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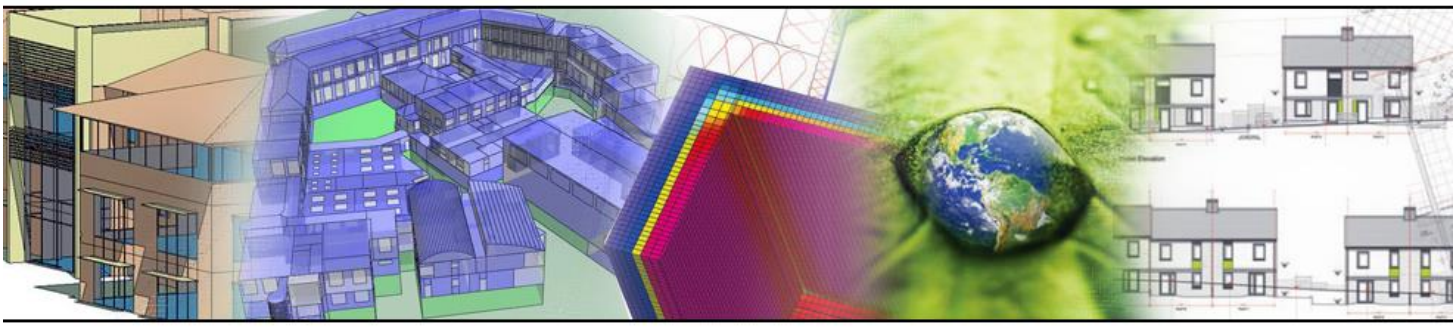


Whole Life Cycle Carbon Assessment

Woolley Colliery Road, Darton, Barnsley

Stroma Reference: 07-24-C522 WLC1
Date: 24/09/2024
Prepared for: Gleeson Homes

1. Executive Summary

This Whole Life-Cycle Carbon Statement has been produced on behalf of Gleesons for the proposed housing development at Woolley Colliery Road, Darton, Barnsley

This report has been prepared in line with the guidance given in the RICS Professional Statement Whole Life Carbon Assessment for the Built Environment 2017 and the LETI Embodied Carbon Reporting guidance. Results have been reported and the whole life carbon emissions compared against industry standard best practice benchmark levels taken from the LETI institute and Greater London Authority Guidance. These benchmarks are shown in the table below. The estimated embodied carbon emissions for the relevant modules from the assessment are below both the the best practice industry benchmark levels and the aspirational benchmark levels.

1.1. Results Summary

Assessment Scope	Baseline Emissions ($kgCO_2e$)
Upfront Carbon Emissions A1-A5 modules (excluding sequestration)	4,922,059
Life Cycle Carbon Modules B-C (excluding B6 & B7)	2,267,221
Life Cycle Emissions A-C (excluding B6 & B7, including sequestration)	6,668,180
Life Cycle Emissions for all Modules	10,438,910

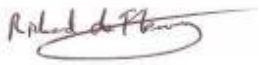
Table 1. LCA Results Total Emissions

Module	Current Average Design (LETI Guidance) kg $CO_2e/m2$	GLA Best Practice benchmark kg $CO_2e/m2$	GLA Aspirational benchmark kg $CO_2e/m2$	Actual WLC $kgCO_2e/m2$
A1-A5 (excluding sequestration)	<850	<850	<500	486
B-C (excluding B6 & B7)	No benchmark available	<350	<300	224
A-C (excluding B6 & B7, including sequestration)	<1200	<1200	<800	659
All Modules	No benchmark available	No benchmark available	No benchmark available	1,031

Table 2. Actual Emissions kgCO2e/m2

Contents

2. Quality Management

Prepared by	Checked by
	
Rob Waiting BSc (hons) MSc	Richard de Fleury BEng (hons) MSc
Principal Sustainability Consultant	Principal Sustainability Consultant
Date: 24/09/2024	**Date:** 24/09/2024
File reference:	07-24-C522 WLC1

Version	Status	Date	Change Summary
LCA1	First Issue	24.09.24	

3. Development

Stroma Built Environment has been commissioned by Gleesons Homes to prepare a Whole Life Carbon Assessment in line with the RICS Whole Life Carbon Assessment for the Built Environment. This is a Local Validation Requirement for major developments in the Barnsley Metropolitan Borough Council Area in line with Policies CC2 and RE1 of the Local Plan and the Sustainable Construction and Climate Change Adaption Supplementary Planning Document.

The development site is located within Darton, Barnsley on land off Woolley Colliery Road. The proposal will consist of the development of 114 dwellings split into 72 dwellings on Site A and 42 dwellings on Site B. There will be a mixture of 2-4 bedroom detached and semi-detached houses, with associated access, landscaping and parking.

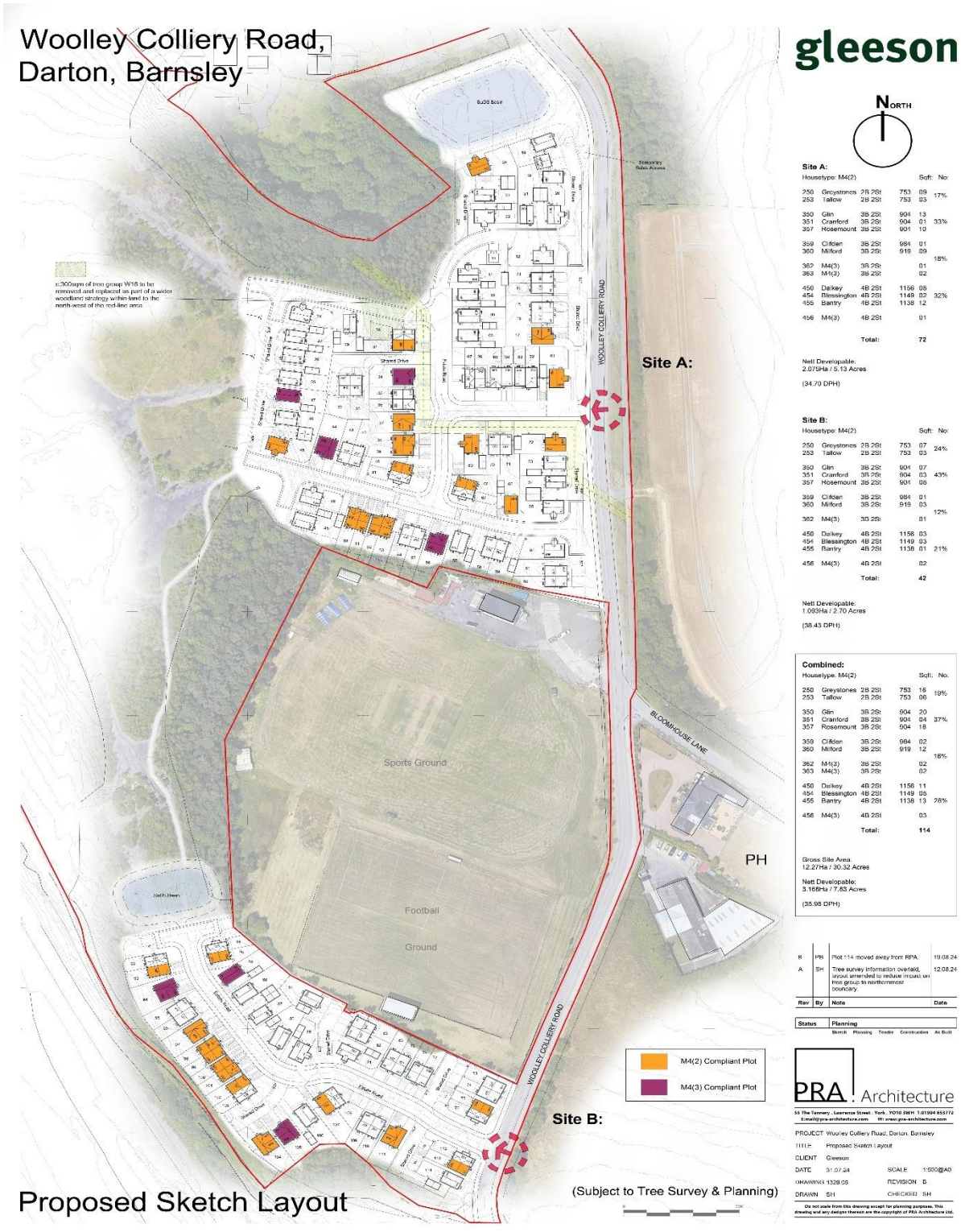


Figure 1. Proposed Site Layout

4. Assessment Criteria

4.1. Barnsley Metropolitan Local Plan Requirements

It is a requirement of the Local Supplementary Planning Document 'Sustainable Construction and Climate Change Adaption' to produce a Whole Life Carbon Assessment for applications for major development as copied below.

Whole life carbon emissions relate to the carbon emissions associated with a building over its entire lifetime arising from materials, its construction, and its use. Traditionally it has mainly been operational emissions that have been assessed. The RICS whole life carbon assessment for the built environment document November 2017 states that "A whole life carbon approach identifies the overall best combined opportunities for reducing lifetime emissions, and also helps to avoid any unintended consequences of focusing on operational emissions alone. For example, the embodied carbon burden of installing triple glazing rather than double can be greater than the operational benefit resulting from the additional pane. Therefore, whole life carbon needs to be effectively integrated into the sustainability agenda in order to achieve a lower carbon future."

A whole life carbon assessment will be required with full or hybrid applications or assessment of approval of reserved matters for major developments (10 dwellings or above and 1000m2 or above for commercial developments or change of use developments). Where we receive an outline application, if minded to approve, a condition will be added requiring submission of a Whole life carbon assessment alongside the reserved matters. The whole life carbon assessment will be expected to follow the model set out in the RICS professional statement 'Whole Life Carbon Assessment for the Built Environment, 2017", or, if applicable, the latest subsequent version of this document or other recognised document setting out best practice for whole life carbon assessment. which RICS members must act in accordance with.

4.2. Assessment Scope

The assessment of Whole Life Carbon (WLC) emissions consists of the following sections: total operational carbon emissions; embodied carbon emissions; and any future potential carbon emissions 'benefits', post end-of-life, including benefits from reuse and recycling of building structure and materials.

This assessment has been undertaken in line with the RICS Professional Statement: Whole Life Carbon Assessment for the Built Environment. The OneClick LCA Tool has been used to calculate the embodied carbon emissions associated with the below stages of the project.

In the assessment following life cycle stages according to EN 15804:2012 were included:

- A1-A5 Emissions
- A-C (excluding B6 and B7)
- All Modules (excluding B1 due to lack of data and B5 as no future refurbishment is planned at this stage)

Product Stage			Construction Process Stage		Use Stage							End-of-Life Stage				Benefits and loads beyond the system boundary		
Raw material supply	Transport	Manufacturing	Transport to building site	Installation into building	Use/application	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling
A1	A2	A3	A4	A5	B1	B2	B3	B4	~~B5~~	B6	B7	C1	C2	C3	C4	D	D	D
x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x

Figure 3.Life Cycle Stages

A description of the life cycle stages and analysis scope are provided in the table below:

A1-A3 Construction Materials	Raw material supply (A1) includes emissions generated when raw materials are taken from nature, transported to industrial units for processing and processed. Loss of raw material and energy are also taken into account. Transport impacts (A2) include exhaust emissions resulting from the transport of all raw materials from suppliers to the manufacturer's production plant as well as impacts of production of fuels. Production impacts (A3) cover the manufacturing of the production materials and fuels used by machines, as well as handling of waste formed in the production processes at the manufacturer's production plants until end-of-waste state.
A4 Transportation to site	A4 includes exhaust emissions resulting from the transport of building products from manufacturer's production plant to building site as well as the environmental impacts of production of the used fuel.
A5 Construction/installation process	A5 covers the exhaust emissions resulting from using energy during the site operations, the environmental impacts of production processes of fuel and energy and water as well as handling of waste until the end-of-waste state.
B1-B5 Maintenance and material replacement	The environmental impacts of maintenance and material replacements (B1-B5) include environmental impacts from replacing building products after they reach the end of their service life. The emissions cover impacts from raw material supply, transportation and production of the replacing new material as well

	as the impacts from manufacturing the replacing material as well as handling of waste until the end-of-waste state.
B6 Energy use	The considered use phase energy consumption (B6) impacts include exhaust emissions from any building level energy production as well as the environmental impacts of production processes of fuel and externally produced energy. Energy transmission losses are also taken into account.
B7 Water use	The considered use phase water consumption (B7) impacts include the environmental impacts of production processes of fresh water and the impacts from waste water treatment.
C1-C4 Deconstruction	The impacts of deconstruction include impacts for processing recyclable construction waste flows for recycling (C3) until the end-of-waste stage or the impacts of pre-processing and landfilling for waste streams that cannot be recycled (C4) based on type of material. Additionally deconstruction impacts includes emissions caused by waste energy recovery.
D External impacts/end-of-life benefits	The external benefits include emission benefits from recycling recyclable building waste. Benefits for re-used or recycled material types include positive impact of replacing virgin based material with recycled material and benefits for materials that can be recovered for energy cover positive impact for replacing other energy streams based on average impacts of energy production.

