	-2,4E-2	-6,09E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	27756.1	kg	-3,5E2	-5,76E-1	-1,1E-1	-1,04E-9	-2,52E-2	-6,39E3	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quickstep	27909.6	kg	-1,65E4	-1,75E1	-2,8E0	-2,87E-8	-1,85E0	-2,91E5	Floor slabs, ceilings, roofing	40	EPD
D	Floor screed mortar, cement screed (IWM)	94014	kg	-1,19E3	-1,95E0	-3,71E-1	-3,52E-9	-8,52E-2	-2,16E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	134513.4	kg	-1,7E3	-2,79E0	-5,31E-1	-5,04E-9	-1,22E-1	-3,1E4	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
D	Floor screed mortar, cement screed (IWM)	679850.4	kg	-8,57E3	-1,41E1	-2,68E0	-2,55E-8	-6,16E-1	-1,56E5	Floor slabs, ceilings, roofing	50	Oekobau.dat 201
				1,55E6	**5,58E3**	**6,94E2**	**2,99E1**	**6,14E2**	**2,17E7**	**Floor slabs, ceilings, roofi**		
A1-A3	Mineral wool (facade insulation)	0.1	m3	7,26E0	3,41E-2	4,71E-3	1,69E-10	2,64E-3	9,23E1	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Aluminium, sheet	1	m2	1,73E2	7,4E-1	4,76E-2	7,33E-8	4,6E-2	3,07E3	Foundation, sub-surface, ba	40	Oekobau.dat 201
A1-A3	Mineral wool (facade insulation)	6.4	m3	4,64E2	2,18E0	3,01E-1	1,08E-8	1,69E-1	5,91E3	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Aluminium, anodised	8.2	kg	5,48E1	9,69E-2	1,81E-2	3,55E-9	8,16E-3	9,61E2	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	9.4	m3	1,69E3	2,04E0	2,63E-1	2,4E-8	1,84E-1	1,19E4	Foundation, sub-surface, ba	As building	EPD Unbewehrte
A1-A3	Waterproofing roof membrane, EPDM	13.75	m2	1,23E2	1,69E-1	1,97E-2	2,41E-9	2,72E-2	2,25E3	Foundation, sub-surface, ba	20	Oekobau.dat 201
A1-A3	Mineral wool (facade insulation)	14.6	m3	1,06E3	4,98E0	6,87E-1	2,47E-8	3,86E-1	1,35E4	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Thermoset resin insulation, glass tissue faced/backed, 5.0	20.9	kg	5,89E1	1,43E-1	1,61E-2	4,67E-9	5,91E-2	1,04E3	Foundation, sub-surface, ba	As building	EPD Kooltherm K
A1-A3	Aluminium, anodised	36	kg	2,41E2	4,25E-1	7,94E-2	1,56E-8	3,58E-2	4,22E3	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Waterproofing roof membrane, EPDM	41	kg	1,83E2	2,51E-1	2,93E-2	3,59E-9	4,06E-2	3,35E3	Foundation, sub-surface, ba	20	Oekobau.dat 201
A1-A3	Insulation, EPS hard foam, (Styropor ®) for ceilings/floors	46.1	m3	2,48E3	5,62E0	5,16E-1	1,33E-5	2,19E1	4,06E4	Foundation, sub-surface, ba	40	Oekobau.dat 201
A1-A3	Bitumen membrane, V 60	67	m2	1,46E2	5,9E-1	4,86E-2	1,35E-8	8,8E-2	2,21E3	Foundation, sub-surface, ba	20	Oekobau.dat 201
A1-A3	Extruded polystyrene (XPS), m3	80	kg	2,42E2	5,18E-1	5,29E-2	1,73E-8	2,32E-1	3,46E3	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Waterproofing roof membrane, EPDM	149.9	m2	1,34E3	1,84E0	2,14E-1	2,63E-8	2,97E-1	2,45E4	Foundation, sub-surface, ba	20	Oekobau.dat 201
A1-A3	Extruded polystyrene (XPS), m3	179.3	kg	5,43E2	1,16E0	1,19E-1	3,87E-8	5,19E-1	7,74E3	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Bitumen membrane, V 60	192.5	kg	9,04E1	3,66E-1	3,01E-2	8,37E-9	5,45E-2	1,37E3	Foundation, sub-surface, ba	20	Oekobau.dat 201
A1-A3	Insulation with aluminium cladding and mineral filled polim	202	kg	1,06E3	4,86E0	2,86E-1	2,32E-5	3,43E-1	2,12E4	Foundation, sub-surface, ba	As building	EPD ALUCOBOI
A1-A3	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	551.4	m3	1,26E5	2,01E2	3,15E1	4,4E-4	2,44E1	6,66E5	Foundation, sub-surface, ba	As building	Beton der Druckf
A1-A3	Thin sheet, steel, (0.3-3.0 mm)	561.3	kg	1,21E3	4,5E0	3,96E-1	9,03E-9	6,49E-1	1,44E4	Foundation, sub-surface, ba	40	Oekobau.dat 201
A1-A3	Aluminium, anodised	604.1	kg	4,04E3	7,14E0	1,33E0	2,62E-7	6,01E-1	7,08E4	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	946.1	m3	2,17E5	3,44E2	5,41E1	7,55E-4	4,18E1	1,14E6	Foundation, sub-surface, ba	As building	Beton der Druckf
A1-A3	Floor screed mortar, cement screed (IWM)	1272.2	kg	1,98E2	2,76E-1	5,09E-2	1,65E-8	1,62E-2	1,46E3	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Reinforcement steel	26356.9	kg	1,98E4	4,71E1	4,69E0	1,31E-6	4,59E0	3,32E5	Foundation, sub-surface, ba	50	Oekobau.dat 201
A1-A3	Reinforcement steel	45223.6	kg	3,39E4	8,08E1	8,04E0	2,24E-6	7,88E0	5,69E5	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Mineral wool (facade insulation)	0.1	m3	5,31E-2	2,45E-4	5,33E-5	1,05E-8	3E-6	1,51E0	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Aluminium, sheet	1	m2	1,86E-1	8,57E-4	1,87E-4	3,68E-8	1,05E-5	5,3E0	Foundation, sub-surface, ba	40	Oekobau.dat 201
A4	Mineral wool (facade insulation)	6.4	m3	3,4E0	1,57E-2	3,41E-3	6,72E-7	1,92E-4	9,68E1	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Aluminium, anodised	8.2	kg	9,42E-2	4,34E-4	9,45E-5	1,86E-8	5,31E-6	2,68E0	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	9.4	m3	4,05E1	1,86E-1	4,06E-2	8E-6	2,28E-3	1,15E3	Foundation, sub-surface, ba	As building	EPD Unbewehrte
A4	Waterproofing roof membrane, EPDM	13.75	m2	3,16E-1	1,45E-3	3,17E-4	6,24E-8	1,78E-5	8,99E0	Foundation, sub-surface, ba	20	Oekobau.dat 201
A4	Mineral wool (facade insulation)	14.6	m3	7,76E0	3,57E-2	7,78E-3	1,53E-6	4,37E-4	2,21E2	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Thermoset resin insulation, glass tissue faced/backed, 5.0	20.9	kg	2,4E-1	1,11E-3	2,41E-4	4,74E-8	1,35E-5	6,83E0	Foundation, sub-surface, ba	As building	EPD Kooltherm K
A4	Aluminium, anodised	36	kg	4,14E-1	1,9E-3	4,15E-4	8,17E-8	2,33E-5	1,18E1	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Waterproofing roof membrane, EPDM	41	kg	4,71E-1	2,17E-3	4,73E-4	9,3E-8	2,66E-5	1,34E1	Foundation, sub-surface, ba	20	Oekobau.dat 201
A4	Insulation, EPS hard foam, (Styropor ®) for ceilings/floors	46.1	m3	9,8E0	4,51E-2	9,83E-3	1,94E-6	5,52E-4	2,79E2	Foundation, sub-surface, ba	40	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Bitumen membrane, V 60	67	m2	3,85E0	1,77E-2	3,86E-3	7,6E-7	2,17E-4	1,1E2	Foundation, sub-surface, ba	20	Oekobau.dat 201
A4	Extruded polystyrene (XPS), m3	80	kg	9,19E-1	4,23E-3	9,22E-4	1,82E-7	5,18E-5	2,62E1	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Waterproofing roof membrane, EPDM	149.9	m2	3,44E0	1,59E-2	3,46E-3	6,8E-7	1,94E-4	9,8E1	Foundation, sub-surface, ba	20	Oekobau.dat 201
A4	Extruded polystyrene (XPS), m3	179.3	kg	2,06E0	9,49E-3	2,07E-3	4,07E-7	1,16E-4	5,86E1	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Bitumen membrane, V 60	192.5	kg	2,38E0	1,1E-2	2,39E-3	4,71E-7	1,34E-4	6,78E1	Foundation, sub-surface, ba	20	Oekobau.dat 201
A4	Insulation with aluminium cladding and mineral filled polim	202	kg	2,32E0	1,07E-2	2,33E-3	4,58E-7	1,31E-4	6,61E1	Foundation, sub-surface, ba	As building	EPD ALUCOBOI
A4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	551.4	m3	5,16E4	7,54E1	1,54E1	8,69E-3	7,74E0	7,86E5	Foundation, sub-surface, ba	As building	Beton der Druckf
A4	Thin sheet, steel, (0.3-3.0 mm)	561.3	kg	6,45E0	2,97E-2	6,47E-3	1,27E-6	3,64E-4	1,84E2	Foundation, sub-surface, ba	40	Oekobau.dat 201
A4	Aluminium, anodised	604.1	kg	1,16E1	5,33E-2	1,16E-2	2,28E-6	6,52E-4	3,29E2	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	946.1	m3	8,86E4	1,29E2	2,64E1	1,49E-2	1,33E1	1,35E6	Foundation, sub-surface, ba	As building	Beton der Druckf
A4	Floor screed mortar, cement screed (IWM)	1272.2	kg	1,46E1	6,73E-2	1,47E-2	2,89E-6	8,24E-4	4,16E2	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Reinforcement steel	26356.9	kg	3,03E2	1,39E0	3,04E-1	5,98E-5	1,71E-2	8,62E3	Foundation, sub-surface, ba	50	Oekobau.dat 201
A4	Reinforcement steel	45223.6	kg	5,2E2	2,39E0	5,21E-1	1,03E-4	2,93E-2	1,48E4	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Mineral wool (facade insulation)	0.1	m3	6,26E-2	3,87E-4	5,59E-5	9,66E-13	3,76E-5	9,34E-1	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Aluminium, sheet	1	m2	1,31E-2	7,73E-5	1,05E-5	1,23E-14	6,08E-6	1,95E-1	Foundation, sub-surface, ba	40	Oekobau.dat 201
C1-C4	Mineral wool (facade insulation)	6.4	m3	4,01E0	2,48E-2	3,57E-3	6,18E-11	2,4E-3	5,98E1	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Aluminium, anodised	8.2	kg	6,62E-3	3,91E-5	5,33E-6	6,23E-15	3,08E-6	9,9E-2	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	9.4	m3	9,62E0	7,54E-2	1,56E-2	7,69E-12	7,46E-3	2,01E2	Foundation, sub-surface, ba	As building	EPD Unbewehrte
C1-C4	Waterproofing roof membrane, EPDM	13.75	m2	3,72E-1	2,3E-3	3,32E-4	5,74E-12	2,23E-4	5,55E0	Foundation, sub-surface, ba	20	Oekobau.dat 201
C1-C4	Mineral wool (facade insulation)	14.6	m3	9,14E0	5,65E-2	8,16E-3	1,41E-10	5,48E-3	1,36E2	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Thermoset resin insulation, glass tissue faced/backed, 5.0	20.9	kg	5,28E1	1,23E-2	1,03E-3	4,25E-12	5,65E-4	2,87E1	Foundation, sub-surface, ba	As building	EPD Kooltherm I
C1-C4	Aluminium, anodised	36	kg	2,9E-2	1,72E-4	2,34E-5	2,74E-14	1,35E-5	4,34E-1	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Waterproofing roof membrane, EPDM	41	kg	5,55E-1	3,43E-3	4,95E-4	8,56E-12	3,33E-4	8,28E0	Foundation, sub-surface, ba	20	Oekobau.dat 201
C1-C4	Insulation, EPS hard foam, (Styropor ®) for ceilings/floors	46.1	m3	2,15E3	5,04E-1	4,21E-2	1,73E-10	2,31E-2	1,17E3	Foundation, sub-surface, ba	40	Oekobau.dat 201
C1-C4	Bitumen membrane, V 60	67	m2	4,53E0	2,8E-2	4,05E-3	7E-11	2,72E-3	6,77E1	Foundation, sub-surface, ba	20	Oekobau.dat 201
C1-C4	Extruded polystyrene (XPS), m3	80	kg	1,08E0	6,69E-3	9,66E-4	1,67E-11	6,5E-4	1,62E1	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Waterproofing roof membrane, EPDM	149.9	m2	4,06E0	2,51E-2	3,62E-3	6,26E-11	2,43E-3	6,06E1	Foundation, sub-surface, ba	20	Oekobau.dat 201
C1-C4	Extruded polystyrene (XPS), m3	179.3	kg	2,43E0	1,5E-2	2,17E-3	3,75E-11	1,46E-3	3,62E1	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Bitumen membrane, V 60	192.5	kg	2,81E0	1,74E-2	2,51E-3	4,33E-11	1,68E-3	4,19E1	Foundation, sub-surface, ba	20	Oekobau.dat 201
C1-C4	Insulation with aluminium cladding and mineral filled polim	202	kg	2,73E0	1,69E-2	2,44E-3	4,22E-11	1,64E-3	4,08E1	Foundation, sub-surface, ba	As building	EPD ALUCOBOI
C1-C4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	551.4	m3	3,61E3	2,83E1	5,87E0	2,89E-9	2,8E0	7,53E4	Foundation, sub-surface, ba	As building	Beton der Druckf
C1-C4	Thin sheet, steel, (0.3-3.0 mm)	561.3	kg	4,53E-1	2,68E-3	3,65E-4	4,27E-13	2,11E-4	6,77E0	Foundation, sub-surface, ba	40	Oekobau.dat 201