4.3. Assessment Software

The calculations were performed with One Click LCA calculation tool. The software is fully compliant with EN 15978 standard. One Click LCA has been third party verified by ITB for compliancy with the following LCA standards: EN 15978, ISO 21931–1 and ISO 21929, and data requirements of ISO 14040 and EN 15804. You can find the official letters of compliancy here:

https://www.oneclicklca.com/wp-content/uploads/2016/11/360optimi-verification-ITB-Certificate-scanned-1.pdf.

ITB is a certification organization and a Notified Body (EC registration nr. 1488) to the European Commission designated for construction product certification. Polish Accreditation Board assures the independence and impartiality of ITB services (Accreditation Certificates are: AB 023, AC 020, AC 072, AP 113). ITB activities are conducted in accordance to the requirements of the following assurance standards: ISO 9001, ISO/IEC 27001, ISO/IEC 17025, EN 45011, and ISO/IEC 17021.

4.4. Operational Carbon Emissions

Predicted annual energy consumption has been determined using SAP Calculation Modelling as part of the Energy Statement produced by Stroma Built Environment. This confirms the predicted regulated energy consumption is 24.11 kWh/m2 (NIA) annum. This equates to a total energy usage of 244,114 kWh/yr. The predicted unregulated energy consumption is 30.24 kWh/m2 (NIA) per annum which equates to a total energy usage of 306,214 kWh/yr.

4.5. Embodied Carbon Assessment and End-of-life emissions

One Click LCA has been used to assess the embodied carbon associated with the development to produce the anticipated materials quantities in an inventory analysis. Each material specified has been matched to anticipated Environmental Product Declaration (EPD). These are produced by manufacturers and identify the carbon emissions of a product. By scheduling together all the materials specified, the overall carbon emissions can be calculated.

The One Click Tool has a limited database of materials and where a specified material is not included, the most similar material in terms of composition is selected. The LCA process and results have been assessed in line with BS 15978:2011 and the RICS Professional Statement: Whole Life Carbon Assessment for the Built Environment. All EPDS's stored within One Click have been produced in line with the requirements of BS EN 15804: 2012 and each material has been assessed against the following life cycle stages:

- A1-A3: Product stage
- A4: Material transportation to site
- B4-B5: Replacement and maintenance
- C1-C4: End of life

The Construction Phase A5 has also been included to give an estimate of the emission related to the electrical consumption and waste disposal.

In line with the RICS Guidance, the assessment includes the following elements:

- Demolition (emissions associated with demolition and facilitating works are included in the A5 Lifecycle Phase)
- Facilitating works
- Substructure
- Superstructure (frame, upper floors, roof, stairs and ramps, external walls, windows and external doors, internal walls and partitions, internal doors)
- Finishes
- Fittings, furnishings and equipment
- Building services
- Prefabricated buildings and building units
- Work to existing building (not applicable to this development)
- External works (hard and soft landscaping, fencing, fixtures, drainage, services)

4.6. Data Sources

One Click LCA LCA EN-15978 tool was used in the assessment. The tool supports CML (2002 - November 2012 or newer) methodology and all assessed impact categories. All of the datasets in the tool follow EN 15804 standard. A complete list of data sources including all EPD's used is presented in Appendix A.

The documents have been reviewed as part of the assessment:

1. Plans, elevations and specifications
2. Stroma Built Environment Energy Statement

3. Stroma Built Environment SAP Calculations

5. Assessment Parameters

5.1. Data sources within the Assessment

The following table details the assumptions and data sources for the assessment against each of the required element groups.

Building Element Group	Building element	Data Sources
Facilitating Works	0.3 & 0.5 Temporary/enabling works	Due to the project currently at RIBA Stage 2 this information is not yet available
	0.4 Specialist groundworks	No specialist groundworks are known at this stage and have not been included in the assessment
1 Substructure	1.1 Foundations	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
2 Superstructure	2.1 Frame	There are no structural frames within the houses
	2.2 Upper Floors	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
	2.3 Roof	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
	2.4 Stairs and ramps	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
	2.5 External Walls	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
	2.6 Windows and external doors	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
	2.7 Internal Walls and partitions	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
	2.8 Internal doors	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element

3 Finishes	3.1 Wall finishes	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
	2.3 Floor Finishes	No floor finishes are provided
	3.3 Ceiling Finishes	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
4 Fittings, furnishings and equipment (FF&E)	4.1 Fittings, furnishings & equipment incl. building-related* and non-building-related**	Furnishing and equipment are not fully designed at this stage and are not currently included
5 Building services/MEP	5.1–5.14 Services incl. building-related* and non-building-related**	The House Type Specification contains the details. These have been entered into the OneClick LCA Carbon Designer Tool which provides an estimate of the CO_2 associated with the construction of this element
6 Prefabricated Buildings and Building Units	6 Prefabricated Buildings and Building Units	There are no prefabricated Buildings
7 Work to Existing Building	7.1 Minor demolition and alteration works	There are no minor works to existing buildings
8 External Works	8.1 Site preparation works	This information is not included in the cost plan
	8.2 Roads, paths, paving and surfacing	This information has been taken from the project site plan. An assumption of car parking spaces and paths has been made based on the below: 2 bed dwellings 1 space 3 and 4 bed dwellings 2 spaces
	8.3 Soft landscaping, planting and irrigation systems	Due to the project currently at RIBA Stage 2 this information is not yet available
	8.4 Fencing, railings and walls	Due to the project currently at RIBA Stage 2 this information is not yet available
	8.5 External fixtures	Due to the project currently at RIBA Stage 2 this information is not yet available
	8.6 External drainage	Due to the project currently at RIBA Stage 2 this information is not yet available
	8.7 External services	Due to the project currently at RIBA Stage 2 this information is not yet available
	8.8 Minor building works and ancillary buildings	There are no works classified as minor building works and ancillary buildings

Module	Description	Data Source
A1-A3 Construction Materials	Raw material supply (A1) includes emissions generated when raw materials are taken from nature, transported to industrial units for processing and processed. Loss of raw material and energy are also taken into account. Transport impacts (A2 include exhaust emissions resulting from the transport of all raw materials from suppliers to the manufacturer's production plant as well as impacts of production of fuels. Production impacts (A3) cover the manufacturing of the production materials and fuels used by machines, as well as handling of waste formed in the production processes at the manufacturer's production plants until end-of-waste state.	Calculated using EPD's from OneClick LCA which align with the exact product (where known) or the most applicable similar product.
A4 Transportation to site	A4 includes exhaust emissions resulting from the transport of building products from manufacturer's production plant to building site as well as the environmental impacts of production of the used fuel.	Transport distances were estimated by Oneclick using the dataset from Table 7 of the RICS Whole Life Carbon Professional Statement Guidance 2017
A5 Construction/ installation process	A5 covers the exhaust emissions resulting from using energy during the site operations, the environmental impacts of production processes of fuel and energy and water as well as handling of waste until the end-of-waste state.	Transport distances were estimated by Oneclick using the dataset from the Average site impacts - temperate climate (South), EU electricity mix, 2024
B1-B5 Maintenance and material replacement	The environmental impacts of maintenance and material replacements (B1-B5) include environmental impacts from replacing building products after they reach the end of their service life. The emissions cover impacts from	Use (B1) includes the impact of refrigerant leakage. Refrigerant associated with annual and end of life leakage from the proposed air source heat pumps has been included. This is based on the Panasonic WH-MDC05J3E5 air source heat pump proposed.

	raw material supply, transportation and production of the replaced new material as well as the impacts from manufacturing the replaced material and handling of waste until the end-of-waste state.	Maintenance (B2) emissions - No data was available from the design team and emissions have been estimated for relevant products using the below nominal assumption from the GLA Guidance Document: • 10 kgCO2e/m2 Repair (B3) No data was available from the design team and emissions have been estimated for relevant products using the below nominal assumptions in line with the GLA Guidance Document • 25% of B2 emissions. Replacement (B4) were based on the inputted EPD's from Oneclick Refurbishment (B5) account for the technical service life of the building components "BCIS Life expectancy of building components". There is no know refurbishment strategy so these emissions are excluded
B6 Energy Use	The considered use phase energy consumption (B6) impacts include exhaust emissions from any building level energy production as well as the environmental impacts of production processes of fuel and externally produced energy. Energy transmission losses are also taken into account.	Energy consumption data for regulated and energy usage is taken from the SAP Calculations
B7 Water Use	The considered use phase water consumption (B7) impacts include the environmental impacts of production processes of fresh water and the impacts from wastewater treatment.	Water consumption based on Building Regulations Part G 'Enhanced Consumption' of 105 l/p/d and multiplied by the intended full occupancy of the development, using the EPD for conventionally treated UK tap water. Total occupancy is 468 persons x 105 l/p/d = 49,140 litres per day = 17,936,100 litres per annum. Equates to 17,936 m3
C1-C4 Deconstruction	The impacts of deconstruction include impacts for processing recyclable construction waste flows for recycling (C3) until the end-of-waste stage or the	C1 Deconstruction/demolition) and C2 (Transport) are based on default values. C3 (Waste Processing) and C4 (Disposal) use OneClick LCA's default end of life scenarios.

	impacts of pre-processing and landfilling for waste streams that cannot be recycled (C4) based on type of material. Additionally, deconstruction impacts include emissions caused by waste energy recovery.	
D External impacts/end of life benefits	External benefits for re-used or recycled material types include the positive impact of replacing virgin based material with recycled material and the benefits of the energy which can be recovered from the materials.	D (End of Life) use OneClick LCA's default end of life scenarios.

6. Results

6.1. Whole Life Carbon Emissions

A whole life carbon assessment has been undertaken for the Proposed Development. The assessment has been undertaken in line with the guidance given in the RICS Professional Statement.

The results are shown in the following table.

Assessment Scope	Baseline Emissions ($kgCO_2e$)
Upfront Carbon Emissions A1-A5 modules (excluding sequestration)	4,922,059
Life Cycle Carbon Modules B-C (excluding B6 & B7)	2,267,221
Life Cycle Emissions A-C (excluding B6 & B7, including sequestration)	6,668,180
Life Cycle Emissions for all Modules	10,438,910

Table 3. Whole Life Cycle Emissions

The full results from the LETI guidelines Reporting spreadsheet are provided within Appendix B.