C1-C4	Aluminium, anodised	604.1	kg	4,87E-1	2,88E-3	3,93E-4	4,59E-13	2,27E-4	7,29E0	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	946.1	m3	6,2E3	4,86E1	1,01E1	4,95E-9	4,8E0	1,29E5	Foundation, sub-surface, ba	As building	Beton der Druckf
C1-C4	Floor screed mortar, cement screed (IWM)	1272.2	kg	3,47E0	2,72E-2	5,64E-3	2,77E-12	2,69E-3	7,24E1	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Reinforcement steel	26356.9	kg	2,13E1	1,26E-1	1,71E-2	2E-11	9,89E-3	3,18E2	Foundation, sub-surface, ba	50	Oekobau.dat 201
C1-C4	Reinforcement steel	45223.6	kg	3,65E1	2,16E-1	2,94E-2	3,44E-11	1,7E-2	5,46E2	Foundation, sub-surface, ba	50	Oekobau.dat 201
D	Aluminium, sheet	1	m2	-5,03E-2	-1,91E-4	-1,28E-5	-4,86E-13	-1,12E-5	-9,04E-1	Foundation, sub-surface, ba	40	Oekobau.dat 201
D	Aluminium, anodised	8.2	kg	-6,87E1	-2,61E-1	-1,75E-2	-6,64E-10	-1,52E-2	-1,24E3	Foundation, sub-surface, ba	50	Oekobau.dat 201
D	Autoclaved aerated concrete, 300-800 kg/m3, P2 0,40 (H+	9.4	m3	-2,47E-1	-5,14E-4	-1,78E-4	-6,17E-9	-3E-5	-1,27E0	Foundation, sub-surface, ba	As building	EPD Unbewehrte
D	Thermoset resin insulation, glass tissue faced/backed, 5.0	20.9	kg	-3,25E1	-3,51E-2	-5,61E-3	-5,86E-11	-3,65E-3	-5,75E2	Foundation, sub-surface, ba	As building	EPD Kooltherm I
D	Aluminium, anodised	36	kg	-3,02E2	-1,15E0	-7,7E-2	-2,92E-9	-6,69E-2	-5,42E3	Foundation, sub-surface, ba	50	Oekobau.dat 201
D	Insulation, EPS hard foam, (Styropor ®) for ceilings/floors	46.1	m3	-7,18E1	-7,74E-2	-1,24E-2	-1,29E-10	-8,05E-3	-1,27E3	Foundation, sub-surface, ba	40	Oekobau.dat 201
D	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	551.4	m3	-1,45E1	-3,02E-2	-1,04E-2	-3,62E-7	-1,76E-3	-7,43E1	Foundation, sub-surface, ba	As building	Beton der Druckf
D	Thin sheet, steel, (0.3-3.0 mm)	561.3	kg	-2,01E-1	-1,11E-3	-6,89E-5	-2,09E-12	-6,46E-5	-2,61E0	Foundation, sub-surface, ba	40	Oekobau.dat 201
D	Aluminium, anodised	604.1	kg	-5,06E3	-1,92E1	-1,29E0	-4,89E-8	-1,12E0	-9,1E4	Foundation, sub-surface, ba	50	Oekobau.dat 201
D	Concrete, C35/45 (B35 M40) (ex rebar) (IZB)	946.1	m3	-2,49E1	-5,18E-2	-1,79E-2	-6,21E-7	-3,02E-3	-1,27E2	Foundation, sub-surface, ba	As building	Beton der Druckf
D	Floor screed mortar, cement screed (IWM)	1272.2	kg	-1,6E1	-2,64E-2	-5,02E-3	-4,76E-11	-1,15E-3	-2,93E2	Foundation, sub-surface, ba	50	Oekobau.dat 201
				5,66E5	**9,98E2**	**1,62E2**	**2,5E-2**	**1,33E2**	**5,31E6**	**Foundation, sub-surface,**		
A1-A3	Mineral insulation panel, Multipor, 0.042-0.05 W/mK, 20-3(	0.4	m3	4,04E1	7,44E-2	9,24E-3	1,28E-9	6,4E-3	6,64E2	Internal walls and non-beari	50	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	1.1	m3	4,58E1	2,13E-1	2,99E-2	1,08E-9	1,62E-2	5,97E2	Internal walls and non-beari	50	Oekobau.dat 201
A1-A3	Plywood, spruce, uncoated (Metsä Wood)	1.6	m3	1,94E2	1,45E0	3,07E-1	8,62E-9	8,88E-2	1,02E4	Internal walls and non-beari	As building	Metsä wood spru
A1-A3	Interior paint, dispersion, scuff-proof	2.2	kg	6,25E0	2,46E-2	1,9E-3	2,85E-10	3,33E-3	1,45E2	Internal walls and non-beari	15	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	2.4	m3	9,99E1	4,64E-1	6,51E-2	2,36E-9	3,53E-2	1,3E3	Internal walls and non-beari	50	Oekobau.dat 201
A1-A3	Plywood, spruce, uncoated (Metsä Wood)	3.7	m2	4,03E0	3,03E-2	6,39E-3	1,79E-10	1,85E-3	2,13E2	Internal walls and non-beari	As building	Metsä wood spru
A1-A3	Interior paint, dispersion, scuff-proof	4.8	kg	1,36E1	5,37E-2	4,15E-3	6,22E-10	7,25E-3	3,17E2	Internal walls and non-beari	15	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	5.2	m3	2,16E2	1,01E0	1,41E-1	5,12E-9	7,65E-2	2,82E3	Internal walls and non-beari	50	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	5.4	m3	2,25E2	1,04E0	1,47E-1	5,31E-9	7,95E-2	2,93E3	Internal walls and non-beari	50	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Autoclaved aerated concrete blocks, 300 - 800 kg/m3, Yto	6	m3	9,76E2	1,29E0	1,56E-1	4,88E-8	1,52E-1	8,37E3	Internal walls and non-bearii	As building	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	8.2	m3	3,41E2	1,59E0	2,23E-1	8,07E-9	1,21E-1	4,45E3	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	8.6	m2	2,29E1	8,75E-2	1,09E-2	3,24E-6	5,17E-3	5,33E2	Internal walls and non-bearii	As building	NEPD-413-292-E
A1-A3	Laminated safety glass, 2-15 mm, max 3210x6000 mm, 2!	8.9	m2	1,75E2	4,34E-1	7,26E-2	2,74E-8	3,82E-2	2,86E3	Internal walls and non-bearii	As building	EPD Uncoated fl
A1-A3	Mineral wool (interior insulation)	12	m3	4,99E2	2,32E0	3,26E-1	1,18E-8	1,77E-1	6,52E3	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	15.1	m3	6,28E2	2,92E0	4,1E-1	1,49E-8	2,22E-1	8,2E3	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	17.2	m3	7,16E2	3,33E0	4,67E-1	1,69E-8	2,53E-1	9,34E3	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Aluminium, sash frame profile, thermally separated, powde	17.8	m	3,1E2	1,22E0	9,07E-2	1,21E-7	7,93E-2	5,62E3	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Float glass, single pane, generic, 3 - 12 mm, 10 kg/m2 (for	17.8	m2	1,72E2	1,66E0	1,3E-1	1,24E-5	5,51E-2	2,75E3	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	18	m2	5,31E1	1,11E-1	2,72E-2	3,47E-6	5,83E-3	1,15E3	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Plasterboard, impregnated	18	m2	4,2E1	6,38E-2	1,74E-2	8,68E-10	4,84E-3	6,88E2	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	18.8	kg	9,71E1	5,12E-1	4,95E-2	4,63E-6	3,48E-2	1,61E3	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	22.1	kg	1,14E2	6,02E-1	5,82E-2	5,44E-6	4,09E-2	1,9E3	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	23.4	m2	6,9E1	1,44E-1	3,53E-2	4,52E-6	7,58E-3	1,5E3	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Gypsum board with increased fire resistance performance	23.4	m2	7,54E1	2,06E-1	7E-2	1,06E-5	1,04E-2	1,51E3	Internal walls and non-bearii	As building	NEPD-357-246-E
A1-A3	Interior paint, dispersion, scuff-proof	27.6	kg	7,84E1	3,09E-1	2,39E-2	3,58E-9	4,17E-2	1,82E3	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	34	kg	1,76E2	9,26E-1	8,95E-2	8,36E-6	6,29E-2	2,92E3	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Mineral wool (interior insulation)	37.2	m3	1,55E3	7,19E0	1,01E0	3,66E-8	5,47E-1	2,02E4	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Interior paint, dispersion, scuff-proof	63.2	kg	1,8E2	7,07E-1	5,47E-2	8,19E-9	9,55E-2	4,17E3	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	64	m3	2,66E3	1,24E1	1,74E0	6,3E-8	9,42E-1	3,48E4	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Interior paint, dispersion, scuff-proof	64.8	kg	1,84E2	7,25E-1	5,61E-2	8,4E-9	9,79E-2	4,28E3	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Thin sheet, steel, (0.3-3.0 mm)	70.8	kg	1,53E2	5,68E-1	5E-2	1,14E-9	8,19E-2	1,82E3	Internal walls and non-bearii	40	Oekobau.dat 201
A1-A3	Interior paint, dispersion, scuff-proof	71.2	kg	2,02E2	7,96E-1	6,16E-2	9,23E-9	1,08E-1	4,7E3	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Interior paint, dispersion, scuff-proof	90.8	kg	2,58E2	1,02E0	7,86E-2	1,18E-8	1,37E-1	6E3	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Interior paint, dispersion, scuff-proof	97.6	kg	2,77E2	1,09E0	8,44E-2	1,27E-8	1,48E-1	6,45E3	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Interior paint, dispersion, scuff-proof	102.4	kg	2,91E2	1,15E0	8,86E-2	1,33E-8	1,55E-1	6,76E3	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Sunshade sheet	104.1	m2	6,11E2	8,56E-1	1,63E-1	3,05E-8	1,89E-1	1,24E4	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	122.5	m3	5,1E3	2,37E1	3,32E0	1,21E-7	1,8E0	6,65E4	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	128	m2	3,78E2	7,87E-1	1,93E-1	2,47E-5	4,15E-2	8,19E3	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	144.3	m2	4,26E2	8,87E-1	2,18E-1	2,78E-5	4,68E-2	9,24E3	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Interior paint, dispersion, scuff-proof	149.2	kg	4,24E2	1,67E0	1,29E-1	1,93E-8	2,26E-1	9,85E3	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	167	kg	8,62E2	4,55E0	4,4E-1	4,11E-5	3,09E-1	1,43E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Interior paint, dispersion, scuff-proof	179.2	kg	5,09E2	2E0	1,55E-1	2,32E-8	2,71E-1	1,18E4	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	207	m2	6,11E2	1,27E0	3,13E-1	4E-5	6,71E-2	1,32E4	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Float glass, single pane, generic, 3 - 12 mm, 10 kg/m2 (for	209.6	m2	2,03E3	1,96E1	1,54E0	1,46E-4	6,49E-1	3,24E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	233.8	kg	1,21E3	6,37E0	6,16E-1	5,75E-5	4,33E-1	2,01E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Interior paint, dispersion, scuff-proof	243	kg	6,9E2	2,72E0	2,1E-1	3,15E-8	3,67E-1	1,6E4	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Aluminium, sash frame profile, thermally separated, powde	274.6	m	4,78E3	1,88E1	1,4E0	1,87E-6	1,22E0	8,66E4	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	283	kg	1,46E3	7,71E0	7,45E-1	6,96E-5	5,24E-1	2,43E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	295.6	kg	1,53E3	8,05E0	7,78E-1	7,27E-5	5,47E-1	2,54E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	302.5	kg	1,56E3	8,24E0	7,96E-1	7,44E-5	5,6E-1	2,6E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	310.2	kg	1,6E3	8,45E0	8,17E-1	7,63E-5	5,74E-1	2,66E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Mineral wool (interior insulation)	324.2	m3	1,35E4	6,27E1	8,8E0	3,19E-7	4,77E0	1,76E5	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	332.4	kg	1,72E3	9,05E0	8,75E-1	8,18E-5	6,15E-1	2,85E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	399	m2	1,06E3	4,06E0	5,07E-1	1,5E-4	2,4E-1	2,47E4	Internal walls and non-bearii	As building	NEPD-413-292-E