Result category	Biogenic carbon (kg CO2e)	A1-A3 Product Stage	A4 Transportation to site	A5 Site operations	B1 Use Phase	B2 Maintenance	B3 Repair	B4 Material replacement - materials	B5 Material refurbishment	B6 Operational Energy use - Regulated	B6 Operational Energy use - Unregulated	B7 Operational Water use	C1 Deconstruction / demolition	C2 Waste transportation	C3 Waste processing	C4 Waste disposal	TOTAL kg CO2e	D External impacts (not included in totals)
0.1 Toxic Mat.																		
0.2 Demolition																		
0.3 Supports																		
0.4 Groundworks																		
0.5 Diversion																		
1 Substructure	0	838787.6	95775.69	48995.61			0	4078.36	0					20906.56	63773.22		1079833	-193443
2.1 Frame																		
2.2 Upper Floors	-226247	159692.1	6115.5	22813.76			0							2459.85	228130	63.1	193027.4	-103939
2.3 Roof	-177123	154097.1	9298.01	14451.66			0	45191.91	0					1357.52	195661.8	98.63	243033.8	-134756
2.4 Stairs & Ramps	-25031	16332.78	186.45	3001.72			0							57.4	25223.72		19771.09	-10981.8
2.5 Ext. Walls	0	1842944	57981.14	147258.5			0	8413.86	0					19876.28	1864.52	1115.97	2079454	-75615.6
2.6 Windows & Ext. Doors	0	205489.6	280.87	0			0	205961.3	0					187.25	1.02	2.54	411922.5	-102.4
2.7. Int. Walls & Partitions	-70692	302158	14938.16	32364.6			0		0					7578.77	71742.26	54.14	358143.9	-55657.7
2.8 Int. Doors	-22007.7	11928.02	689.51	0			0	12793.21						45.97	22131.17	6.24	25586.42	
3 Finishes	0	38710.7	1685.64	5208			0	19417.09	0					2486.7	80.04	7.08	67595.24	-282.06
4 Fittings, furnishings & equipments																		
5 Services (MEP)	0	517267.6	100721.4	7522.92	342346.7		0	629460.8	0	1991970	2498706	291250.4		4158.07	373.45	28.23	6393128	-434695
6 Prefabricated																		
7 Existing bldg																		
8 Ext. works	0	46916.78	31019.42	0				128974.5						1184.57	133.06		92128.32	
Other or overall site construction				140816.5													140816.5	
Unclassified / Other	0	38574.34	3552.16	4484.31		101234	25308.5	72397.66	0					184.47	655.44	14.66	119863	-1724.66
TOTAL kg CO2e	**-521100**	**4172898**	**322243.9**	**426917.6**	**342346.7**	**101234**	**25308.5**	**1126689**	**0**	**1991970**	**2498706**	**291250.4**		**60483.41**	**609769.6**	**1390.59**	**11450108**	**-1011197**
KG CO2/m2	-51	412	32	42	34	10	3	111	0	197	247	29		6	60	0	1131	

Table 4. Whole Life Carbon Emissions for all stages A-D

The overall emissions for the SAP10 factors are shown in the graphs below.

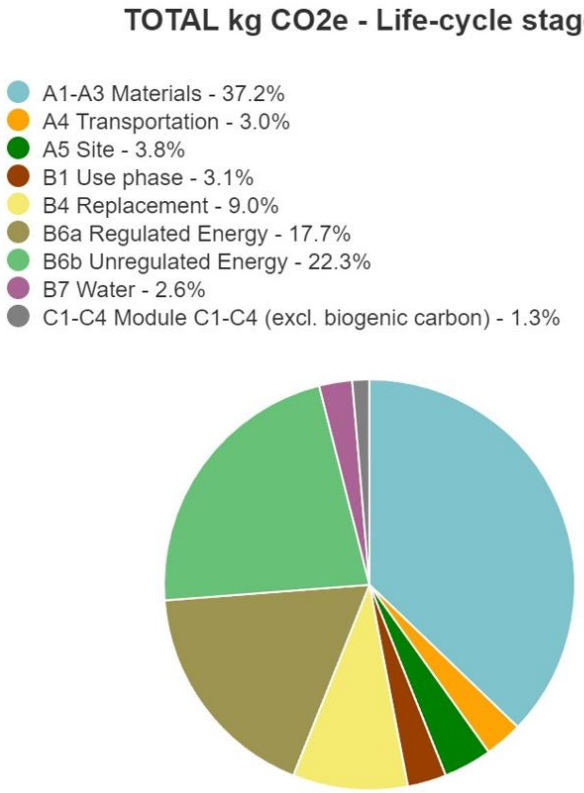


Figure 4.Pie chart of Whole Life Cycle Emissions by Life Cycle Stage

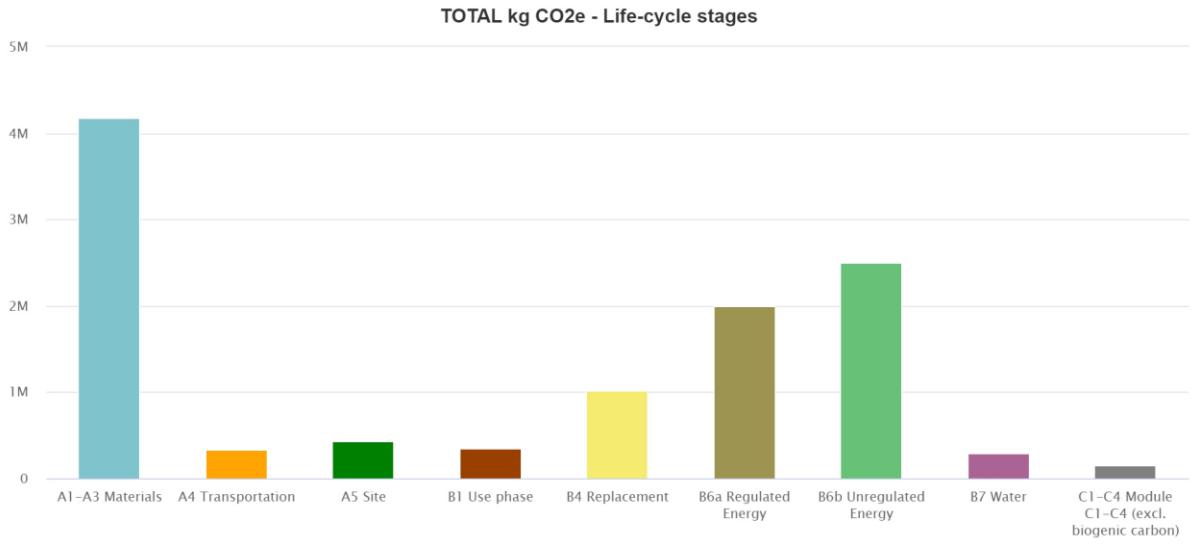


Figure 5. Bar chart of Whole Life Cycle Emissions by Life Cycle Stage

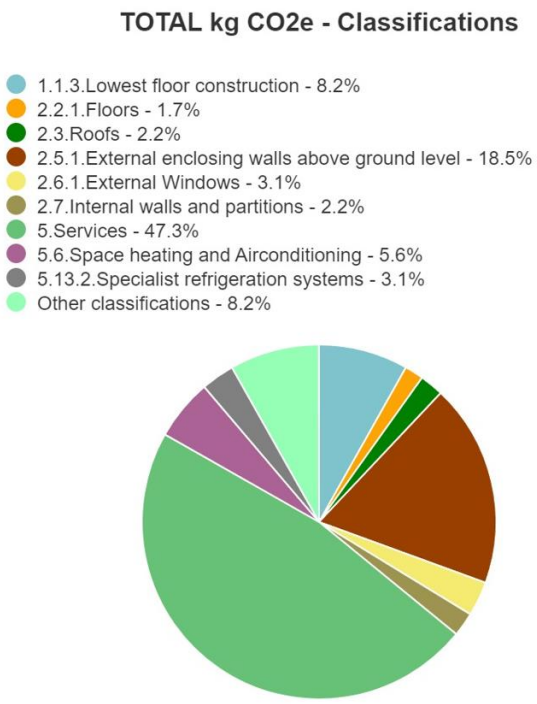


Figure 6.Life Cycle Emissions by RICS Classification

6.2. Comparison with benchmark data

The Whole Life Cycle Carbon Emissions have been calculated for the development and compared against the industry standard benchmark data provided within the Greater London Authority Whole Life Carbon Assessments, and the LETI Guidance for Defining and Aligning: Whole Life Carbon & Embodied Carbon.

The full data from the OneClick Report is provided within Appendix A.

Module	Current Average Design (LETI Guidance) kg $CO_2e/m2$	GLA Best Practice benchmark kg $CO_2e/m2$	GLA Aspirational benchmark kg $CO_2e/m2$	Actual WLC kg$CO_2e/m2$
A1-A5 (excluding sequestration)	<850	<850	<500	486
B-C (excluding B6 & B7)	No benchmark available	<350	<300	224
A-C (excluding B6 & B7, including sequestration)	<1200	<1200	<800	659
All Modules	No benchmark available	No benchmark available	No benchmark available	1,031

Table 5. Carbon Emissions CO2e/m2

The data shows the each set of results to be within the aspirational practice benchmark.

6.2.1. LETI Embodied Carbon Declaration Results

In the absence of limited benchmark data to report the embodied and whole life cycle carbon emissions against, the results have been entered into the LETI (Low Energy Transformation Initiative) Embodied Carbon Declaration Template to report the results using the their Framework.

The full outputs from the LETI Guidance tool are shown in Appendix B with a summary below. This shows the assessment is currently achieving a result of C478 (kg/CO_2e/m^2) for Modules A1-A5 (upfront Embodied Carbon) and C638 (kg/CO_2e/m^2) for Life Cycle Carbon. Both these results are significantly better than the current design average of E850 (kg/CO_2e/m^2) and E1200 (kg/CO_2e/m^2) respectively.

	Upfront Embodied Carbon A1-5 exc. sequestration (kgCO_2e/m^2)	Life Cycle Embodied Carbon A1-5, B1-5, C1-4 (kgCO_2e/m^2)
Project Name Woolley Colliery Road, Darton, B **Project Sector** Residential (6+ storeys) **Assessment Date** 23.09.24 **Assessment By (company)** Stroma Built Environment **Location of Data** -		
A++	100	150
A+	200	300
A	300	450
B	400	625 C 638
C	500 C 478	800
D	675	1000
E Current	850	1200
F Average Design	1000	1400
G		
Non-Listed Typology:		
Sequestered Carbon:	-51 kgCO_2e/m^2	
Module D:		-100 kgCO_2e/m^2