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	476.8	m2	1,41E3	2,93E0	7,2E-1	9,2E-5	1,54E-1	3,05E4	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	486.98	m2	1,44E3	2,99E0	7,35E-1	9,4E-5	1,58E-1	3,12E4	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Plasterboard, impregnated	535.2	m2	1,25E3	1,9E0	5,18E-1	2,58E-8	1,44E-1	2,05E4	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	543	kg	2,8E3	1,48E1	1,43E0	1,34E-4	1E0	4,66E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	644	kg	3,33E3	1,75E1	1,7E0	1,58E-4	1,19E0	5,53E4	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	673	m2	1,99E3	4,14E0	1,02E0	1,3E-4	2,18E-1	4,31E4	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Plasterboard, impregnated	673	m2	1,57E3	2,39E0	6,52E-1	3,24E-8	1,81E-1	2,57E4	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	682.4	m2	2,01E3	4,2E0	1,03E0	1,32E-4	2,21E-1	4,37E4	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Plasterboard, impregnated	732.8	m2	1,71E3	2,6E0	7,1E-1	3,53E-8	1,97E-1	2,8E4	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	769.2	m2	2,27E3	4,73E0	1,16E0	1,48E-4	2,49E-1	4,92E4	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	913.9	m2	2,43E3	9,29E0	1,16E0	3,45E-4	5,49E-1	5,66E4	Internal walls and non-bearii	As building	NEPD-413-292-E
A1-A3	Thermoset resin insulation, glass tissue faced/backed, 5.0	1024	kg	2,88E3	7,02E0	7,88E-1	2,29E-7	2,9E0	5,08E4	Internal walls and non-bearii	As building	EPD Kooltherm K
A1-A3	Thin sheet, steel, (0.3-3.0 mm)	1339.4	kg	2,9E3	1,07E1	9,46E-1	2,15E-8	1,55E0	3,45E4	Internal walls and non-bearii	40	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Interior paint, dispersion, scuff-proof	1447.6	kg	4,11E3	1,62E1	1,25E0	1,88E-7	2,19E0	9,56E4	Internal walls and non-bearii	15	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	2073.8	kg	1,07E4	5,65E1	5,46E0	5,1E-4	3,84E0	1,78E5	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Floor screed mortar, cement screed (IWM)	2283.4	kg	3,56E2	4,95E-1	9,13E-2	2,97E-8	2,9E-2	2,62E3	Internal walls and non-bearii	50	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	4391.4	kg	2,27E4	1,2E2	1,16E1	1,08E-3	8,12E0	3,77E5	Internal walls and non-bearii	As building	One Click LCA
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	10885.6	m2	3,21E4	6,69E1	1,64E1	2,1E-3	3,53E0	6,97E5	Internal walls and non-bearii	As building	MD-16002-EN Si
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	87759.5	kg	4,53E5	2,39E3	2,31E2	2,16E-2	1,62E2	7,53E6	Internal walls and non-bearii	As building	One Click LCA
A4	Mineral insulation panel, Multipor, 0.042-0.05 W/mK, 20-3(	0.4	m3	5,28E-1	2,43E-3	5,3E-4	1,04E-7	2,98E-5	1,5E1	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Mineral wool (interior insulation)	1.1	m3	3,32E-1	1,53E-3	3,33E-4	6,55E-8	1,87E-5	9,44E0	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Plywood, spruce, uncoated (Metsä Wood)	1.6	m3	8,46E0	3,89E-2	8,48E-3	1,67E-6	4,77E-4	2,41E2	Internal walls and non-bearii	As building	Metsä wood spru
A4	Interior paint, dispersion, scuff-proof	2.2	kg	6,12E-2	2,48E-4	5,32E-5	1,18E-8	5,11E-6	1,71E0	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Mineral wool (interior insulation)	2.4	m3	7,24E-1	3,33E-3	7,26E-4	1,43E-7	4,08E-5	2,06E1	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Plywood, spruce, uncoated (Metsä Wood)	3.7	m2	1,76E-1	8,1E-4	1,77E-4	3,48E-8	9,92E-6	5,01E0	Internal walls and non-bearii	As building	Metsä wood spru
A4	Interior paint, dispersion, scuff-proof	4.8	kg	1,34E-1	5,41E-4	1,16E-4	2,57E-8	1,12E-5	3,73E0	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Mineral wool (interior insulation)	5.2	m3	1,57E0	7,22E-3	1,57E-3	3,1E-7	8,84E-5	4,46E1	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Mineral wool (interior insulation)	5.4	m3	1,63E0	7,5E-3	1,63E-3	3,22E-7	9,18E-5	4,64E1	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Autoclaved aerated concrete blocks, 300 - 800 kg/m3, Yto	6	m3	3,31E1	1,52E-1	3,32E-2	6,53E-6	1,87E-3	9,42E2	Internal walls and non-bearii	As building	Oekobau.dat 201
A4	Mineral wool (interior insulation)	8.2	m3	2,47E0	1,14E-2	2,48E-3	4,88E-7	1,39E-4	7,04E1	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	8.6	m2	1,04E0	4,78E-3	1,04E-3	2,05E-7	5,85E-5	2,95E1	Internal walls and non-bearii	As building	NEPD-413-292-E
A4	Laminated safety glass, 2-15 mm, max 3210x6000 mm, 2!	8.9	m2	2,04E0	9,42E-3	2,05E-3	4,04E-7	1,15E-4	5,82E1	Internal walls and non-bearii	As building	EPD Uncoated fl
A4	Mineral wool (interior insulation)	12	m3	3,62E0	1,67E-2	3,63E-3	7,15E-7	2,04E-4	1,03E2	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Mineral wool (interior insulation)	15.1	m3	4,55E0	2,1E-2	4,57E-3	8,99E-7	2,57E-4	1,3E2	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Mineral wool (interior insulation)	17.2	m3	5,19E0	2,39E-2	5,2E-3	1,02E-6	2,92E-4	1,48E2	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Aluminium, sash frame profile, thermally separated, powd	17.8	m	3,09E-1	1,42E-3	3,1E-4	6,1E-8	1,74E-5	8,79E0	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Float glass, single pane, generic, 3 - 12 mm, 10 kg/m2 (for	17.8	m2	2,04E0	9,42E-3	2,05E-3	4,04E-7	1,15E-4	5,82E1	Internal walls and non-bearii	As building	One Click LCA
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	18	m2	2,32E0	1,07E-2	2,32E-3	4,57E-7	1,31E-4	6,59E1	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Plasterboard, impregnated	18	m2	2,07E0	9,52E-3	2,07E-3	4,08E-7	1,17E-4	5,89E1	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	18.8	kg	2,16E-1	9,95E-4	2,17E-4	4,27E-8	1,22E-5	6,15E0	Internal walls and non-bearii	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	22.1	kg	2,54E-1	1,17E-3	2,55E-4	5,01E-8	1,43E-5	7,23E0	Internal walls and non-bearii	As building	One Click LCA
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	23.4	m2	3,01E0	1,39E-2	3,02E-3	5,95E-7	1,7E-4	8,57E1	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Gypsum board with increased fire resistance performance	23.4	m2	3,28E0	1,51E-2	3,29E-3	6,48E-7	1,85E-4	9,33E1	Internal walls and non-bearii	As building	NEPD-357-246-E
A4	Interior paint, dispersion, scuff-proof	27.6	kg	7,68E-1	3,11E-3	6,68E-4	1,48E-7	6,41E-5	2,14E1	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	34	kg	3,91E-1	1,8E-3	3,92E-4	7,71E-8	2,2E-5	1,11E1	Internal walls and non-bearii	As building	One Click LCA
A4	Mineral wool (interior insulation)	37.2	m3	1,12E1	5,17E-2	1,13E-2	2,22E-6	6,33E-4	3,19E2	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Interior paint, dispersion, scuff-proof	63.2	kg	5,86E-1	2,37E-3	5,1E-4	1,13E-7	4,9E-5	1,64E1	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Mineral wool (interior insulation)	64	m3	1,93E1	8,89E-2	1,94E-2	3,81E-6	1,09E-3	5,49E2	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Interior paint, dispersion, scuff-proof	64.8	kg	1,8E0	7,3E-3	1,57E-3	3,48E-7	1,51E-4	5,03E1	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Thin sheet, steel, (0.3-3.0 mm)	70.8	kg	8,13E-1	3,75E-3	8,16E-4	1,61E-7	4,59E-5	2,32E1	Internal walls and non-bearii	40	Oekobau.dat 201
A4	Interior paint, dispersion, scuff-proof	71.2	kg	1,98E0	8,02E-3	1,72E-3	3,82E-7	1,65E-4	5,53E1	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Interior paint, dispersion, scuff-proof	90.8	kg	2,53E0	1,02E-2	2,2E-3	4,87E-7	2,11E-4	7,05E1	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Interior paint, dispersion, scuff-proof	97.6	kg	2,72E0	1,1E-2	2,36E-3	5,23E-7	2,27E-4	7,58E1	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Interior paint, dispersion, scuff-proof	102.4	kg	2,85E0	1,15E-2	2,48E-3	5,49E-7	2,38E-4	7,95E1	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Sunshade sheet	104.1	m2	4,78E-1	2,2E-3	4,8E-4	9,45E-8	2,7E-5	1,36E1	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Mineral wool (interior insulation)	122.5	m3	3,69E1	1,7E-1	3,71E-2	7,3E-6	2,08E-3	1,05E3	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	128	m2	1,65E1	7,58E-2	1,65E-2	3,25E-6	9,29E-4	4,69E2	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	144.3	m2	1,86E1	8,55E-2	1,86E-2	3,67E-6	1,05E-3	5,28E2	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Interior paint, dispersion, scuff-proof	149.2	kg	4,15E0	1,68E-2	3,61E-3	8E-7	3,47E-4	1,16E2	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	167	kg	1,92E0	8,84E-3	1,92E-3	3,79E-7	1,08E-4	5,46E1	Internal walls and non-bearii	As building	One Click LCA
A4	Interior paint, dispersion, scuff-proof	179.2	kg	4,99E0	2,02E-2	4,33E-3	9,61E-7	4,16E-4	1,39E2	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	207	m2	2,66E1	1,23E-1	2,67E-2	5,26E-6	1,5E-3	7,58E2	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Float glass, single pane, generic, 3 - 12 mm, 10 kg/m2 (for	209.6	m2	2,41E1	1,11E-1	2,42E-2	4,76E-6	1,36E-3	6,85E2	Internal walls and non-bearii	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	233.8	kg	2,69E0	1,24E-2	2,69E-3	5,31E-7	1,51E-4	7,65E1	Internal walls and non-bearii	As building	One Click LCA
A4	Interior paint, dispersion, scuff-proof	243	kg	6,76E0	2,74E-2	5,88E-3	1,3E-6	5,65E-4	1,89E2	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Aluminium, sash frame profile, thermally separated, powd	274.6	m	4,76E0	2,19E-2	4,78E-3	9,41E-7	2,69E-4	1,36E2	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	283	kg	3,25E0	1,5E-2	3,26E-3	6,42E-7	1,83E-4	9,25E1	Internal walls and non-bearii	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	295.6	kg	3,4E0	1,56E-2	3,41E-3	6,71E-7	1,91E-4	9,67E1	Internal walls and non-bearii	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	302.5	kg	3,48E0	1,6E-2	3,49E-3	6,86E-7	1,96E-4	9,89E1	Internal walls and non-bearii	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	310.2	kg	3,56E0	1,64E-2	3,58E-3	7,04E-7	2,01E-4	1,01E2	Internal walls and non-bearii	As building	One Click LCA
A4	Mineral wool (interior insulation)	324.2	m3	9,78E1	4,5E-1	9,81E-2	1,93E-5	5,51E-3	2,78E3	Internal walls and non-bearii	50	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Structural hollow steel sections (HSS), cold rolled, generic	332.4	kg	3,82E0	1,76E-2	3,83E-3	7,54E-7	2,15E-4	1,09E2	Internal walls and non-bearii	As building	One Click LCA
A4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	399	m2	4,81E1	2,22E-1	4,83E-2	9,51E-6	2,71E-3	1,37E3	Internal walls and non-bearii	As building	NEPD-413-292-E
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	476.8	m2	6,13E1	2,83E-1	6,15E-2	1,21E-5	3,46E-3	1,75E3	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	486.98	m2	6,27E1	2,89E-1	6,29E-2	1,24E-5	3,53E-3	1,78E3	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Plasterboard, impregnated	535.2	m2	6,15E1	2,83E-1	6,17E-2	1,21E-5	3,47E-3	1,75E3	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	543	kg	6,24E0	2,87E-2	6,26E-3	1,23E-6	3,52E-4	1,78E2	Internal walls and non-bearii	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	644	kg	7,4E0	3,41E-2	7,42E-3	1,46E-6	4,17E-4	2,11E2	Internal walls and non-bearii	As building	One Click LCA
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	673	m2	8,66E1	3,99E-1	8,69E-2	1,71E-5	4,88E-3	2,46E3	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Plasterboard, impregnated	673	m2	7,73E1	3,56E-1	7,76E-2	1,53E-5	4,36E-3	2,2E3	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	682.4	m2	8,78E1	4,04E-1	8,81E-2	1,73E-5	4,95E-3	2,5E3	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Plasterboard, impregnated	732.8	m2	8,42E1	3,88E-1	8,45E-2	1,66E-5	4,75E-3	2,4E3	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	769.2	m2	9,9E1	4,56E-1	9,93E-2	1,95E-5	5,58E-3	2,82E3	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	913.9	m2	1,1E2	5,08E-1	1,11E-1	2,18E-5	6,22E-3	3,14E3	Internal walls and non-bearii	As building	NEPD-413-292-E
A4	Thermoset resin insulation, glass tissue faced/backed, 5.0	1024	kg	1,18E1	5,42E-2	1,18E-2	2,32E-6	6,63E-4	3,35E2	Internal walls and non-bearii	As building	EPD Kooltherm K
A4	Thin sheet, steel, (0.3-3.0 mm)	1339.4	kg	1,54E1	7,09E-2	1,54E-2	3,04E-6	8,68E-4	4,38E2	Internal walls and non-bearii	40	Oekobau.dat 201
A4	Interior paint, dispersion, scuff-proof	1447.6	kg	4,03E1	1,63E-1	3,5E-2	7,76E-6	3,36E-3	1,12E3	Internal walls and non-bearii	15	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	2073.8	kg	2,38E1	1,1E-1	2,39E-2	4,71E-6	1,34E-3	6,78E2	Internal walls and non-bearii	As building	One Click LCA
A4	Floor screed mortar, cement screed (IWM)	2283.4	kg	2,62E1	1,21E-1	2,63E-2	5,18E-6	1,48E-3	7,47E2	Internal walls and non-bearii	50	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	4391.4	kg	5,04E1	2,32E-1	5,06E-2	9,96E-6	2,84E-3	1,44E3	Internal walls and non-bearii	As building	One Click LCA
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	10885.6	m2	1,4E3	6,45E0	1,41E0	2,77E-4	7,9E-2	3,99E4	Internal walls and non-bearii	As building	MD-16002-EN Si
A4	Structural hollow steel sections (HSS), cold rolled, generic	87759.5	kg	1,01E3	4,64E0	1,01E0	1,99E-4	5,68E-2	2,87E4	Internal walls and non-bearii	As building	One Click LCA
B1-B5	Interior paint, dispersion, scuff-proof	2.2	kg	1,88E1	7,38E-2	5,71E-3	8,56E-10	9,98E-3	4,36E2	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	4.8	kg	4,09E1	1,61E-1	1,25E-2	1,87E-9	2,18E-2	9,51E2	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	27.6	kg	2,35E2	9,26E-1	7,16E-2	1,07E-8	1,25E-1	5,47E3	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	63.2	kg	5,39E2	2,12E0	1,64E-1	2,46E-8	2,87E-1	1,25E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	64.8	kg	5,52E2	2,17E0	1,68E-1	2,52E-8	2,94E-1	1,28E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Thin sheet, steel, (0.3-3.0 mm)	70.8	kg	1,53E2	5,68E-1	5E-2	1,14E-9	8,19E-2	1,82E3	Internal walls and non-bearii	40	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	71.2	kg	6,07E2	2,39E0	1,85E-1	2,77E-8	3,23E-1	1,41E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	90.8	kg	7,74E2	3,05E0	2,36E-1	3,53E-8	4,12E-1	1,8E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	97.6	kg	8,32E2	3,27E0	2,53E-1	3,8E-8	4,43E-1	1,93E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	102.4	kg	8,73E2	3,44E0	2,66E-1	3,98E-8	4,64E-1	2,03E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Sunshade sheet	104.1	m2	1,83E3	2,57E0	4,88E-1	9,16E-8	5,67E-1	3,73E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	149.2	kg	1,27E3	5,01E0	3,87E-1	5,8E-8	6,77E-1	2,96E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	179.2	kg	1,53E3	6,01E0	4,65E-1	6,97E-8	8,13E-1	3,55E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	243	kg	2,07E3	8,15E0	6,31E-1	9,45E-8	1,1E0	4,81E4	Internal walls and non-bearii	15	Oekobau.dat 201
B1-B5	Thin sheet, steel, (0.3-3.0 mm)	1339.4	kg	2,9E3	1,07E1	9,46E-1	2,15E-8	1,55E0	3,45E4	Internal walls and non-bearii	40	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	1447.6	kg	1,23E4	4,86E1	3,76E0	5,63E-7	6,56E0	2,87E5	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Mineral insulation panel, Multipor, 0.042-0.05 W/mK, 20-3(	0.4	m3	6,23E-1	3,85E-3	5,56E-4	9,61E-12	3,74E-4	9,29E0	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	1.1	m3	3,91E-1	2,42E-3	3,49E-4	6,03E-12	2,34E-4	5,83E0	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Plywood, spruce, uncoated (Metsä Wood)	1.6	m3	6,65E0	1,62E-1	2,13E-1	7,73E-7	2,16E-3	7,69E1	Internal walls and non-bearii	As building	Metsä wood spru
C1-C4	Interior paint, dispersion, scuff-proof	2.2	kg	2,98E-2	1,84E-4	2,66E-5	4,6E-13	1,79E-5	4,44E-1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	2.4	m3	8,53E-1	5,27E-3	7,61E-4	1,32E-11	5,12E-4	1,27E1	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Plywood, spruce, uncoated (Metsä Wood)	3.7	m2	1,38E-1	3,37E-3	4,44E-3	1,61E-8	4,49E-5	1,6E0	Internal walls and non-bearii	As building	Metsä wood spru
C1-C4	Interior paint, dispersion, scuff-proof	4.8	kg	6,5E-2	4,02E-4	5,8E-5	1E-12	3,9E-5	9,7E-1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	5.2	m3	1,85E0	1,14E-2	1,65E-3	2,85E-11	1,11E-3	2,76E1	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	5.4	m3	1,92E0	1,19E-2	1,71E-3	2,96E-11	1,15E-3	2,86E1	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Autoclaved aerated concrete blocks, 300 - 800 kg/m3, Yto	6	m3	7,86E0	6,16E-2	1,28E-2	6,28E-12	6,09E-3	1,64E2	Internal walls and non-bearii	As building	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	8.2	m3	2,91E0	1,8E-2	2,6E-3	4,5E-11	1,75E-3	4,35E1	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	8.6	m2	1,22E0	7,56E-3	1,09E-3	1,89E-11	7,33E-4	1,82E1	Internal walls and non-bearii	As building	NEPD-413-292-E
C1-C4	Laminated safety glass, 2-15 mm, max 3210x6000 mm, 2!	8.9	m2	4,86E-1	3,81E-3	7,89E-4	3,88E-13	3,77E-4	1,01E1	Internal walls and non-bearii	As building	EPD Uncoated fl
C1-C4	Mineral wool (interior insulation)	12	m3	4,26E0	2,64E-2	3,8E-3	6,58E-11	2,56E-3	6,36E1	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	15.1	m3	5,37E0	3,32E-2	4,79E-3	8,28E-11	3,22E-3	8,01E1	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	17.2	m3	6,11E0	3,78E-2	5,45E-3	9,43E-11	3,67E-3	9,12E1	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Aluminium, sash frame profile, thermally separated, powd(	17.8	m	2,17E-2	1,28E-4	1,75E-5	2,04E-14	1,01E-5	3,24E-1	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Float glass, single pane, generic, 3 - 12 mm, 10 kg/m2 (for	17.8	m2	7,76E0	1,49E-2	7,38E-3	4,72E-7	2,08E-3	5,76E1	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	18	m2	2,73E0	1,69E-2	2,43E-3	4,21E-11	1,64E-3	4,07E1	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Plasterboard, impregnated	18	m2	2,44E0	1,51E-2	2,17E-3	3,76E-11	1,46E-3	3,64E1	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	18.8	kg	1,46E-1	5,79E-4	1,2E-4	2,84E-8	1,96E-5	4,14E0	Internal walls and non-bearii	As building	One Click LCA

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	22.1	kg	1,71E-1	6,81E-4	1,41E-4	3,34E-8	2,3E-5	4,87E0	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	23.4	m2	3,55E0	2,19E-2	3,17E-3	5,47E-11	2,13E-3	5,29E1	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Gypsum board with increased fire resistance performance	23.4	m2	3,86E0	2,39E-2	3,45E-3	5,96E-11	2,32E-3	5,76E1	Internal walls and non-bearii	As building	NEPD-357-246-E
C1-C4	Interior paint, dispersion, scuff-proof	27.6	kg	3,74E-1	2,31E-3	3,33E-4	5,77E-12	2,24E-4	5,57E0	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	34	kg	2,64E-1	1,05E-3	2,18E-4	5,13E-8	3,54E-5	7,49E0	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Mineral wool (interior insulation)	37.2	m3	1,32E1	8,17E-2	1,18E-2	2,04E-10	7,93E-3	1,97E2	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Interior paint, dispersion, scuff-proof	63.2	kg	8,56E-1	5,29E-3	7,63E-4	1,32E-11	5,13E-4	1,28E1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	64	m3	2,27E1	1,41E-1	2,03E-2	3,51E-10	1,36E-2	3,39E2	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Interior paint, dispersion, scuff-proof	64.8	kg	8,77E-1	5,42E-3	7,83E-4	1,35E-11	5,26E-4	1,31E1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Thin sheet, steel, (0.3-3.0 mm)	70.8	kg	5,71E-2	3,38E-4	4,6E-5	5,38E-14	2,66E-5	8,54E-1	Internal walls and non-bearii	40	Oekobau.dat 201
C1-C4	Interior paint, dispersion, scuff-proof	71.2	kg	9,64E-1	5,96E-3	8,6E-4	1,49E-11	5,78E-4	1,44E1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Interior paint, dispersion, scuff-proof	90.8	kg	1,23E0	7,6E-3	1,1E-3	1,9E-11	7,37E-4	1,83E1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Interior paint, dispersion, scuff-proof	97.6	kg	1,32E0	8,17E-3	1,18E-3	2,04E-11	7,93E-4	1,97E1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Interior paint, dispersion, scuff-proof	102.4	kg	1,39E0	8,57E-3	1,24E-3	2,14E-11	8,32E-4	2,07E1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Sunshade sheet	104.1	m2	5,64E-1	3,48E-3	5,03E-4	8,7E-12	3,38E-4	8,41E0	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	122.5	m3	4,35E1	2,69E-1	3,88E-2	6,72E-10	2,61E-2	6,5E2	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	128	m2	1,94E1	1,2E-1	1,73E-2	2,99E-10	1,16E-2	2,9E2	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	144.3	m2	2,19E1	1,35E-1	1,95E-2	3,38E-10	1,31E-2	3,26E2	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Interior paint, dispersion, scuff-proof	149.2	kg	2,02E0	1,25E-2	1,8E-3	3,12E-11	1,21E-3	3,01E1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	167	kg	1,29E0	5,14E-3	1,07E-3	2,52E-7	1,74E-4	3,68E1	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Interior paint, dispersion, scuff-proof	179.2	kg	2,43E0	1,5E-2	2,16E-3	3,74E-11	1,46E-3	3,62E1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	207	m2	3,14E1	1,94E-1	2,8E-2	4,84E-10	1,88E-2	4,68E2	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Float glass, single pane, generic, 3 - 12 mm, 10 kg/m2 (fo	209.6	m2	9,13E1	1,75E-1	8,69E-2	5,55E-6	2,45E-2	6,78E2	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	233.8	kg	1,81E0	7,2E-3	1,5E-3	3,53E-7	2,43E-4	5,15E1	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Interior paint, dispersion, scuff-proof	243	kg	3,29E0	2,03E-2	2,93E-3	5,08E-11	1,97E-3	4,91E1	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Aluminium, sash frame profile, thermally separated, powde	274.6	m	3,35E-1	1,98E-3	2,7E-4	3,15E-13	1,56E-4	5E0	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	283	kg	2,19E0	8,72E-3	1,81E-3	4,27E-7	2,94E-4	6,24E1	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	295.6	kg	2,29E0	9,1E-3	1,89E-3	4,46E-7	3,07E-4	6,51E1	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	302.5	kg	2,34E0	9,32E-3	1,94E-3	4,57E-7	3,15E-4	6,66E1	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	310.2	kg	2,4E0	9,55E-3	1,99E-3	4,68E-7	3,23E-4	6,83E1	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Mineral wool (interior insulation)	324.2	m3	1,15E2	7,12E-1	1,03E-1	1,78E-9	6,91E-2	1,72E3	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	332.4	kg	2,58E0	1,02E-2	2,13E-3	5,02E-7	3,46E-4	7,32E1	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 n	399	m2	5,67E1	3,51E-1	5,06E-2	8,75E-10	3,4E-2	8,46E2	Internal walls and non-bearii	As building	NEPD-413-292-E