Appendix A – Full Data Report from Oneclick

Entity use	Project name	Design na	Indicator name																																						
Rob Waiti	Woolley Colliery Road	2 - WLC A	Whole life carbon assessment, GLA / RICS / Green Mark																																						
Section	Resource	User input	Unit	Mass of raw materials kg	TOTAL kg CO_2e	0.1 Toxic Mat.	0.2 Demoliti on	0.3 Supports	0.4 Groundw orks	0.5 Diversio n	1 Substruc ture	2.1 Frame	2.2 Upper Floors	2.3 Roof	2.4 Stairs & Ramps	2.5 Ext. Walls	2.6 Windows & Ext. Doors	2.7. Int. Walls & Partition s	2.8 Int. Doors	3 Finishes	4 Fittings, furnishin gs & equipme nts	5 Services (MEP)	6 Prefabric ated	7 Existing bldg	8 Ext. works	Other or overall site construc tion	Unclassif ied / Other	Biogenic carbon storage kg CO_2e bio	Estimate d reusable materials kg	Estimate d recyclabl e materials kg	Question	EOL Process	RICS category	Commen t	Service life	Construc tion	Resourc e type	Datasour ce	Transfor mation process	Years of replacem ent	uniClass
A1-A3	Ready-mix concrete, low-strength, generic, C12/15 (1700/2200 PSI), 0% recycled binders in cement (220 kg/m3 / 13.73 lbs/ft3)	5057.44	m2	556318.4	55054.42						55054.42																0		556318.4	Foundatio	Concrete (	1.1.1.Stan		As buildin	Concrete (	Ready-mix	One Click			P2
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	31905.2	kg	31905.2	21200.91						21200.91																0		31905.2	Foundatio	Steel recy	1.1.1.Stan		As buildin	Footing fo	Reinforcer	One Click			P4
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	490251	kg	490251	55268.97						55268.97																0		490251	Foundatio	Concrete (	1.1.1.Stan		As buildin	Footing fo	Ready-mix	One Click			P2
A1-A3				**1078475**	**131524.3**						**131524.3**																		**1078475**			**1.1.1.Stan**								
A4	Ready-mix concrete, low-strength, generic, C12/15 (1700/2200 PSI), 0% recycled binders in cement (220 kg/m3 / 13.73 lbs/ft3)	5057.44	m2		3616.07						3616.07																			Foundatio	Concrete (	1.1.1.Stan		As buildin	Concrete (	Ready-mix	One Click			P2
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	31905.2	kg		13574.9						13574.9																			Foundatio	Steel recy	1.1.1.Stan		As buildin	Footing fo	Reinforcer	One Click			P4
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	490251	kg		3186.63						3186.63																			Foundatio	Concrete (	1.1.1.Stan		As buildin	Footing fo	Ready-mix	One Click			P2
A4					**20377.6**						**20377.6**																					**1.1.1.Stan**								
A5	Ready-mix concrete, low-strength, generic, C12/15 (1700/2200 PSI), 0% recycled binders in cement (220 kg/m3 / 13.73 lbs/ft3)	5057.44	m2	22252.74	2419.63						2419.63																		22252.74	Foundatio	Concrete (	1.1.1.Stan		As buildin	Concrete (	Ready-mix	One Click			P2
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	31905.2	kg	1547.4	1749.25						1749.25																		1547.4	Foundatio	Steel recy	1.1.1.Stan		As buildin	Footing fo	Reinforcer	One Click			P4
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	490251	kg	19610.04	2402.39						2402.39																		19610.04	Foundatio	Concrete (	1.1.1.Stan		As buildin	Footing fo	Ready-mix	One Click			P2
A5				**43410.18**	**6571.27**						**6571.27**																		**43410.18**			**1.1.1.Stan**								
B3	Ready-mix concrete, low-strength, generic, C12/15 (1700/2200 PSI), 0% recycled binders in cement (220 kg/m3 / 13.73 lbs/ft3)	5057.44	m2		0						0																			Foundatio	Concrete (	1.1.1.Stan		As buildin	Concrete (	Ready-mix	One Click			P2
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	31905.2	kg		0						0																			Foundatio	Steel recy	1.1.1.Stan		As buildin	Footing fo	Reinforcer	One Click			P4
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	490251	kg		0						0																			Foundatio	Concrete (	1.1.1.Stan		As buildin	Footing fo	Ready-mix	One Click			P2
B3																															**1.1.1.Stan**								
C2	Ready-mix concrete, low-strength, generic, C12/15 (1700/2200 PSI), 0% recycled binders in cement (220 kg/m3 / 13.73 lbs/ft3)	5057.44	m2		1627.88						1627.88																			Foundatio	Concrete (	1.1.1.Stan		As buildin	Concrete (	Ready-mix	One Click	Dumper tr		P2
C2	Reinforcement steel (rebar), generic, 90% recycled content, A615	31905.2	kg		1221.73						1221.73																			Foundatio	Steel recy	1.1.1.Stan		As buildin	Footing fo	Reinforcer	One Click	Trailer con		P4
C2	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	490251	kg		1434.56						1434.56																			Foundatio	Concrete (	1.1.1.Stan		As buildin	Footing fo	Ready-mix	One Click	Dumper tr		P2
C2					**4284.17**						**4284.17**																					**1.1.1.Stan**								
C3	Ready-mix concrete, low-strength, generic, C12/15 (1700/2200 PSI), 0% recycled binders in cement (220 kg/m3 / 13.73 lbs/ft3)	5057.44	m2		192.42						192.42																			Foundatio	Concrete (	1.1.1.Stan		As buildin	Concrete (	Ready-mix	One Click			P2
C3	Reinforcement steel (rebar), generic, 90% recycled content, A615	31905.2	kg		69.41						69.41																			Foundatio	Steel recy	1.1.1.Stan		As buildin	Footing fo	Reinforcer	One Click			P4
C3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	490251	kg		169.57						169.57																			Foundatio	Concrete (	1.1.1.Stan		As buildin	Footing fo	Ready-mix	One Click			P2
C3					**431.41**						**431.41**																					**1.1.1.Stan**								

D	Ready-mix concrete, low-strength, generic, C12/15 (1700/2200 PSI), 0% recycled binders in cement (220 kg/m3 / 13.73 lbs/ft3)	5057.44	m2		-9078.31						-9078.31																				Foundatio	Concrete c	1.1.1.Stan		As buildin	Concrete c	Ready-mix	One Click			P2
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	31905.2	kg		-7375.11						-7375.11																				Foundatio	Steel recy	1.1.1.Stan		As buildin	Footing fo	Reinforcem	One Click			P4
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	490251	kg		-11520.8						-11520.8																				Foundatio	Concrete c	1.1.1.Stan		As buildin	Footing fo	Ready-mix	One Click			P2
D																																	**1.1.1.Star**								
TOTAL	Ready-mix concrete, low-strength, generic, C12/15 (1700/2200 PSI), 0% recycled binders in cement (220 kg/m3 / 13.73 lbs/ft3)	5057.44	m2		62910.43						62910.43																				Foundatio	Concrete c	1.1.1.Stan		As buildin	Concrete c	Ready-mix	One Click			P2
TOTAL	Reinforcement steel (rebar), generic, 90% recycled content, A615	31905.2	kg		37816.2						37816.2																				Foundatio	Steel recy	1.1.1.Stan		As buildin	Footing fo	Reinforcem	One Click			P4
TOTAL	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	490251	kg		62462.12						62462.12																				Foundatio	Concrete c	1.1.1.Stan		As buildin	Footing fo	Ready-mix	One Click			P2
TOTAL																																	**1.1.1.Star**								
bioC	Ready-mix concrete, low-strength, generic, C12/15 (1700/2200 PSI), 0% recycled binders in cement (220 kg/m3 / 13.73 lbs/ft3)	5057.44	m2		0						0																				Foundatio	Concrete c	1.1.1.Stan		As buildin	Concrete c	Ready-mix	One Click			P2
bioC	Reinforcement steel (rebar), generic, 90% recycled content, A615	31905.2	kg		0						0																				Foundatio	Steel recy	1.1.1.Stan		As buildin	Footing fo	Reinforcem	One Click			P4
bioC	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	490251	kg		0						0																				Foundatio	Concrete c	1.1.1.Stan		As buildin	Footing fo	Ready-mix	One Click			P2
bioC																																	**1.1.1.Star**								
				1121885	**163188.8**						**163188.8**																			**1121885**			**1.1.1.Star**								
A1-A3	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3	213193.9	70265.96						70265.96																	0		213193.9	Floor slabs	Cement/m	1.1.3.Low		As buildin	Concrete c	Leveling s	One Click			P2
A1-A3	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	2699.36	m2	8637.95	40042.38						40042.38																	0			Foundatio	Plastic-ba	1.1.3.Low		As buildin	Frost insul	EPS (expa	EPD_Lavl			P7
A1-A3	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	5057.44	m2	20229.76	93777.75						93777.75																	0			Floor slabs	Plastic-ba	1.1.3.Low	Lambda =	As buildin	Concrete c	EPS (expa	EPD_Lavl			P7
A1-A3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	5057.44	m2	3641357	410512.2						410512.2																	0		3641357	Floor slabs	Concrete c	1.1.3.Low		As buildin	Concrete c	Ready-mix	One Click			P2
A1-A3	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2	1011.49	1927.29						1927.29																	0			Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete c	Plastic me	ÖKOBAUI			P7
A1-A3	Reinforcement steel (rebar), generic, 90% recycled content, A615	136551	kg	136551	90737.74						90737.74																	0		136551	Floor slabs	Steel recy	1.1.3.Low	90 kg/m3	As buildin	Concrete c	Reinforcem	One Click			P4
A1-A3				**4020981**	**707263.3**						**707263.3**																			**3991102**			**1.1.3.Low**								
A4	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		408.19						408.19																				Floor slabs	Cement/m	1.1.3.Low		As buildin	Concrete c	Leveling s	One Click			P2
A4	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	2699.36	m2		99.23						99.23																				Foundatio	Plastic-ba	1.1.3.Low		As buildin	Frost insul	EPS (expa	EPD_Lavl			P7
A4	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	5057.44	m2		232.4						232.4																				Floor slabs	Plastic-ba	1.1.3.Low	Lambda =	As buildin	Concrete c	EPS (expa	EPD_Lavl			P7
A4	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	5057.44	m2		23668.82						23668.82																				Floor slabs	Concrete c	1.1.3.Low		As buildin	Concrete c	Ready-mix	One Click			P2
A4	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		58.1						58.1																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete c	Plastic me	ÖKOBAUI			P7
A4	Reinforcement steel (rebar), generic, 90% recycled content, A615	136551	kg		58099.17						58099.17																				Floor slabs	Steel recy	1.1.3.Low	90 kg/m3	As buildin	Concrete c	Reinforcem	One Click			P4
A4					**82565.9**						**82565.9**																						**1.1.3.Low**								

A5	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3	27715.2	9278.32						9278.32																			27715.2	Floor slabs	Cement/m	1.1.3.Low		As building	Concrete (	Leveling s	One Click			P2
A5	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	2699.36	m2	345.52	2320.61						2320.61																				Foundatio	Plastic-ba	1.1.3.Low		As building	Frost insul	EPS (expa	EPD Lavl			P7
A5	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	5057.44	m2	809.19	5434.78						5434.78																				Floor slabs	Plastic-ba	1.1.3.Low	Lambda =	As building	Concrete (	EPS (expa	EPD Lavl			P7
A5	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	5057.44	m2	145654.3	17843.83						17843.83																			145654.3	Floor slabs	Concrete (	1.1.3.Low		As building	Concrete (	Ready-mix	One Click			P2
A5	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2	101.15	407.84						407.84																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete (	Plastic me	ÖKOBAUI			P7
A5	Reinforcement steel (rebar), generic, 90% recycled content, A615	136551	kg	6622.72	7486.6						7486.6																			6622.72	Floor slabs	Steel recy	1.1.3.Low	90 kg/m3	As building	Concrete (	Reinforcer	One Click			P4
A5				**181248.1**	**42771.98**						**42771.98**																			**179992.2**			**1.1.3.Low**								
B3	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		0						0																				Floor slabs	Cement/m	1.1.3.Low		As building	Concrete (	Leveling s	One Click			P2
B3	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	2699.36	m2		0						0																				Foundatio	Plastic-ba	1.1.3.Low		As building	Frost insul	EPS (expa	EPD Lavl			P7
B3	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	5057.44	m2		0						0																				Floor slabs	Plastic-ba	1.1.3.Low	Lambda =	As building	Concrete (	EPS (expa	EPD Lavl			P7
B3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	5057.44	m2		0						0																				Floor slabs	Concrete (	1.1.3.Low		As building	Concrete (	Ready-mix	One Click			P2
B3	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		0						0																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete (	Plastic me	ÖKOBAUI			P7
B3	Reinforcement steel (rebar), generic, 90% recycled content, A615	136551	kg		0						0																				Floor slabs	Steel recy	1.1.3.Low	90 kg/m3	As building	Concrete (	Reinforcer	One Click			P4
B3																																	**1.1.3.Low**								
B4	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		4078.36						4078.36																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete (	Plastic me	ÖKOBAUI			P7
B5	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2	0	0						0																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete (	Plastic me	ÖKOBAUI			P7
C2	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		623.84						623.84																				Floor slabs	Cement/m	1.1.3.Low		As building	Concrete (	Leveling s	One Click	Dumper tr		P2
C2	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	2699.36	m2		33.08						33.08																				Foundatio	Plastic-ba	1.1.3.Low		As building	Frost insul	EPS (expa	EPD Lavl	Trailer cor		P7
C2	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	5057.44	m2		77.47						77.47																				Floor slabs	Plastic-ba	1.1.3.Low	Lambda =	As building	Concrete (	EPS (expa	EPD Lavl	Trailer cor		P7
C2	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	5057.44	m2		10655.24						10655.24																				Floor slabs	Concrete (	1.1.3.Low		As building	Concrete (	Ready-mix	One Click	Dumper tr		P2
C2	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		3.87						3.87																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete (	Plastic me	ÖKOBAUI	Trailer cor		P7
C2	Reinforcement steel (rebar), generic, 90% recycled content, A615	136551	kg		5228.89						5228.89																				Floor slabs	Steel recy	1.1.3.Low	90 kg/m3	As building	Concrete (	Reinforcer	One Click	Trailer cor		P4
C2					**16622.39**						**16622.39**																						**1.1.3.Low**								
C3	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		73.74						73.74																				Floor slabs	Cement/m	1.1.3.Low		As building	Concrete (	Leveling s	One Click			P2
C3	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	2699.36	m2		17840.53						17840.53																				Foundatio	Plastic-ba	1.1.3.Low		As building	Frost insul	EPS (expa	EPD Lavl			P7
C3	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	5057.44	m2		41781.86						41781.86																				Floor slabs	Plastic-ba	1.1.3.Low	Lambda =	As building	Concrete (	EPS (expa	EPD Lavl			P7

C3	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	5057.44	m2		1259.5						1259.5																				Floor slabs	Concrete c	1.1.3.Low		As building	Concrete c	Ready-mix	One Click			P2
C3	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		2089.09						2089.09																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete c	Plastic me	ÖKOBAUI			P7
C3	Reinforcement steel (rebar), generic, 90% recycled content, A615	136551	kg		297.08						297.08																				Floor slabs	Steel recy	1.1.3.Low	90 kg/m3	As building	Concrete c	Reinforcen	One Click			P4
C3					**63341.81**						**63341.81**																						**1.1.3.Low**								
D	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		-3780.08						-3780.08																				Floor slabs	Cement/m	1.1.3.Low		As building	Concrete c	Leveling s	One Click			P2
D	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	2699.36	m2		-12379.8						-12379.8																				Foundation	Plastic-ba	1.1.3.Low		As building	Frost insul	EPS (expa	EPD Lavl			P7
D	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	5057.44	m2		-28993						-28993																				Floor slabs	Plastic-ba	1.1.3.Low	Lambda =	As building	Concrete c	EPS (expa	EPD Lavl			P7
D	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	5057.44	m2		-85571.3						-85571.3																				Floor slabs	Concrete c	1.1.3.Low		As building	Concrete c	Ready-mix	One Click			P2
D	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		-3180.13						-3180.13																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete c	Plastic me	ÖKOBAUI			P7
D	Reinforcement steel (rebar), generic, 90% recycled content, A615	136551	kg		-31564.7						-31564.7																				Floor slabs	Steel recy	1.1.3.Low	90 kg/m3	As building	Concrete c	Reinforcen	One Click			P4
D																																	**1.1.3.Low**								
TOTAL	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		80650.05						80650.05																				Floor slabs	Cement/m	1.1.3.Low		As building	Concrete c	Leveling s	One Click			P2
TOTAL	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	2699.36	m2		60335.83						60335.83																				Foundation	Plastic-ba	1.1.3.Low		As building	Frost insul	EPS (expa	EPD Lavl			P7
TOTAL	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	5057.44	m2		141304.3						141304.3																				Floor slabs	Plastic-ba	1.1.3.Low	Lambda =	As building	Concrete c	EPS (expa	EPD Lavl			P7
TOTAL	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	5057.44	m2		463939.6						463939.6																				Floor slabs	Concrete c	1.1.3.Low		As building	Concrete c	Ready-mix	One Click			P2
TOTAL	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		8564.55						8564.55																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete c	Plastic me	ÖKOBAUI			P7
TOTAL	Reinforcement steel (rebar), generic, 90% recycled content, A615	136551	kg		161849.5						161849.5																				Floor slabs	Steel recy	1.1.3.Low	90 kg/m3	As building	Concrete c	Reinforcen	One Click			P4
TOTAL																																	**1.1.3.Low**								
bioC	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		0						0																				Floor slabs	Cement/m	1.1.3.Low		As building	Concrete c	Leveling s	One Click			P2
bioC	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	2699.36	m2		0						0																				Foundation	Plastic-ba	1.1.3.Low		As building	Frost insul	EPS (expa	EPD Lavl			P7
bioC	EPS Insulation, L= 0.031 W/mK, R= 1 m2K/W, 600x1200x31 mm, 16 kg/m3, pressure class 80 kN/m² (EPS-gruppen)	5057.44	m2		0						0																				Floor slabs	Plastic-ba	1.1.3.Low	Lambda =	As building	Concrete c	EPS (expa	EPD Lavl			P7
bioC	Ready-mix concrete, normal-strength, generic, C30/37 (4400/5400 PSI), 10% (typical) recycled binders in cement (300 kg/m3 / 18.72 lbs/ft3)	5057.44	m2		0						0																				Floor slabs	Concrete c	1.1.3.Low		As building	Concrete c	Ready-mix	One Click			P2
bioC	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		0						0																				Floor slabs	Plastic-ba	1.1.3.Low		30	Concrete c	Plastic me	ÖKOBAUI			P7
bioC	Reinforcement steel (rebar), generic, 90% recycled content, A615	136551	kg		0						0																				Floor slabs	Steel recy	1.1.3.Low	90 kg/m3	As building	Concrete c	Reinforcen	One Click			P4
bioC																																	**1.1.3.Low**								
				4202229	**916643.8**						**916643.8**																			**4171094**			**1.1.3.Low**								
A1-A3	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3	213193.9	70265.96								70265.96															0		213193.9	Floor slabs	Cement/m	2.2.1.Floo		As building	Wooden jc	Leveling s	One Click			P2
A1-A3	Planed timber, conifer (Treindustrien)	743.444	m2	69630.97	10055.99								10055.99															109420.1			Floor slabs	Wood inci	2.2.1.Floo	Quantity a	As building	Wooden jc	Plain wooc	Structural			P5

A1-A3	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	4314	m2	24266.25	27055.36								27055.36															0			Floor slabs	Landfilling	2.2.1.Floo	Quantity a	As buildin	Wooden j	Glass woo	One Click			P3
A1-A3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	5057.44	m2	56412.53	16265.16								16265.16															0		56412.53	Floor slabs	Gypsum r	2.2.1.Floo		As buildin	Wooden j	Regular gy	One Click			P232
A1-A3	Particleboard, uncoated, 8 - 48 x 590 - 2850 x 1025 - 6250 mm, 611 kg/m3 (Sonae Indústria)	5057.44	m2	67982.11	36049.68								36049.68															116826.9			Floor slabs	Wood inci	2.2.1.Floo		As buildin	Wooden j	Particlebo	EPD			P5
A1-A3				**431485.7**	**159692.1**								**159692.1**															**226247**		**269606.4**			**2.2.1.Floo**								
A4	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		408.19								408.19																		Floor slabs	Cement/m	2.2.1.Floo		As buildin	Wooden j	Leveling s	One Click			P2
A4	Planed timber, conifer (Treindustrien)	743.444	m2		3999.53								3999.53																		Floor slabs	Wood inci	2.2.1.Floo	Quantity a	As buildin	Wooden j	Plain woo	Structural			P5
A4	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	4314	m2		278.77								278.77																		Floor slabs	Landfilling	2.2.1.Floo	Quantity a	As buildin	Wooden j	Glass woo	One Click			P3
A4	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	5057.44	m2		648.05								648.05																		Floor slabs	Gypsum r	2.2.1.Floo		As buildin	Wooden j	Regular gy	One Click			P232
A4	Particleboard, uncoated, 8 - 48 x 590 - 2850 x 1025 - 6250 mm, 611 kg/m3 (Sonae Indústria)	5057.44	m2		780.96								780.96																		Floor slabs	Wood inci	2.2.1.Floo		As buildin	Wooden j	Particlebo	EPD			P5
A4					**6115.5**								**6115.5**																				**2.2.1.Floo**								
A5	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3	27715.2	9278.32								9278.32																	27715.2	Floor slabs	Cement/m	2.2.1.Floo		As buildin	Wooden j	Leveling s	One Click			P2
A5	Planed timber, conifer (Treindustrien)	743.444	m2	12463.94	2723.92								2723.92																		Floor slabs	Wood inci	2.2.1.Floo	Quantity a	As buildin	Wooden j	Plain woo	Structural			P5
A5	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	4314	m2	1941.3	2197.46								2197.46																		Floor slabs	Landfilling	2.2.1.Floo	Quantity a	As buildin	Wooden j	Glass woo	One Click			P3
A5	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	5057.44	m2	7051.57	2273.9								2273.9																	7051.57	Floor slabs	Gypsum r	2.2.1.Floo		As buildin	Wooden j	Regular gy	One Click			P232
A5	Particleboard, uncoated, 8 - 48 x 590 - 2850 x 1025 - 6250 mm, 611 kg/m3 (Sonae Indústria)	5057.44	m2	11353.01	6340.16								6340.16																		Floor slabs	Wood inci	2.2.1.Floo		As buildin	Wooden j	Particlebo	EPD			P5
A5				**60525.02**	**22813.76**								**22813.76**																	**34766.77**			**2.2.1.Floo**								
B3	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		0								0																		Floor slabs	Cement/m	2.2.1.Floo		As buildin	Wooden j	Leveling s	One Click			P2
B3	Planed timber, conifer (Treindustrien)	743.444	m2		0								0																		Floor slabs	Wood inci	2.2.1.Floo	Quantity a	As buildin	Wooden j	Plain woo	Structural			P5
B3	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	4314	m2		0								0																		Floor slabs	Landfilling	2.2.1.Floo	Quantity a	As buildin	Wooden j	Glass woo	One Click			P3
B3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	5057.44	m2		0								0																		Floor slabs	Gypsum r	2.2.1.Floo		As buildin	Wooden j	Regular gy	One Click			P232
B3	Particleboard, uncoated, 8 - 48 x 590 - 2850 x 1025 - 6250 mm, 611 kg/m3 (Sonae Indústria)	5057.44	m2		0								0																		Floor slabs	Wood inci	2.2.1.Floo		As buildin	Wooden j	Particlebo	EPD			P5
B3																																	**2.2.1.Floo**								

C2	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		623.84								623.84																		Floor slab	Cement/m	2.2.1.Floo		As buildin	Wooden j	Leveling s	One Click	Dumper tr		P2
C2	Planed timber, conifer (Treindustrien)	743.444	m2		266.64								266.64																		Floor slab	Wood inci	2.2.1.Floo	Quantity a	As buildin	Wooden j	Plain woo	Structural	Trailer con		P5
C2	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	4314	m2		71.01								71.01																		Floor slab	Landfilling	2.2.1.Floo	Quantity a	As buildin	Wooden j	Glass woo	One Click	Dumper tr		P3
C2	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	5057.44	m2		1238.05								1238.05																		Floor slab	Gypsum r	2.2.1.Floo		As buildin	Wooden j	Regular g	One Click	Dumper tr		P232
C2	Particleboard, uncoated, 8 - 48 x 590 - 2850 x 1025 - 6250 mm, 611 kg/m3 (Sonae Indústria)	5057.44	m2		260.32								260.32																		Floor slab	Wood inci	2.2.1.Floo		As buildin	Wooden j	Particlebo	EPD	Trailer con		P5
C2					**2459.85**								**2459.85**																				**2.2.1.Floo**								
C3	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		73.74								73.74																		Floor slab	Cement/m	2.2.1.Floo		As buildin	Wooden j	Leveling s	One Click			P2
C3	Planed timber, conifer (Treindustrien)	743.444	m2		110315.4								110315.4																		Floor slab	Wood inci	2.2.1.Floo	Quantity a	As buildin	Wooden j	Plain woo	Structural			P5
C3	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	4314	m2		0								0																		Floor slab	Landfilling	2.2.1.Floo	Quantity a	As buildin	Wooden j	Glass woo	One Click			P3
C3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	5057.44	m2		39.95								39.95																		Floor slab	Gypsum r	2.2.1.Floo		As buildin	Wooden j	Regular g	One Click			P232
C3	Particleboard, uncoated, 8 - 48 x 590 - 2850 x 1025 - 6250 mm, 611 kg/m3 (Sonae Indústria)	5057.44	m2		117700.9								117700.9																		Floor slab	Wood inci	2.2.1.Floo		As buildin	Wooden j	Particlebo	EPD			P5
C3					**228130**								**228130**																				**2.2.1.Floo**								
C4	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	4314	m2		63.1								63.1																		Floor slab	Landfilling	2.2.1.Floo	Quantity a	As buildin	Wooden j	Glass woo	One Click	Inert mate		P3
D	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		-3780.08								-3780.08																		Floor slab	Cement/m	2.2.1.Floo		As buildin	Wooden j	Leveling s	One Click			P2
D	Planed timber, conifer (Treindustrien)	743.444	m2		-51009								-51009																		Floor slab	Wood inci	2.2.1.Floo	Quantity a	As buildin	Wooden j	Plain woo	Structural			P5
D	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	5057.44	m2		-139.6								-139.6																		Floor slab	Gypsum r	2.2.1.Floo		As buildin	Wooden j	Regular g	One Click			P232
D	Particleboard, uncoated, 8 - 48 x 590 - 2850 x 1025 - 6250 mm, 611 kg/m3 (Sonae Indústria)	5057.44	m2		-49009.9								-49009.9																		Floor slab	Wood inci	2.2.1.Floo		As buildin	Wooden j	Particlebo	EPD			P5
D																																	**2.2.1.Floo**								
TOTAL	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		80650.05								80650.05																		Floor slab	Cement/m	2.2.1.Floo		As buildin	Wooden j	Leveling s	One Click			P2
TOTAL	Planed timber, conifer (Treindustrien)	743.444	m2		17941.33								17941.33																		Floor slab	Wood inci	2.2.1.Floo	Quantity a	As buildin	Wooden j	Plain woo	Structural			P5
TOTAL	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	4314	m2		29665.68								29665.68																		Floor slab	Landfilling	2.2.1.Floo	Quantity a	As buildin	Wooden j	Glass woo	One Click			P3