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	476.8	m2	7,23E1	4,47E-1	6,45E-2	1,12E-9	4,34E-2	1,08E3	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	486.98	m2	7,38E1	4,56E-1	6,59E-2	1,14E-9	4,43E-2	1,1E3	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Plasterboard, impregnated	535.2	m2	7,24E1	4,48E-1	6,46E-2	1,12E-9	4,35E-2	1,08E3	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	543	kg	4,21E0	1,67E-2	3,48E-3	8,2E-7	5,65E-4	1,2E2	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	644	kg	4,99E0	1,98E-2	4,12E-3	9,72E-7	6,7E-4	1,42E2	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	673	m2	1,02E2	6,31E-1	9,1E-2	1,57E-9	6,12E-2	1,52E3	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Plasterboard, impregnated	673	m2	9,11E1	5,63E-1	8,13E-2	1,41E-9	5,46E-2	1,36E3	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	682.4	m2	1,03E2	6,4E-1	9,23E-2	1,6E-9	6,21E-2	1,54E3	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Plasterboard, impregnated	732.8	m2	9,92E1	6,13E-1	8,85E-2	1,53E-9	5,95E-2	1,48E3	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	769.2	m2	1,17E2	7,21E-1	1,04E-1	1,8E-9	7E-2	1,74E3	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 n	913.9	m2	1,3E2	8,03E-1	1,16E-1	2E-9	7,79E-2	1,94E3	Internal walls and non-bearii	As building	NEPD-413-292-E
C1-C4	Thermoset resin insulation, glass tissue faced/backed, 5.0	1024	kg	2,59E3	6,05E-1	5,05E-2	2,08E-10	2,77E-2	1,41E3	Internal walls and non-bearii	As building	EPD Kooltherm K
C1-C4	Thin sheet, steel, (0.3-3.0 mm)	1339.4	kg	1,08E0	6,39E-3	8,71E-4	1,02E-12	5,03E-4	1,62E1	Internal walls and non-bearii	40	Oekobau.dat 201
C1-C4	Interior paint, dispersion, scuff-proof	1447.6	kg	1,96E1	1,21E-1	1,75E-2	3,02E-10	1,18E-2	2,92E2	Internal walls and non-bearii	15	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	2073.8	kg	1,61E1	6,39E-2	1,33E-2	3,13E-6	2,16E-3	4,57E2	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Floor screed mortar, cement screed (IWM)	2283.4	kg	6,23E0	4,89E-2	1,01E-2	4,98E-12	4,83E-3	1,3E2	Internal walls and non-bearii	50	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	4391.4	kg	3,4E1	1,35E-1	2,81E-2	6,63E-6	4,57E-3	9,68E2	Internal walls and non-bearii	As building	One Click LCA
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	10885.6	m2	1,65E3	1,02E1	1,47E0	2,55E-8	9,9E-1	2,46E4	Internal walls and non-bearii	As building	MD-16002-EN Si
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	87759.5	kg	6,8E2	2,7E0	5,62E-1	1,33E-4	9,13E-2	1,93E4	Internal walls and non-bearii	As building	One Click LCA
D	Plywood, spruce, uncoated (Metsä Wood)	1.6	m3	-1,01E3	-1,45E0	-4,43E-1	-2,83E-4	-6,82E-2	-3,11E4	Internal walls and non-bearii	As building	Metsä wood spru
D	Plywood, spruce, uncoated (Metsä Wood)	3.7	m2	-2,11E1	-3,02E-2	-9,23E-3	-5,9E-6	-1,42E-3	-6,47E2	Internal walls and non-bearii	As building	Metsä wood spru
D	Autoclaved aerated concrete blocks, 300 - 800 kg/m3, Yto	6	m3	-7,57E-2	-1,25E-4	-2,37E-5	-2,25E-13	-5,44E-6	-1,38E0	Internal walls and non-bearii	As building	Oekobau.dat 201
D	Aluminium, sash frame profile, thermally separated, powde	17.8	m	-1,8E2	-6,85E-1	-4,6E-2	-1,74E-9	-4E-2	-3,24E3	Internal walls and non-bearii	50	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	18.8	kg	-2,5E1	-1,08E-1	-3,61E-2	-1,26E-6	-1,87E-2	-2,77E2	Internal walls and non-bearii	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	22.1	kg	-2,94E1	-1,27E-1	-4,24E-2	-1,48E-6	-2,2E-2	-3,25E2	Internal walls and non-bearii	As building	One Click LCA

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
D	Structural hollow steel sections (HSS), cold rolled, generic	34	kg	-4,53E1	-1,95E-1	-6,53E-2	-2,28E-6	-3,38E-2	-5,01E2	Internal walls and non-beari	As building	One Click LCA
D	Thin sheet, steel, (0.3-3.0 mm)	70.8	kg	-2,54E-2	-1,41E-4	-8,69E-6	-2,64E-13	-8,15E-6	-3,29E-	Internal walls and non-beari	40	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	167	kg	-2,22E2	-9,59E-1	-3,21E-1	-1,12E-5	-1,66E-1	-2,46E3	Internal walls and non-beari	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	233.8	kg	-3,11E2	-1,34E0	-4,49E-1	-1,57E-5	-2,33E-1	-3,44E3	Internal walls and non-beari	As building	One Click LCA
D	Aluminium, sash frame profile, thermally separated, powde	274.6	m	-2,78E3	-1,06E1	-7,09E-1	-2,69E-8	-6,17E-1	-5E4	Internal walls and non-beari	50	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	283	kg	-3,77E2	-1,63E0	-5,43E-1	-1,9E-5	-2,81E-1	-4,17E3	Internal walls and non-beari	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	295.6	kg	-3,93E2	-1,7E0	-5,68E-1	-1,98E-5	-2,94E-1	-4,35E3	Internal walls and non-beari	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	302.5	kg	-4,03E2	-1,74E0	-5,81E-1	-2,03E-5	-3,01E-1	-4,45E3	Internal walls and non-beari	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	310.2	kg	-4,13E2	-1,78E0	-5,96E-1	-2,08E-5	-3,08E-1	-4,57E3	Internal walls and non-beari	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	332.4	kg	-4,42E2	-1,91E0	-6,38E-1	-2,23E-5	-3,31E-1	-4,89E3	Internal walls and non-beari	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	543	kg	-7,23E2	-3,12E0	-1,04E0	-3,64E-5	-5,4E-1	-7,99E3	Internal walls and non-beari	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	644	kg	-8,57E2	-3,7E0	-1,24E0	-4,32E-5	-6,4E-1	-9,48E3	Internal walls and non-beari	As building	One Click LCA
D	Thermoset resin insulation, glass tissue faced/backed, 5.0	1024	kg	-1,59E3	-1,72E0	-2,75E-1	-2,87E-9	-1,79E-1	-2,82E4	Internal walls and non-beari	As building	EPD Kooltherm K
D	Thin sheet, steel, (0.3-3.0 mm)	1339.4	kg	-4,8E-1	-2,66E-3	-1,64E-4	-5E-12	-1,54E-4	-6,23E0	Internal walls and non-beari	40	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	2073.8	kg	-2,76E3	-1,19E1	-3,98E0	-1,39E-4	-2,06E0	-3,05E4	Internal walls and non-beari	As building	One Click LCA
D	Floor screed mortar, cement screed (IWM)	2283.4	kg	-2,88E1	-4,74E-2	-9,01E-3	-8,55E-11	-2,07E-3	-5,26E2	Internal walls and non-beari	50	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	4391.4	kg	-5,85E3	-2,52E1	-8,43E0	-2,94E-4	-4,37E0	-6,46E4	Internal walls and non-beari	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	87759.5	kg	-1,17E5	-5,04E2	-1,69E2	-5,88E-3	-8,73E1	-1,29E6	Internal walls and non-beari	As building	One Click LCA
				6,39E5	**3,11E3**	**3,22E2**	**2,83E-2**	**2,22E2**	**1,1E7**	**Internal walls and non-bea**		
A1-A3	Plywood, spruce, uncoated (Metsä Wood)	0.6	m3	7,26E1	5,45E-1	1,15E-1	3,23E-9	3,33E-2	3,84E3	Other structures and materi	As building	Metsä wood spru
A1-A3	Mineral wool (interior insulation)	1.3	m3	5,41E1	2,51E-1	3,53E-2	1,28E-9	1,91E-2	7,06E2	Other structures and materi	50	Oekobau.dat 201
A1-A3	Plywood, spruce, uncoated (Metsä Wood)	2.2	m3	2,66E2	2E0	4,22E-1	1,19E-8	1,22E-1	1,41E4	Other structures and materi	As building	Metsä wood spru
A1-A3	Mineral wool (interior insulation)	2.4	m3	9,99E1	4,64E-1	6,51E-2	2,36E-9	3,53E-2	1,3E3	Other structures and materi	50	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	3	m3	1,25E2	5,8E-1	8,14E-2	2,95E-9	4,42E-2	1,63E3	Other structures and materi	50	Oekobau.dat 201
A1-A3	Interior paint, dispersion, scuff-proof	5.4	kg	1,53E1	6,04E-2	4,67E-3	7E-10	8,16E-3	3,57E2	Other structures and materi	15	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	5.4	m3	2,25E2	1,04E0	1,47E-1	5,31E-9	7,95E-2	2,93E3	Other structures and materi	50	Oekobau.dat 201
A1-A3	Sealants for floor coatings and parquetes, DE avg., PU-ba	5.5	kg	2,39E1	8,52E-2	1,22E-2	1,79E-7	1,33E-2	4,09E2	Other structures and materi	15	Oekobau.dat 201
A1-A3	Mineral wool (interior insulation)	12.4	m3	5,16E2	2,4E0	3,37E-1	1,22E-8	1,82E-1	6,73E3	Other structures and materi	50	Oekobau.dat 201
A1-A3	Interior paint, dispersion, scuff-proof	13.4	kg	3,81E1	1,5E-1	1,16E-2	1,74E-9	2,03E-2	8,85E2	Other structures and materi	15	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	13.9	kg	7,18E1	3,78E-1	3,66E-2	3,42E-6	2,57E-2	1,19E3	Other structures and materi	As building	One Click LCA
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	20.4	m2	6,02E1	1,25E-1	3,08E-2	3,94E-6	6,61E-3	1,31E3	Other structures and materi	As building	MD-16002-EN Si
A1-A3	Sealants for floor coatings and parquetes, DE avg., PU-ba	22.4	kg	9,72E1	3,47E-1	4,97E-2	7,3E-7	5,4E-2	1,67E3	Other structures and materi	15	Oekobau.dat 201
A1-A3	Timber lining (interior), broadleaf (Lauvtrebruk)	26.5	kg	1,65E1	1,24E-2	2,42E-3	4,13E-7	1,38E-3	8,43E1	Other structures and materi	As building	Heltrepanel av la
A1-A3	Interior paint, dispersion, scuff-proof	34.1	kg	9,69E1	3,81E-1	2,95E-2	4,42E-9	5,15E-2	2,25E3	Other structures and materi	15	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	44	kg	2,27E2	1,2E0	1,16E-1	1,08E-5	8,14E-2	3,78E3	Other structures and materi	As building	One Click LCA
A1-A3	Timber lining (interior), broadleaf (Lauvtrebruk)	48.8	kg	3,04E1	2,28E-2	4,46E-3	7,61E-7	2,54E-3	1,55E2	Other structures and materi	As building	Heltrepanel av la
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	57.6	m2	1,7E2	3,54E-1	8,7E-2	1,11E-5	1,87E-2	3,69E3	Other structures and materi	As building	MD-16002-EN Si