TOTAL	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	5057.44	m2		20465.12								20465.12																		Floor slabs	Gypsum r	2.2.1.Floo		As buildin	Wooden jo	Regular gy	One Click			P232
TOTAL	Particleboard, uncoated, 8 - 48 x 590 - 2850 x 1025 - 6250 mm, 611 kg/m3 (Sonae Indústria)	5057.44	m2		44305.18								44305.18																		Floor slabs	Wood inci	2.2.1.Floo		As buildin	Wooden jo	Particlebo	EPD			P5
TOTAL																																	**2.2.1.Floo**								
bioC	Self-levelling mortar (SLM), 2107.7 kg/m3, 3.01 Mpa, additive: polyfunctional plasticizer (One Click LCA)	101.15	m3		0								0																		Floor slabs	Cement/m	2.2.1.Floo		As buildin	Wooden jo	Leveling s	One Click			P2
bioC	Planed timber, conifer (Treindustrien)	743.444	m2		-109420								-109420																		Floor slabs	Wood inci	2.2.1.Floo	Quantity a	As buildin	Wooden jo	Plain wooc	Structural			P5
bioC	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	4314	m2		0								0																		Floor slabs	Landfilling	2.2.1.Floo	Quantity a	As buildin	Wooden jo	Glass woo	One Click			P3
bioC	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	5057.44	m2		0								0																		Floor slabs	Gypsum r	2.2.1.Floo		As buildin	Wooden jo	Regular gy	One Click			P232
bioC	Particleboard, uncoated, 8 - 48 x 590 - 2850 x 1025 - 6250 mm, 611 kg/m3 (Sonae Indústria)	5057.44	m2		-116827								-116827																		Floor slabs	Wood inci	2.2.1.Floo		As buildin	Wooden jo	Particlebo	EPD			P5
bioC					**-226247**								**-226247**																				**2.2.1.Floo**								
				492010.7	**193027.4**								**193027.4**																**226247**		**304373.2**			**2.2.1.Floo**								
A1-A3	Planed timber, conifer (Treindustrien)	202.3	m3	84966	12270.65									12270.65														133518			Floor slabs	Wood inci	2.3.Roofs	Assumed	As buildin	Wooden fr	Plain wooc	Structural			P5
A1-A3	Planed timber, conifer (Treindustrien)	455.17	m2	4396.94	635									635														6909.48			Floor slabs	Wood inci	2.3.Roofs	Quantity a	As buildin	Wooden fr	Plain wooc	Structural			P5
A1-A3	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2	1011.49	1927.29									1927.29														0			Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAUI			P7
A1-A3	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	5057.44	m2	37930.8	42290.48									42290.48														0			Floor slabs	Landfilling	2.3.Roofs		As buildin	Wooden fr	Glass woo	One Click			P3
A1-A3	Oriented strand board (OSB), generic, 9.5-28.5 mm (0.37-1.12 in), 610 kg/m3 (38.1 lbs/ft3), min. G4-2	5057.44	m2	46275.58	16670.99									16670.99														36695.34			Floor slabs	Wood inci	2.3.Roofs		As buildin	Wooden fr	Oriented s	One Click			P5
A1-A3	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2	7080.42	26056.1									26056.1														0			Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
A1-A3	Concrete roof tiles, Avg. thickness per m2: 22.4 mm, 334x420 mm, 2100 kg/m3 (Eternit)	5057.44	m2	237902	54246.61									54246.61														0		237902	Floor slabs	Rebar sep	2.3.Roofs		As buildin	Concrete r	Other prec	EPD Etern			P2
A1-A3				**419563.2**	**154097.1**									**154097.1**														**177122.8**		**237902**			**2.3.Roofs**								
A4	Planed timber, conifer (Treindustrien)	202.3	m3		4880.35									4880.35																	Floor slabs	Wood inci	2.3.Roofs	Assumed	As buildin	Wooden fr	Plain wooc	Structural			P5
A4	Planed timber, conifer (Treindustrien)	455.17	m2		252.56									252.56																	Floor slabs	Wood inci	2.3.Roofs	Quantity a	As buildin	Wooden fr	Plain wooc	Structural			P5
A4	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		58.1									58.1																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAUI			P7
A4	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	5057.44	m2		435.74									435.74																	Floor slabs	Landfilling	2.3.Roofs		As buildin	Wooden fr	Glass woo	One Click			P3
A4	Oriented strand board (OSB), generic, 9.5-28.5 mm (0.37-1.12 in), 610 kg/m3 (38.1 lbs/ft3), min. G4-2	5057.44	m2		531.6									531.6																	Floor slabs	Wood inci	2.3.Roofs		As buildin	Wooden fr	Oriented s	One Click			P5
A4	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2		406.69									406.69																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
A4	Concrete roof tiles, Avg. thickness per m2: 22.4 mm, 334x420 mm, 2100 kg/m3 (Eternit)	5057.44	m2		2732.97									2732.97																	Floor slabs	Rebar sep	2.3.Roofs		As buildin	Concrete r	Other prec	EPD Etern			P2
A4					**9298.01**									**9298.01**																			**2.3.Roofs**								

A5	Planed timber, conifer (Treindustrien)	202.3	m3	15208.91	3323.81								3323.81																	Floor slabs	Wood inci	2.3.Roofs	Assumed	As buildin	Wooden fr	Plain wooc	Structural			P5
A5	Planed timber, conifer (Treindustrien)	455.17	m2	787.05	172.01								172.01																	Floor slabs	Wood inci	2.3.Roofs	Quantity a	As buildin	Wooden fr	Plain wooc	Structural			P5
A5	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2	101.15	407.84								407.84																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAUI			P7
A5	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	5057.44	m2	3034.46	3434.87								3434.87																	Floor slabs	Landfilling	2.3.Roofs		As buildin	Wooden fr	Glass woo	One Click			P3
A5	Oriented strand board (OSB), generic, 9.5-28.5 mm (0.37-1.12 in), 610 kg/m3 (38.1 lbs/ft3), min. G4-2	5057.44	m2	7728.02	3001.79								3001.79																	Floor slabs	Wood inci	2.3.Roofs		As buildin	Wooden fr	Oriented s	One Click			P5
A5	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2	708.04	4111.36								4111.36																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
A5	Concrete roof tiles, Avg. thickness per m2: 22.4 mm, 334x420 mm, 2100 kg/m3 (Eternit)	5057.44	m2	0	0								0																0	Floor slabs	Rebar sep	2.3.Roofs		As buildin	Concrete r	Other prec	EPD Etern			P2
A5				**27567.64**	**14451.66**								**14451.66**																			**2.3.Roofs**								
B3	Planed timber, conifer (Treindustrien)	202.3	m3		0								0																	Floor slabs	Wood inci	2.3.Roofs	Assumed	As buildin	Wooden fr	Plain wooc	Structural			P5
B3	Planed timber, conifer (Treindustrien)	455.17	m2		0								0																	Floor slabs	Wood inci	2.3.Roofs	Quantity a	As buildin	Wooden fr	Plain wooc	Structural			P5
B3	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		0								0																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAUI			P7
B3	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	5057.44	m2		0								0																	Floor slabs	Landfilling	2.3.Roofs		As buildin	Wooden fr	Glass woo	One Click			P3
B3	Oriented strand board (OSB), generic, 9.5-28.5 mm (0.37-1.12 in), 610 kg/m3 (38.1 lbs/ft3), min. G4-2	5057.44	m2		0								0																	Floor slabs	Wood inci	2.3.Roofs		As buildin	Wooden fr	Oriented s	One Click			P5
B3	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2		0								0																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
B3	Concrete roof tiles, Avg. thickness per m2: 22.4 mm, 334x420 mm, 2100 kg/m3 (Eternit)	5057.44	m2		0								0																	Floor slabs	Rebar sep	2.3.Roofs		As buildin	Concrete r	Other prec	EPD Etern			P2
B3																																**2.3.Roofs**								
B4	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		4078.36								4078.36																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAUI			P7
B4	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2		41113.55								41113.55																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
B4					**45191.91**								**45191.91**																			**2.3.Roofs**								
B5	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2	0	0								0																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAUI			P7
B5	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2	0	0								0																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
B5																																**2.3.Roofs**								
C2	Planed timber, conifer (Treindustrien)	202.3	m3		325.36								325.36																	Floor slabs	Wood inci	2.3.Roofs	Assumed	As buildin	Wooden fr	Plain wooc	Structural	Trailer con		P5
C2	Planed timber, conifer (Treindustrien)	455.17	m2		16.84								16.84																	Floor slabs	Wood inci	2.3.Roofs	Quantity a	As buildin	Wooden fr	Plain wooc	Structural	Trailer con		P5
C2	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		3.87								3.87																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAUI	Trailer con		P7
C2	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	5057.44	m2		110.99								110.99																	Floor slabs	Landfilling	2.3.Roofs		As buildin	Wooden fr	Glass woo	One Click	Dumper tr		P3
C2	Oriented strand board (OSB), generic, 9.5-28.5 mm (0.37-1.12 in), 610 kg/m3 (38.1 lbs/ft3), min. G4-2	5057.44	m2		177.2								177.2																	Floor slabs	Wood inci	2.3.Roofs		As buildin	Wooden fr	Oriented s	One Click	Trailer con		P5