A1-A3	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 n	72	m2	1,92E2	7,32E-1	9,14E-2	2,71E-5	4,33E-2	4,46E3	Other structures and materi	As building	NEPD-413-292-E
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	106.8	kg	5,51E2	2,91E0	2,81E-1	2,63E-5	1,98E-1	9,17E3	Other structures and materi	As building	One Click LCA
A1-A3	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 n	132.8	m2	3,53E2	1,35E0	1,69E-1	5,01E-5	7,98E-2	8,23E3	Other structures and materi	As building	NEPD-413-292-E
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	164	m2	4,84E2	1,01E0	2,48E-1	3,17E-5	5,31E-2	1,05E4	Other structures and materi	As building	MD-16002-EN Si
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	178.4	kg	9,21E2	4,86E0	4,7E-1	4,39E-5	3,3E-1	1,53E4	Other structures and materi	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	189.2	kg	9,77E2	5,15E0	4,98E-1	4,65E-5	3,5E-1	1,62E4	Other structures and materi	As building	One Click LCA
A1-A3	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	195	kg	4,46E0	2,52E0	2,39E-1	2,48E-8	1,81E-1	6,64E3	Other structures and materi	40	EPD
A1-A3	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	239	m2	7,05E2	1,47E0	3,61E-1	4,61E-5	7,74E-2	1,53E4	Other structures and materi	As building	MD-16002-EN Si
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	266.9	kg	1,38E3	7,27E0	7,03E-1	6,57E-5	4,94E-1	2,29E4	Other structures and materi	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	282.6	kg	1,46E3	7,69E0	7,44E-1	6,95E-5	5,23E-1	2,43E4	Other structures and materi	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	330.7	kg	1,71E3	9E0	8,71E-1	8,14E-5	6,12E-1	2,84E4	Other structures and materi	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	392.5	kg	2,03E3	1,07E1	1,03E0	9,66E-5	7,26E-1	3,37E4	Other structures and materi	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	658.2	kg	3,4E3	1,79E1	1,73E0	1,62E-4	1,22E0	5,65E4	Other structures and materi	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	690.8	kg	3,57E3	1,88E1	1,82E0	1,7E-4	1,28E0	5,93E4	Other structures and materi	As building	One Click LCA
A1-A3	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	795.6	kg	1,82E1	1,03E1	9,77E-1	1,01E-7	7,38E-1	2,71E4	Other structures and materi	40	EPD
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	1044.1	kg	5,39E3	2,84E1	2,75E0	2,57E-4	1,93E0	8,96E4	Other structures and materi	As building	One Click LCA
A1-A3	Thin sheet, steel, (0.3-3.0 mm)	1130.4	kg	2,44E3	9,06E0	7,98E-1	1,82E-8	1,31E0	2,91E4	Other structures and materi	40	Oekobau.dat 201
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	2331.5	kg	1,2E4	6,35E1	6,14E0	5,74E-4	4,31E0	2E5	Other structures and materi	As building	One Click LCA
A1-A3	Structural hollow steel sections (HSS), cold rolled, generic	2637.6	kg	1,36E4	7,18E1	6,94E0	6,49E-4	4,88E0	2,26E5	Other structures and materi	As building	One Click LCA
A1-A3	Galvanized steel staircase, indoor use (Lonbakken)	5755	kg	1,54E4	4,03E1	3,79E0	4,35E-4	6,22E0	1,84E5	Other structures and materi	As building	Lonbakken Steel
A4	Plywood, spruce, uncoated (Metsä Wood)	0.6	m3	3,17E0	1,46E-2	3,18E-3	6,26E-7	1,79E-4	9,03E1	Other structures and materi	As building	Metsä wood spru

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A4	Mineral wool (interior insulation)	1.3	m3	3,92E-1	1,81E-3	3,93E-4	7,74E-8	2,21E-5	1,12E1	Other structures and materi	50	Oekobau.dat 201
A4	Plywood, spruce, uncoated (Metsä Wood)	2.2	m3	1,16E1	5,35E-2	1,17E-2	2,3E-6	6,56E-4	3,31E2	Other structures and materi	As building	Metsä wood spru
A4	Mineral wool (interior insulation)	2.4	m3	7,24E-1	3,33E-3	7,26E-4	1,43E-7	4,08E-5	2,06E1	Other structures and materi	50	Oekobau.dat 201
A4	Mineral wool (interior insulation)	3	m3	9,05E-1	4,17E-3	9,08E-4	1,79E-7	5,1E-5	2,58E1	Other structures and materi	50	Oekobau.dat 201
A4	Interior paint, dispersion, scuff-proof	5.4	kg	1,5E-1	6,08E-4	1,31E-4	2,9E-8	1,25E-5	4,19E0	Other structures and materi	15	Oekobau.dat 201
A4	Mineral wool (interior insulation)	5.4	m3	1,63E0	7,5E-3	1,63E-3	3,22E-7	9,18E-5	4,64E1	Other structures and materi	50	Oekobau.dat 201
A4	Sealants for floor coatings and parquetes, DE avg., PU-ba	5.5	kg	1,53E-1	6,19E-4	1,33E-4	2,95E-8	1,28E-5	4,27E0	Other structures and materi	15	Oekobau.dat 201
A4	Mineral wool (interior insulation)	12.4	m3	3,74E0	1,72E-2	3,75E-3	7,39E-7	2,11E-4	1,06E2	Other structures and materi	50	Oekobau.dat 201
A4	Interior paint, dispersion, scuff-proof	13.4	kg	3,73E-1	1,51E-3	3,24E-4	7,19E-8	3,11E-5	1,04E1	Other structures and materi	15	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	13.9	kg	1,6E-1	7,35E-4	1,6E-4	3,15E-8	9E-6	4,55E0	Other structures and materi	As building	One Click LCA
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	20.4	m2	2,62E0	1,21E-2	2,63E-3	5,18E-7	1,48E-4	7,47E1	Other structures and materi	As building	MD-16002-EN Si
A4	Sealants for floor coatings and parquetes, DE avg., PU-ba	22.4	kg	6,23E-1	2,52E-3	5,42E-4	1,2E-7	5,21E-5	1,74E1	Other structures and materi	15	Oekobau.dat 201
A4	Timber lining (interior), broadleaf (Lauvtrebruk)	26.5	kg	3,04E-1	1,4E-3	3,05E-4	6,01E-8	1,72E-5	8,67E0	Other structures and materi	As building	Heltrepanel av la
A4	Interior paint, dispersion, scuff-proof	34.1	kg	9,49E-1	3,84E-3	8,25E-4	1,83E-7	7,92E-5	2,65E1	Other structures and materi	15	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	44	kg	5,05E-1	2,33E-3	5,07E-4	9,98E-8	2,85E-5	1,44E1	Other structures and materi	As building	One Click LCA
A4	Timber lining (interior), broadleaf (Lauvtrebruk)	48.8	kg	5,61E-1	2,58E-3	5,62E-4	1,11E-7	3,16E-5	1,6E1	Other structures and materi	As building	Heltrepanel av la
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	57.6	m2	7,41E0	3,41E-2	7,44E-3	1,46E-6	4,18E-4	2,11E2	Other structures and materi	As building	MD-16002-EN Si
A4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	72	m2	8,68E0	4E-2	8,71E-3	1,72E-6	4,9E-4	2,47E2	Other structures and materi	As building	NEPD-413-292-E
A4	Structural hollow steel sections (HSS), cold rolled, generic	106.8	kg	1,23E0	5,65E-3	1,23E-3	2,42E-7	6,92E-5	3,49E1	Other structures and materi	As building	One Click LCA
A4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	132.8	m2	1,6E1	7,38E-2	1,61E-2	3,16E-6	9,03E-4	4,56E2	Other structures and materi	As building	NEPD-413-292-E
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	164	m2	2,11E1	9,72E-2	2,12E-2	4,17E-6	1,19E-3	6,01E2	Other structures and materi	As building	MD-16002-EN Si
A4	Structural hollow steel sections (HSS), cold rolled, generic	178.4	kg	2,05E0	9,44E-3	2,06E-3	4,05E-7	1,16E-4	5,83E1	Other structures and materi	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	189.2	kg	2,17E0	1E-2	2,18E-3	4,29E-7	1,23E-4	6,19E1	Other structures and materi	As building	One Click LCA
A4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	195	kg	2,26E0	1,04E-2	2,26E-3	4,46E-7	1,27E-4	6,42E1	Other structures and materi	40	EPD
A4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	239	m2	3,08E1	1,42E-1	3,09E-2	6,07E-6	1,73E-3	8,75E2	Other structures and materi	As building	MD-16002-EN Si
A4	Structural hollow steel sections (HSS), cold rolled, generic	266.9	kg	3,07E0	1,41E-2	3,08E-3	6,06E-7	1,73E-4	8,73E1	Other structures and materi	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	282.6	kg	3,25E0	1,5E-2	3,26E-3	6,41E-7	1,83E-4	9,24E1	Other structures and materi	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	330.7	kg	3,8E0	1,75E-2	3,81E-3	7,5E-7	2,14E-4	1,08E2	Other structures and materi	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	392.5	kg	4,51E0	2,08E-2	4,52E-3	8,91E-7	2,54E-4	1,28E2	Other structures and materi	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	658.2	kg	7,56E0	3,48E-2	7,59E-3	1,49E-6	4,26E-4	2,15E2	Other structures and materi	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	690.8	kg	7,94E0	3,65E-2	7,96E-3	1,57E-6	4,47E-4	2,26E2	Other structures and materi	As building	One Click LCA
A4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	795.6	kg	9,21E0	4,24E-2	9,24E-3	1,82E-6	5,19E-4	2,62E2	Other structures and materi	40	EPD
A4	Structural hollow steel sections (HSS), cold rolled, generic	1044.1	kg	1,2E1	5,52E-2	1,2E-2	2,37E-6	6,76E-4	3,41E2	Other structures and materi	As building	One Click LCA
A4	Thin sheet, steel, (0.3-3.0 mm)	1130.4	kg	1,3E1	5,98E-2	1,3E-2	2,56E-6	7,32E-4	3,7E2	Other structures and materi	40	Oekobau.dat 201
A4	Structural hollow steel sections (HSS), cold rolled, generic	2331.5	kg	2,68E1	1,23E-1	2,69E-2	5,29E-6	1,51E-3	7,62E2	Other structures and materi	As building	One Click LCA
A4	Structural hollow steel sections (HSS), cold rolled, generic	2637.6	kg	3,03E1	1,4E-1	3,04E-2	5,98E-6	1,71E-3	8,63E2	Other structures and materi	As building	One Click LCA
A4	Galvanized steel staircase, indoor use (Lonbakken)	5755	kg	6,61E1	3,04E-1	6,63E-2	1,31E-5	3,73E-3	1,88E3	Other structures and materi	As building	Lonbakken Steel
B1-B5	Interior paint, dispersion, scuff-proof	5.4	kg	4,6E1	1,81E-1	1,4E-2	2,1E-9	2,45E-2	1,07E3	Other structures and materi	15	Oekobau.dat 201
B1-B5	Sealants for floor coatings and parquetes, DE avg., PU-ba	5.5	kg	7,16E1	2,56E-1	3,66E-2	5,38E-7	3,98E-2	1,23E3	Other structures and materi	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	13.4	kg	1,14E2	4,5E-1	3,48E-2	5,21E-9	6,08E-2	2,65E3	Other structures and materi	15	Oekobau.dat 201
B1-B5	Sealants for floor coatings and parquetes, DE avg., PU-ba	22.4	kg	2,92E2	1,04E0	1,49E-1	2,19E-6	1,62E-1	5E3	Other structures and materi	15	Oekobau.dat 201
B1-B5	Interior paint, dispersion, scuff-proof	34.1	kg	2,91E2	1,14E0	8,85E-2	1,33E-8	1,55E-1	6,76E3	Other structures and materi	15	Oekobau.dat 201
B1-B5	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	195	kg	4,46E0	2,52E0	2,39E-1	2,48E-8	1,81E-1	6,64E3	Other structures and materi	40	EPD
B1-B5	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	795.6	kg	1,82E1	1,03E1	9,77E-1	1,01E-7	7,38E-1	2,71E4	Other structures and materi	40	EPD
B1-B5	Thin sheet, steel, (0.3-3.0 mm)	1130.4	kg	2,44E3	9,06E0	7,98E-1	1,82E-8	1,31E0	2,91E4	Other structures and materi	40	Oekobau.dat 201
C1-C4	Plywood, spruce, uncoated (Metsä Wood)	0.6	m3	2,5E0	6,07E-2	8E-2	2,9E-7	8,09E-4	2,89E1	Other structures and materi	As building	Metsä wood spru
C1-C4	Mineral wool (interior insulation)	1.3	m3	4,62E-1	2,86E-3	4,12E-4	7,13E-12	2,77E-4	6,89E0	Other structures and materi	50	Oekobau.dat 201
C1-C4	Plywood, spruce, uncoated (Metsä Wood)	2.2	m3	9,15E0	2,23E-1	2,93E-1	1,06E-6	2,97E-3	1,06E2	Other structures and materi	As building	Metsä wood spru
C1-C4	Mineral wool (interior insulation)	2.4	m3	8,53E-1	5,27E-3	7,61E-4	1,32E-11	5,12E-4	1,27E1	Other structures and materi	50	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	3	m3	1,07E0	6,59E-3	9,51E-4	1,65E-11	6,39E-4	1,59E1	Other structures and materi	50	Oekobau.dat 201
C1-C4	Interior paint, dispersion, scuff-proof	5.4	kg	7,31E-2	4,52E-4	6,52E-5	1,13E-12	4,38E-5	1,09E0	Other structures and materi	15	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	5.4	m3	1,92E0	1,19E-2	1,71E-3	2,96E-11	1,15E-3	2,86E1	Other structures and materi	50	Oekobau.dat 201
C1-C4	Sealants for floor coatings and parquetes, DE avg., PU-ba	5.5	kg	7,45E-2	4,6E-4	6,64E-5	1,15E-12	4,47E-5	1,11E0	Other structures and materi	15	Oekobau.dat 201
C1-C4	Mineral wool (interior insulation)	12.4	m3	4,41E0	2,72E-2	3,93E-3	6,8E-11	2,64E-3	6,57E1	Other structures and materi	50	Oekobau.dat 201
C1-C4	Interior paint, dispersion, scuff-proof	13.4	kg	1,81E-1	1,12E-3	1,62E-4	2,8E-12	1,09E-4	2,71E0	Other structures and materi	15	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	13.9	kg	1,06E-1	4,28E-4	8,9E-5	2,1E-8	1,45E-5	3,06E0	Other structures and materi	As building	One Click LCA
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	20.4	m2	3,09E0	1,91E-2	2,76E-3	4,77E-11	1,86E-3	4,62E1	Other structures and materi	As building	MD-16002-EN Si
C1-C4	Sealants for floor coatings and parquetes, DE avg., PU-ba	22.4	kg	3,03E-1	1,87E-3	2,71E-4	4,68E-12	1,82E-4	4,52E0	Other structures and materi	15	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
C1-C4	Timber lining (interior), broadleaf (Lauvtrebruk)	26.5	kg	2,4E-1	5,83E-3	7,68E-3	2,78E-8	7,76E-5	2,77E0	Other structures and materi	As building	Heltrepanel av la
C1-C4	Interior paint, dispersion, scuff-proof	34.1	kg	4,62E-1	2,85E-3	4,12E-4	7,12E-12	2,77E-4	6,89E0	Other structures and materi	15	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	44	kg	3,41E-1	1,36E-3	2,82E-4	6,64E-8	4,58E-5	9,69E0	Other structures and materi	As building	One Click LCA
C1-C4	Timber lining (interior), broadleaf (Lauvtrebruk)	48.8	kg	4,41E-1	1,07E-2	1,42E-2	5,12E-8	1,43E-4	5,1E0	Other structures and materi	As building	Heltrepanel av la
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	57.6	m2	8,73E0	5,4E-2	7,79E-3	1,35E-10	5,24E-3	1,3E2	Other structures and materi	As building	MD-16002-EN Si
C1-C4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	72	m2	1,02E1	6,33E-2	9,13E-3	1,58E-10	6,14E-3	1,53E2	Other structures and materi	As building	NEPD-413-292-E
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	106.8	kg	8,28E-1	3,29E-3	6,84E-4	1,61E-7	1,11E-4	2,35E1	Other structures and materi	As building	One Click LCA
C1-C4	Gypsum board with perforated surface, 10.5 kg/m2, 12.5 r	132.8	m2	1,89E1	1,17E-1	1,68E-2	2,91E-10	1,13E-2	2,82E2	Other structures and materi	As building	NEPD-413-292-E
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	164	m2	2,49E1	1,54E-1	2,22E-2	3,84E-10	1,49E-2	3,71E2	Other structures and materi	As building	MD-16002-EN Si
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	178.4	kg	1,38E0	5,49E-3	1,14E-3	2,69E-7	1,86E-4	3,93E1	Other structures and materi	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	189.2	kg	1,47E0	5,83E-3	1,21E-3	2,86E-7	1,97E-4	4,17E1	Other structures and materi	As building	One Click LCA
C1-C4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	195	kg	5,36E-1	4,2E-3	8,71E-4	4,28E-13	4,16E-4	1,12E1	Other structures and materi	40	EPD
C1-C4	Gypsum board, 12.5mm, 900 kg/m3, GKB Scan heavy (Si	239	m2	3,62E1	2,24E-1	3,23E-2	5,59E-10	2,17E-2	5,41E2	Other structures and materi	As building	MD-16002-EN Si
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	266.9	kg	2,07E0	8,22E-3	1,71E-3	4,03E-7	2,78E-4	5,88E1	Other structures and materi	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	282.6	kg	2,19E0	8,7E-3	1,81E-3	4,27E-7	2,94E-4	6,23E1	Other structures and materi	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	330.7	kg	2,56E0	1,02E-2	2,12E-3	4,99E-7	3,44E-4	7,29E1	Other structures and materi	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	392.5	kg	3,04E0	1,21E-2	2,51E-3	5,93E-7	4,08E-4	8,65E1	Other structures and materi	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	658.2	kg	5,1E0	2,03E-2	4,21E-3	9,94E-7	6,85E-4	1,45E2	Other structures and materi	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	690.8	kg	5,35E0	2,13E-2	4,42E-3	1,04E-6	7,18E-4	1,52E2	Other structures and materi	As building	One Click LCA
C1-C4	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	795.6	kg	2,19E0	1,71E-2	3,55E-3	1,75E-12	1,7E-3	4,56E1	Other structures and materi	40	EPD
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	1044.1	kg	8,09E0	3,22E-2	6,68E-3	1,58E-6	1,09E-3	2,3E2	Other structures and materi	As building	One Click LCA
C1-C4	Thin sheet, steel, (0.3-3.0 mm)	1130.4	kg	9,12E-1	5,39E-3	7,35E-4	8,59E-13	4,24E-4	1,36E1	Other structures and materi	40	Oekobau.dat 201
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	2331.5	kg	1,81E1	7,18E-2	1,49E-2	3,52E-6	2,42E-3	5,14E2	Other structures and materi	As building	One Click LCA
C1-C4	Structural hollow steel sections (HSS), cold rolled, generic	2637.6	kg	2,04E1	8,12E-2	1,69E-2	3,98E-6	2,74E-3	5,81E2	Other structures and materi	As building	One Click LCA
C1-C4	Galvanized steel staircase, indoor use (Lonbakken)	5755	kg	4,46E1	1,77E-1	3,68E-2	8,69E-6	5,99E-3	1,27E3	Other structures and materi	As building	Lonbakken Steel
D	Plywood, spruce, uncoated (Metsä Wood)	0.6	m3	-3,81E2	-5,44E-1	-1,66E-1	-1,06E-4	-2,56E-2	-1,17E4	Other structures and materi	As building	Metsä wood spru
D	Plywood, spruce, uncoated (Metsä Wood)	2.2	m3	-1,4E3	-2E0	-6,1E-1	-3,9E-4	-9,37E-2	-4,27E4	Other structures and materi	As building	Metsä wood spru
D	Structural hollow steel sections (HSS), cold rolled, generic	13.9	kg	-1,85E1	-7,99E-2	-2,67E-2	-9,31E-7	-1,38E-2	-2,05E2	Other structures and materi	As building	One Click LCA
D	Timber lining (interior), broadleaf (Lauvtrebruk)	26.5	kg	-3,43E1	-4,9E-2	-1,5E-2	-9,56E-6	-2,3E-3	-1,05E3	Other structures and materi	As building	Heltrepanel av la
D	Structural hollow steel sections (HSS), cold rolled, generic	44	kg	-5,86E1	-2,53E-1	-8,45E-2	-2,95E-6	-4,38E-2	-6,48E2	Other structures and materi	As building	One Click LCA
D	Timber lining (interior), broadleaf (Lauvtrebruk)	48.8	kg	-6,31E1	-9,02E-2	-2,76E-2	-1,76E-5	-4,24E-3	-1,93E3	Other structures and materi	As building	Heltrepanel av la
D	Structural hollow steel sections (HSS), cold rolled, generic	106.8	kg	-1,42E2	-6,14E-1	-2,05E-1	-7,16E-6	-1,06E-1	-1,57E3	Other structures and materi	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	178.4	kg	-2,37E2	-1,02E0	-3,43E-1	-1,2E-5	-1,77E-1	-2,63E3	Other structures and materi	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	189.2	kg	-2,52E2	-1,09E0	-3,63E-1	-1,27E-5	-1,88E-1	-2,79E3	Other structures and materi	As building	One Click LCA
D	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	195	kg	-1,15E2	-1,23E-1	-1,96E-2	-2E-10	-1,3E-2	-2,03E3	Other structures and materi	40	EPD
D	Structural hollow steel sections (HSS), cold rolled, generic	266.9	kg	-3,55E2	-1,53E0	-5,12E-1	-1,79E-5	-2,65E-1	-3,93E3	Other structures and materi	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	282.6	kg	-3,76E2	-1,62E0	-5,43E-1	-1,89E-5	-2,81E-1	-4,16E3	Other structures and materi	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	330.7	kg	-4,4E2	-1,9E0	-6,35E-1	-2,22E-5	-3,29E-1	-4,87E3	Other structures and materi	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	392.5	kg	-5,22E2	-2,25E0	-7,54E-1	-2,63E-5	-3,9E-1	-5,78E3	Other structures and materi	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	658.2	kg	-8,76E2	-3,78E0	-1,26E0	-4,41E-5	-6,55E-1	-9,69E3	Other structures and materi	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	690.8	kg	-9,2E2	-3,97E0	-1,33E0	-4,63E-5	-6,87E-1	-1,02E4	Other structures and materi	As building	One Click LCA
D	Multi-layer parquet flooring, 14 mm, 9.52 kg/m2, Quckstep	795.6	kg	-4,7E2	-5E-1	-7,99E-2	-8,17E-10	-5,28E-2	-8,28E3	Other structures and materi	40	EPD
D	Structural hollow steel sections (HSS), cold rolled, generic	1044.1	kg	-1,39E3	-6E0	-2E0	-7E-5	-1,04E0	-1,54E4	Other structures and materi	As building	One Click LCA
D	Thin sheet, steel, (0.3-3.0 mm)	1130.4	kg	-4,05E-1	-2,24E-3	-1,39E-4	-4,22E-12	-1,3E-4	-5,26E0	Other structures and materi	40	Oekobau.dat 201
D	Structural hollow steel sections (HSS), cold rolled, generic	2331.5	kg	-3,1E3	-1,34E1	-4,48E0	-1,56E-4	-2,32E0	-3,43E4	Other structures and materi	As building	One Click LCA
D	Structural hollow steel sections (HSS), cold rolled, generic	2637.6	kg	-3,51E3	-1,52E1	-5,06E0	-1,77E-4	-2,62E0	-3,88E4	Other structures and materi	As building	One Click LCA
D	Galvanized steel staircase, indoor use (Lonbakken)	5755	kg	-5,96E4	-1,45E2	-1,49E1	-2,3E-4	-1,38E1	-4,9E5	Other structures and materi	As building	Lonbakken Steel
				7,27E4	**3,53E2**	**3,55E1**	**2,95E-3**	**2,91E1**	**1,21E6**	**Other structures and mate**		
A1-A3	Thermoset resin insulation, glass tissue faced/backed, 5.0	12.7	m3	1,25E3	3,05E0	3,42E-1	9,94E-8	1,26E0	2,21E4	Windows and doors	As building	EPD Kooltherm K
A1-A3	Multifunctional steel door, without frame, 1.23 x 2.18 m, in	12.8	m2	8,65E2	2,67E0	2,68E-1	1,55E-6	3,81E-1	1,32E4	Windows and doors	As building	EPD Multifunktio
A1-A3	Skylight, smoke lift, F100 (Lamilux)	15.4	m2	1,03E3	5,54E0	6,16E-1	1,3E-5	9,24E-1	4,77E4	Windows and doors	20	Oekobau.dat 201
A1-A3	Aluminium window system, triple glazed, 1230 x 1480 mm	48.39	m2	6,69E3	2,29E1	2,9E0	1,49E-4	2,37E0	1,08E5	Windows and doors	As building	Oekobau.dat 201
A1-A3	Aluminium door system, per m2, 1100 x 2200 mm, 100.59	64.5	m2	1,01E4	3,2E1	3,86E0	2,46E-4	3,52E0	1,63E5	Windows and doors	As building	Schüco ADS 90.