C2	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2		27.11									27.11																	Floor slab	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn	Trailer con		P7
C2	Concrete roof tiles, Avg. thickness per m2: 22.4 mm, 334x420 mm, 2100 kg/m3 (Eternit)	5057.44	m2		696.14									696.14																	Floor slab	Rebar sep	2.3.Roofs		As buildin	Concrete r	Other prec	EPD Etern	Dumper tr		P2
C2					**1357.52**									**1357.52**																			**2.3.Roofs**								
C3	Planed timber, conifer (Treindustrien)	202.3	m3		134610.4									134610.4																	Floor slab	Wood inci	2.3.Roofs	Assumed	As buildin	Wooden fr	Plain woo	Structural			P5
C3	Planed timber, conifer (Treindustrien)	455.17	m2		6966.01									6966.01																	Floor slab	Wood inci	2.3.Roofs	Quantity a	As buildin	Wooden fr	Plain woo	Structural			P5
C3	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		2089.09									2089.09																	Floor slab	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAU			P7
C3	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	5057.44	m2		0									0																	Floor slab	Landfilling	2.3.Roofs		As buildin	Wooden fr	Glass woo	One Click			P3
C3	Oriented strand board (OSB), generic, 9.5-28.5 mm (0.37-1.12 in), 610 kg/m3 (38.1 lbs/ft3), min. G4-2	5057.44	m2		37290.31									37290.31																	Floor slab	Wood inci	2.3.Roofs		As buildin	Wooden fr	Oriented s	One Click			P5
C3	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2		14623.65									14623.65																	Floor slab	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
C3	Concrete roof tiles, Avg. thickness per m2: 22.4 mm, 334x420 mm, 2100 kg/m3 (Eternit)	5057.44	m2		82.29									82.29																	Floor slab	Rebar sep	2.3.Roofs		As buildin	Concrete r	Other prec	EPD Etern			P2
C3					**195661.8**									**195661.8**																			**2.3.Roofs**								
C4	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	5057.44	m2		98.63									98.63																	Floor slab	Landfilling	2.3.Roofs		As buildin	Wooden fr	Glass woo	One Click	Inert mate		P3
D	Planed timber, conifer (Treindustrien)	202.3	m3		-62242.8									-62242.8																	Floor slab	Wood inci	2.3.Roofs	Assumed	As buildin	Wooden fr	Plain woo	Structural			P5
D	Planed timber, conifer (Treindustrien)	455.17	m2		-3221.03									-3221.03																	Floor slab	Wood inci	2.3.Roofs	Quantity a	As buildin	Wooden fr	Plain woo	Structural			P5
D	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		-3180.13									-3180.13																	Floor slab	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAU			P7
D	Oriented strand board (OSB), generic, 9.5-28.5 mm (0.37-1.12 in), 610 kg/m3 (38.1 lbs/ft3), min. G4-2	5057.44	m2		-33361.1									-33361.1																	Floor slab	Wood inci	2.3.Roofs		As buildin	Wooden fr	Oriented s	One Click			P5
D	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2		-22260.9									-22260.9																	Floor slab	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
D	Concrete roof tiles, Avg. thickness per m2: 22.4 mm, 334x420 mm, 2100 kg/m3 (Eternit)	5057.44	m2		-10489.8									-10489.8																	Floor slab	Rebar sep	2.3.Roofs		As buildin	Concrete r	Other prec	EPD Etern			P2
D																																	**2.3.Roofs**								
TOTAL	Planed timber, conifer (Treindustrien)	202.3	m3		21892.6									21892.6																	Floor slab	Wood inci	2.3.Roofs	Assumed	As buildin	Wooden fr	Plain woo	Structural			P5
TOTAL	Planed timber, conifer (Treindustrien)	455.17	m2		1132.93									1132.93																	Floor slab	Wood inci	2.3.Roofs	Quantity a	As buildin	Wooden fr	Plain woo	Structural			P5
TOTAL	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		8564.55									8564.55																	Floor slab	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAU			P7
TOTAL	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	5057.44	m2		46370.7									46370.7																	Floor slab	Landfilling	2.3.Roofs		As buildin	Wooden fr	Glass woo	One Click			P3
TOTAL	Oriented strand board (OSB), generic, 9.5-28.5 mm (0.37-1.12 in), 610 kg/m3 (38.1 lbs/ft3), min. G4-2	5057.44	m2		20976.55									20976.55																	Floor slab	Wood inci	2.3.Roofs		As buildin	Wooden fr	Oriented s	One Click			P5
TOTAL	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2		86338.46									86338.46																	Floor slab	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
TOTAL	Concrete roof tiles, Avg. thickness per m2: 22.4 mm, 334x420 mm, 2100 kg/m3 (Eternit)	5057.44	m2		57758									57758																	Floor slab	Rebar sep	2.3.Roofs		As buildin	Concrete r	Other prec	EPD Etern			P2

TOTAL																																	**2.3.Roofs**								
bioC	Planed timber, conifer (Treindustrien)	202.3	m3		-133518									-133518																	Floor slabs	Wood inci	2.3.Roofs	Assumed	As building	Wooden fr	Plain wood	Structural			P5
bioC	Planed timber, conifer (Treindustrien)	455.17	m2		-6909.48									-6909.48																	Floor slabs	Wood inci	2.3.Roofs	Quantity a	As building	Wooden fr	Plain wood	Structural			P5
bioC	Damp insulation PE, 0.2 kg/m2, EN15804+A1, ref. year 2018	5057.44	m2		0									0																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	ÖKOBAU			P7
bioC	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	5057.44	m2		0									0																	Floor slabs	Landfilling	2.3.Roofs		As building	Wooden fr	Glass woo	One Click			P3
bioC	Oriented strand board (OSB), generic, 9.5-28.5 mm (0.37-1.12 in), 610 kg/m3 (38.1 lbs/ft3), min. G4-2	5057.44	m2		-36695.3									-36695.3																	Floor slabs	Wood inci	2.3.Roofs		As building	Wooden fr	Oriented s	One Click			P5
bioC	PVC based, multi-layer, synthetic waterproofing roof sheet, non-woven glass inlay, polyester backing, 1.2 mm, Sarnafil G410EL Felt (Sika)	5057.44	m2		0									0																	Floor slabs	Plastic-ba	2.3.Roofs		30	Wooden fr	Plastic me	EPD Sarn			P7
bioC	Concrete roof tiles, Avg. thickness per m2: 22.4 mm, 334x420 mm, 2100 kg/m3 (Eternit)	5057.44	m2		0									0																	Floor slabs	Rebar sep	2.3.Roofs		As building	Concrete r	Other prec	EPD Etern			P2
bioC					**-177123**									**-177123**																			**2.3.Roofs**								
				447130.8	**243033.8**									**243033.8**														**177122.8**		**237902**			**2.3.Roofs**								
A1-A3	One storey timber staircase, 2587x225x905 mm, 41.9 deg (Stair Craft)	114	unit	14991	16332.78										16332.78													25030.98			Other stru	Wood inci	2.4.1.Stair		As building		Plain wood	EPD One			P5
A4	One storey timber staircase, 2587x225x905 mm, 41.9 deg (Stair Craft)	114	unit		186.45										186.45																Other stru	Wood inci	2.4.1.Stair		As building		Plain wood	EPD One			P5
A5	One storey timber staircase, 2587x225x905 mm, 41.9 deg (Stair Craft)	114	unit	2683.39	3001.72										3001.72																Other stru	Wood inci	2.4.1.Stair		As building		Plain wood	EPD One			P5
B3	One storey timber staircase, 2587x225x905 mm, 41.9 deg (Stair Craft)	114	unit		0										0																Other stru	Wood inci	2.4.1.Stair		As building		Plain wood	EPD One			P5
C2	One storey timber staircase, 2587x225x905 mm, 41.9 deg (Stair Craft)	114	unit		57.4										57.4																Other stru	Wood inci	2.4.1.Stair		As building		Plain wood	EPD One	Trailer con		P5
C3	One storey timber staircase, 2587x225x905 mm, 41.9 deg (Stair Craft)	114	unit		25223.72										25223.72																Other stru	Wood inci	2.4.1.Stair		As building		Plain wood	EPD One			P5
D	One storey timber staircase, 2587x225x905 mm, 41.9 deg (Stair Craft)	114	unit		-10981.8										-10981.8																Other stru	Wood inci	2.4.1.Stair		As building		Plain wood	EPD One			P5
TOTAL	One storey timber staircase, 2587x225x905 mm, 41.9 deg (Stair Craft)	114	unit		19771.09										19771.09																Other stru	Wood inci	2.4.1.Stair		As building		Plain wood	EPD One			P5
bioC	One storey timber staircase, 2587x225x905 mm, 41.9 deg (Stair Craft)	114	unit		-25031										-25031																Other stru	Wood inci	2.4.1.Stair		As building		Plain wood	EPD One			P5
				17674.39	**19771.09**										**19771.09**													**25030.98**					**2.4.1.Stai**								
A1-A3	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	898.32	m2	289708.2	67800.81											67800.81												0		289708.2	External w	Cement/m	2.5.1.Exte		As building	Masonry c	Mortar (ma	Oekobau.d			P2
A1-A3	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	2686.63	m2	413069.4	96671.19											96671.19												0		413069.4	External w	Cement/m	2.5.1.Exte		As building	Masonry c	Mortar (ma	Oekobau.d			P2
A1-A3	Red brick, average production, UK, 215 mm x 102.5 mm x 65 mm, 2.13 kg/unit, 1485 kg/m3 (Brick Development Association (BDA) Ltd (2019))	13948.8	m2	2123182	452237.7											452237.7												0		2123182	External w	Brick/ston	2.5.1.Exte	60 bricks (	As building	Masonry c	Brick, com	EPD BDA			P33
A1-A3	Lightweight concrete block, with expanded clay aggregate, generic, 650 kg/m3 (40.6 lbs/ft3), 18 kg/block (39.7 lbs/block), 0.5x0.3x0.185 mm (0.019x0.012x0.007 in)	15737.2	m2	2199274	678010.2											678010.2												0		2199274	External w	Concrete (	2.5.1.Exte	440mm x	As building	Masonry c	Aerated/A	One Click			P2
A1-A3	Stone wool insulation panels, unfaced, generic, L = 0.037 W/mK, R = 2.70 m2K/W (15 ft2°Fh/BTU), 150 kg/m3 (9.36 lbs/ft3) (applicable for densities: 100-150 kg/m3 (6.24-9.36 lbs/ft3)), Lambda=0.037 W/(m.K)	16635.48	m2	374298.3	489300.6											489300.6												0			External w	Landfilling	2.5.1.Exte		As building	Masonry c	Stone woo	One Click			P3

A1-A3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	16635.48	m2	178421.4	51443.4											51443.4												0		178421.4	External w	Gypsum r	2.5.1.Exte		As buildin	Masonry c	Regular gy	One Click			P232
A1-A3	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2	54897.08	7479.83											7479.83												0			External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c			P232
A1-A3				**5632850**	**1842944**											**1842944**														**5203654**			**2.5.1.Exte**								
A4	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	898.32	m2		554.68											554.68															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
A4	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	2686.63	m2		790.87											790.87															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
A4	Red brick, average production, UK, 215 mm x 102.5 mm x 65 mm, 2.13 kg/unit, 1485 kg/m3 (Brick Development Association (BDA) Ltd (2019))	13948.8	m2		24390.64											24390.64															External w	Brick/ston	2.5.1.Exte	60 bricks (	As buildin	Masonry c	Brick, com	EPD BDA			P33
A4	Lightweight concrete block, with expanded clay aggregate, generic, 650 kg/m3 (40.6 lbs/ft3), 18 kg/block (39.7 lbs/block), 0.5x0.3x0.185 mm (0.019x0.012x0.007 in)	15737.2	m2		25264.77											25264.77															External w	Concrete (	2.5.1.Exte	440mm x	As buildin	Masonry c	Aerated/A	One Click			P2
A4	Stone wool insulation panels, unfaced, generic, L = 0.037 W/mK, R = 2.70 m2K/W (15 ft2°Fh/BTU), 150 kg/m3 (9.36 lbs/ft3) (applicable for densities: 100-150 kg/m3 (6.24-9.36 lbs/ft3)), Lambda=0.037 W/(m.K)	16635.48	m2		4299.86											4299.86															External w	Landfilling	2.5.1.Exte		As buildin	Masonry c	Stone woo	One Click			P3
A4	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	16635.48	m2		2049.67											2049.67															External w	Gypsum r	2.5.1.Exte		As buildin	Masonry c	Regular gy	One Click			P232
A4	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2		630.65											630.65															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c			P232
A4					**57981.14**											**57981.14**																	**2.5.1.Exte**								
A5	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	898.32	m2	37662.07	9009.45											9009.45														37662.07	External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
A5	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	2686.63	m2	53699.02	12845.78											12845.78														53699.02	External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
A5	Red brick, average production, UK, 215 mm x 102.5 mm x 65 mm, 2.13 kg/unit, 1485 kg/m3 (Brick Development Association (BDA) Ltd (2019))	13948.8	m2	106159.1	24178.78											24178.78														106159.1	External w	Brick/ston	2.5.1.Exte	60 bricks (	As buildin	Masonry c	Brick, com	EPD BDA			P33
A5	Lightweight concrete block, with expanded clay aggregate, generic, 650 kg/m3 (40.6 lbs/ft3), 18 kg/block (39.7 lbs/block), 0.5x0.3x0.185 mm (0.019x0.012x0.007 in)	15737.2	m2	164945.5	53285.33											53285.33														164945.5	External w	Concrete (	2.5.1.Exte	440mm x	As buildin	Masonry c	Aerated/A	One Click			P2
A5	Stone wool insulation panels, unfaced, generic, L = 0.037 W/mK, R = 2.70 m2K/W (15 ft2°Fh/BTU), 150 kg/m3 (9.36 lbs/ft3) (applicable for densities: 100-150 kg/m3 (6.24-9.36 lbs/ft3)), Lambda=0.037 W/(m.K)	16635.48	m2	29943.86	39653.51											39653.51															External w	Landfilling	2.5.1.Exte		As buildin	Masonry c	Stone woo	One Click			P3
A5	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	16635.48	m2	22302.67	7191.89											7191.89														22302.67	External w	Gypsum r	2.5.1.Exte		As buildin	Masonry c	Regular gy	One Click			P232
A5	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2	7136.62	1093.8											1093.8															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c			P232
A5				**421848.9**	**147258.5**											**147258.5**														**384768.4**			**2.5.1.Exte**								
B3	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	898.32	m2		0											0															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2