A1-A3	Aluminium window system, triple glazed, 1230 x 1480 mm	73.43	m2	1,02E4	3,48E1	4,4E0	2,26E-4	3,6E0	1,64E5	Windows and doors	As building	Oekobau.dat 201
A1-A3	Aluminium window system, triple glazed, 1230 x 1480 mm	85	m2	1,18E4	4,03E1	5,09E0	2,62E-4	4,17E0	1,9E5	Windows and doors	As building	Oekobau.dat 201
A1-A3	Steel door frame, per unit, 1.23 x 2.18 m, W: 32-600 mm,	116	unit	5,28E3	1,78E1	1,59E0	8,65E-8	2,45E0	6,74E4	Windows and doors	As building	EPD Türzarge au
A1-A3	Aluminium window system, triple glazed, 1230 x 1480 mm	128	m2	1,77E4	6,07E1	7,66E0	3,94E-4	6,27E0	2,86E5	Windows and doors	As building	Oekobau.dat 201
A1-A3	Aluminium window system, triple glazed, 1230 x 1480 mm	248	m2	3,43E4	1,18E2	1,48E1	7,64E-4	1,22E1	5,54E5	Windows and doors	As building	Oekobau.dat 201

Section	Resource	User input	Unit	GWP kg CO2e	AP kg SO2e	EP kg PO4e	ODP kg CFC11e	POCP kg Ethenee	PE MJ	Question	Service life	Datasource
A1-A3	Wooden interior door, per m2, 809x2053 mm, 42x92 mm f	674.4	m2	2,27E4	1,49E2	4,47E1	2,33E-3	1,58E1	1,16E6	Windows and doors	As building	EPD Climate doc
A1-A3	Aluminium window system, triple glazed, 1230 x 1480 mm	1033.91	m2	1,43E5	4,9E2	6,19E1	3,19E-3	5,07E1	2,31E6	Windows and doors	As building	Oekobau.dat 201
A4	Thermoset resin insulation, glass tissue faced/backed, 5.0	12.7	m3	5,11E0	2,35E-2	5,12E-3	1,01E-6	2,88E-4	1,45E2	Windows and doors	As building	EPD Kooltherm k
A4	Multifunctional steel door, without frame, 1.23 x 2.18 m, ins	12.8	m2	1,35E0	6,21E-3	1,35E-3	2,66E-7	7,61E-5	3,84E1	Windows and doors	As building	EPD Multifunktio
A4	Skylight, smoke lift, F100 (Lamilux)	15.4	m2	7,16E0	3,3E-2	7,18E-3	1,41E-6	4,04E-4	2,04E2	Windows and doors	20	Oekobau.dat 201
A4	Aluminium window system, triple glazed, 1230 x 1480 mm	48.39	m2	2,23E1	1,03E-1	2,24E-2	4,4E-6	1,26E-3	6,35E2	Windows and doors	As building	Oekobau.dat 201
A4	Aluminium door system, per m2, 1100 x 2200 mm, 100.59	64.5	m2	3,08E1	1,42E-1	3,09E-2	6,08E-6	1,74E-3	8,77E2	Windows and doors	As building	Schüco ADS 90.:
A4	Aluminium window system, triple glazed, 1230 x 1480 mm	73.43	m2	3,38E1	1,56E-1	3,39E-2	6,68E-6	1,91E-3	9,63E2	Windows and doors	As building	Oekobau.dat 201
A4	Aluminium window system, triple glazed, 1230 x 1480 mm	85	m2	3,92E1	1,8E-1	3,93E-2	7,73E-6	2,21E-3	1,11E3	Windows and doors	As building	Oekobau.dat 201
A4	Steel door frame, per unit, 1.23 x 2.18 m, W: 32-600 mm,	116	unit	2,51E1	1,16E-1	2,52E-2	4,96E-6	1,42E-3	7,15E2	Windows and doors	As building	EPD Türzarge au
A4	Aluminium window system, triple glazed, 1230 x 1480 mm	128	m2	5,9E1	2,72E-1	5,92E-2	1,16E-5	3,32E-3	1,68E3	Windows and doors	As building	Oekobau.dat 201
A4	Aluminium window system, triple glazed, 1230 x 1480 mm	248	m2	1,14E2	5,26E-1	1,15E-1	2,26E-5	6,44E-3	3,25E3	Windows and doors	As building	Oekobau.dat 201
A4	Wooden interior door, per m2, 809x2053 mm, 42x92 mm f	674.4	m2	2,82E2	1,3E0	2,83E-1	5,56E-5	1,59E-2	8,02E3	Windows and doors	As building	EPD Climate doc
A4	Aluminium window system, triple glazed, 1230 x 1480 mm	1033.91	m2	4,76E2	2,19E0	4,78E-1	9,41E-5	2,69E-2	1,36E4	Windows and doors	As building	Oekobau.dat 201
B1-B5	Skylight, smoke lift, F100 (Lamilux)	15.4	m2	2,06E3	1,11E1	1,23E0	2,61E-5	1,85E0	9,54E4	Windows and doors	20	Oekobau.dat 201
C1-C4	Thermoset resin insulation, glass tissue faced/backed, 5.0	12.7	m3	1,12E3	2,63E-1	2,19E-2	9,04E-11	1,2E-2	6,11E2	Windows and doors	As building	EPD Kooltherm k
C1-C4	Multifunctional steel door, without frame, 1.23 x 2.18 m, ins	12.8	m2	3,2E-1	2,51E-3	5,2E-4	2,56E-13	2,48E-4	6,68E0	Windows and doors	As building	EPD Multifunktio
C1-C4	Skylight, smoke lift, F100 (Lamilux)	15.4	m2	8,44E0	5,22E-2	7,53E-3	1,3E-10	5,06E-3	1,26E2	Windows and doors	20	Oekobau.dat 201
C1-C4	Aluminium window system, triple glazed, 1230 x 1480 mm	48.39	m2	5,3E0	4,15E-2	8,6E-3	4,23E-12	4,1E-3	1,1E2	Windows and doors	As building	Oekobau.dat 201
C1-C4	Aluminium door system, per m2, 1100 x 2200 mm, 100.59	64.5	m2	7,32E0	5,74E-2	1,19E-2	5,84E-12	5,67E-3	1,53E2	Windows and doors	As building	Schüco ADS 90.:
C1-C4	Aluminium window system, triple glazed, 1230 x 1480 mm	73.43	m2	8,04E0	6,3E-2	1,31E-2	6,42E-12	6,23E-3	1,68E2	Windows and doors	As building	Oekobau.dat 201
C1-C4	Aluminium window system, triple glazed, 1230 x 1480 mm	85	m2	9,3E0	7,29E-2	1,51E-2	7,43E-12	7,21E-3	1,94E2	Windows and doors	As building	Oekobau.dat 201
C1-C4	Steel door frame, per unit, 1.23 x 2.18 m, W: 32-600 mm,	116	unit	5,97E0	4,68E-2	9,69E-3	4,77E-12	4,63E-3	1,24E2	Windows and doors	As building	EPD Türzarge au
C1-C4	Aluminium window system, triple glazed, 1230 x 1480 mm	128	m2	1,4E1	1,1E-1	2,28E-2	1,12E-11	1,09E-2	2,92E2	Windows and doors	As building	Oekobau.dat 201
C1-C4	Aluminium window system, triple glazed, 1230 x 1480 mm	248	m2	2,71E1	2,13E-1	4,41E-2	2,17E-11	2,1E-2	5,66E2	Windows and doors	As building	Oekobau.dat 201
C1-C4	Wooden interior door, per m2, 809x2053 mm, 42x92 mm f	674.4	m2	3,08E3	4,17E0	9,13E-1	1,46E-9	3,44E-1	1,11E4	Windows and doors	As building	EPD Climate doc
C1-C4	Aluminium window system, triple glazed, 1230 x 1480 mm	1033.91	m2	1,13E2	8,87E-1	1,84E-1	9,04E-11	8,77E-2	2,36E3	Windows and doors	As building	Oekobau.dat 201
D	Thermoset resin insulation, glass tissue faced/backed, 5.0	12.7	m3	-6,92E2	-7,46E-1	-1,19E-1	-1,25E-9	-7,76E-2	-1,22E4	Windows and doors	As building	EPD Kooltherm k
D	Multifunctional steel door, without frame, 1.23 x 2.18 m, ins	12.8	m2	-2,46E2	-1,36E0	-8,43E-2	-2,56E-9	-7,9E-2	-3,19E3	Windows and doors	As building	EPD Multifunktio
D	Steel door frame, per unit, 1.23 x 2.18 m, W: 32-600 mm,	116	unit	-5,66E3	-3,13E1	-1,94E0	-5,89E-8	-1,82E0	-7,34E4	Windows and doors	As building	EPD Türzarge au
D	Wooden interior door, per m2, 809x2053 mm, 42x92 mm f	674.4	m2	-1,31E4	-1,39E1	-2,22E0	-2,27E-8	-1,47E0	-2,3E5	Windows and doors	As building	EPD Climate doc
				2,72E5	**9,99E2**	**1,52E2**	**7,82E-3**	**1,06E2**	**5,22E6**	**Windows and doors**		