B3	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	2686.63	m2		0											0															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
B3	Red brick, average production, UK, 215 mm x 102.5 mm x 65 mm, 2.13 kg/unit, 1485 kg/m3 (Brick Development Association (BDA) Ltd (2019))	13948.8	m2		0											0															External w	Brick/ston	2.5.1.Exte	60 bricks (	As buildin	Masonry c	Brick, com	EPD BDA			P33
B3	Lightweight concrete block, with expanded clay aggregate, generic, 650 kg/m3 (40.6 lbs/ft3), 18 kg/block (39.7 lbs/block), 0.5x0.3x0.185 mm (0.019x0.012x0.007 in)	15737.2	m2		0											0															External w	Concrete (	2.5.1.Exte	440mm x	As buildin	Masonry c	Aerated/A	One Click			P2
B3	Stone wool insulation panels, unfaced, generic, L = 0.037 W/mK, R = 2.70 m2K/W (15 ft2°Fh/BTU), 150 kg/m3 (9.36 lbs/ft3) (applicable for densities: 100-150 kg/m3 (6.24-9.36 lbs/ft3)), Lambda=0.037 W/(m.K)	16635.48	m2		0											0															External w	Landfilling	2.5.1.Exte		As buildin	Masonry c	Stone woo	One Click			P3
B3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	16635.48	m2		0											0															External w	Gypsum r	2.5.1.Exte		As buildin	Masonry c	Regular gy	One Click			P232
B3	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2		0											0															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c			P232
B3																																	**2.5.1.Exte**								
B4	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2		8413.86											8413.86															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c			P232
B5	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2	0	0											0															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c			P232
C2	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	898.32	m2		847.74											847.74															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c	Dumper tr		P2
C2	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	2686.63	m2		1208.71											1208.71															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c	Dumper tr		P2
C2	Red brick, average production, UK, 215 mm x 102.5 mm x 65 mm, 2.13 kg/unit, 1485 kg/m3 (Brick Development Association (BDA) Ltd (2019))	13948.8	m2		6212.79											6212.79															External w	Brick/ston	2.5.1.Exte	60 bricks (	As buildin	Masonry c	Brick, com	EPD BDA	Dumper tr		P33
C2	Lightweight concrete block, with expanded clay aggregate, generic, 650 kg/m3 (40.6 lbs/ft3), 18 kg/block (39.7 lbs/block), 0.5x0.3x0.185 mm (0.019x0.012x0.007 in)	15737.2	m2		6435.45											6435.45															External w	Concrete (	2.5.1.Exte	440mm x	As buildin	Masonry c	Aerated/A	One Click	Dumper tr		P2
C2	Stone wool insulation panels, unfaced, generic, L = 0.037 W/mK, R = 2.70 m2K/W (15 ft2°Fh/BTU), 150 kg/m3 (9.36 lbs/ft3) (applicable for densities: 100-150 kg/m3 (6.24-9.36 lbs/ft3)), Lambda=0.037 W/(m.K)	16635.48	m2		1095.26											1095.26															External w	Landfilling	2.5.1.Exte		As buildin	Masonry c	Stone woo	One Click	Dumper tr		P3
C2	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	16635.48	m2		3915.69											3915.69															External w	Gypsum r	2.5.1.Exte		As buildin	Masonry c	Regular gy	One Click	Dumper tr		P232
C2	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2		160.64											160.64															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c	Dumper tr		P232
C2					**19876.28**											**19876.28**																	**2.5.1.Exte**								
C3	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	898.32	m2		100.21											100.21															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
C3	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	2686.63	m2		142.88											142.88															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2

C3	Red brick, average production, UK, 215 mm x 102.5 mm x 65 mm, 2.13 kg/unit, 1485 kg/m3 (Brick Development Association (BDA) Ltd (2019))	13948.8	m2		734.38											734.38															External w	Brick/ston	2.5.1.Exte	60 bricks (	As buildin	Masonry c	Brick, com	EPD BDA			P33
C3	Lightweight concrete block, with expanded clay aggregate, generic, 650 kg/m3 (40.6 lbs/ft3), 18 kg/block (39.7 lbs/block), 0.5x0.3x0.185 mm (0.019x0.012x0.007 in)	15737.2	m2		760.7											760.7															External w	Concrete (	2.5.1.Exte	440mm x	As buildin	Masonry c	Aerated/A	One Click			P2
C3	Stone wool insulation panels, unfaced, generic, L = 0.037 W/mK, R = 2.70 m2K/W (15 ft2°Fh/BTU), 150 kg/m3 (9.36 lbs/ft3) (applicable for densities: 100-150 kg/m3 (6.24-9.36 lbs/ft3)), Lambda=0.037 W/(m.K)	16635.48	m2		0											0															External w	Landfilling	2.5.1.Exte		As buildin	Masonry c	Stone woo	One Click			P3
C3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	16635.48	m2		126.36											126.36															External w	Gypsum r	2.5.1.Exte		As buildin	Masonry c	Regular gy	One Click			P232
C3	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2		0											0															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c			P232
C3					**1864.52**											**1864.52**																	**2.5.1.Exte**								
C4	Stone wool insulation panels, unfaced, generic, L = 0.037 W/mK, R = 2.70 m2K/W (15 ft2°Fh/BTU), 150 kg/m3 (9.36 lbs/ft3) (applicable for densities: 100-150 kg/m3 (6.24-9.36 lbs/ft3)), Lambda=0.037 W/(m.K)	16635.48	m2		973.23											973.23															External w	Landfilling	2.5.1.Exte		As buildin	Masonry c	Stone woo	One Click	Inert mate		P3
C4	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2		142.74											142.74															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c	Inert mate		P232
C4					**1115.97**											**1115.97**																	**2.5.1.Exte**								
D	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	898.32	m2		-5136.74											-5136.74															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
D	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	2686.63	m2		-7324.02											-7324.02															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
D	Red brick, average production, UK, 215 mm x 102.5 mm x 65 mm, 2.13 kg/unit, 1485 kg/m3 (Brick Development Association (BDA) Ltd (2019))	13948.8	m2		-8751.84											-8751.84															External w	Brick/ston	2.5.1.Exte	60 bricks (	As buildin	Masonry c	Brick, com	EPD BDA			P33
D	Lightweight concrete block, with expanded clay aggregate, generic, 650 kg/m3 (40.6 lbs/ft3), 18 kg/block (39.7 lbs/block), 0.5x0.3x0.185 mm (0.019x0.012x0.007 in)	15737.2	m2		-53961.5											-53961.5															External w	Concrete (	2.5.1.Exte	440mm x	As buildin	Masonry c	Aerated/A	One Click			P2
D	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	16635.48	m2		-441.51											-441.51															External w	Gypsum r	2.5.1.Exte		As buildin	Masonry c	Regular gy	One Click			P232
D																																	**2.5.1.Exte**								
TOTAL	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	898.32	m2		78312.88											78312.88															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
TOTAL	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	2686.63	m2		111659.4											111659.4															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
TOTAL	Red brick, average production, UK, 215 mm x 102.5 mm x 65 mm, 2.13 kg/unit, 1485 kg/m3 (Brick Development Association (BDA) Ltd (2019))	13948.8	m2		507754.3											507754.3															External w	Brick/ston	2.5.1.Exte	60 bricks (	As buildin	Masonry c	Brick, com	EPD BDA			P33
TOTAL	Lightweight concrete block, with expanded clay aggregate, generic, 650 kg/m3 (40.6 lbs/ft3), 18 kg/block (39.7 lbs/block), 0.5x0.3x0.185 mm (0.019x0.012x0.007 in)	15737.2	m2		763756.4											763756.4															External w	Concrete (	2.5.1.Exte	440mm x	As buildin	Masonry c	Aerated/A	One Click			P2

TOTAL	Stone wool insulation panels, unfaced, generic, L = 0.037 W/mK, R = 2.70 m2K/W (15 ft2°Fh/BTU), 150 kg/m3 (9.36 lbs/ft3) (applicable for densities: 100-150 kg/m3 (6.24-9.36 lbs/ft3)), Lambda=0.037 W/(m.K)	16635.48	m2		535322.4											535322.4															External w	Landfilling	2.5.1.Exte		As buildin	Masonry c	Stone woo	One Click			P3
TOTAL	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	16635.48	m2		64727											64727															External w	Gypsum r	2.5.1.Exte		As buildin	Masonry c	Regular gy	One Click			P232
TOTAL	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2		17921.52											17921.52															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c			P232
TOTAL																																	**2.5.1.Exte**								
bioC	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	898.32	m2		0											0															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
bioC	Masonry mortar/facing wall mortar/mortar with special properties, 1500 kg/m3, EPD coverage: >1500 kg/m3 (IWM)	2686.63	m2		0											0															External w	Cement/m	2.5.1.Exte		As buildin	Masonry c	Mortar (ma	Oekobau.c			P2
bioC	Red brick, average production, UK, 215 mm x 102.5 mm x 65 mm, 2.13 kg/unit, 1485 kg/m3 (Brick Development Association (BDA) Ltd (2019))	13948.8	m2		0											0															External w	Brick/ston	2.5.1.Exte	60 bricks (	As buildin	Masonry c	Brick, com	EPD BDA			P33
bioC	Lightweight concrete block, with expanded clay aggregate, generic, 650 kg/m3 (40.6 lbs/ft3), 18 kg/block (39.7 lbs/block), 0.5x0.3x0.185 mm (0.019x0.012x0.007 in)	15737.2	m2		0											0															External w	Concrete (	2.5.1.Exte	440mm x	As buildin	Masonry c	Aerated/A	One Click			P2
bioC	Stone wool insulation panels, unfaced, generic, L = 0.037 W/mK, R = 2.70 m2K/W (15 ft2°Fh/BTU), 150 kg/m3 (9.36 lbs/ft3) (applicable for densities: 100-150 kg/m3 (6.24-9.36 lbs/ft3)), Lambda=0.037 W/(m.K)	16635.48	m2		0											0															External w	Landfilling	2.5.1.Exte		As buildin	Masonry c	Stone woo	One Click			P3
bioC	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	16635.48	m2		0											0															External w	Gypsum r	2.5.1.Exte		As buildin	Masonry c	Regular gy	One Click			P232
bioC	Gypsum plaster, 1100 kg/m3 (Bundesverband der Gipsindustrie)	16635.48	m2		0											0															External w	Landfilling	2.5.1.Exte		30	Masonry c	Gypsum p	Oekobau.c			P232
bioC																																	**2.5.1.Exte**								
				6054699	**2079454**											**2079454**														**5588423**			**2.5.1.Exte**								
A1-A3	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2	0	176363.9												176363.9											0		0	Windows	Glass-con	2.6.1.Exte		40	Double gla	PVC fram	MDEGD			P8
A1-A3					**176363.9**												**176363.9**																**2.6.1.Exte**								
A5	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2	0	0												0													0	Windows	Glass-con	2.6.1.Exte		40	Double gla	PVC fram	MDEGD			P8
A5																																	**2.6.1.Exte**								
B3	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2		0												0														Windows	Glass-con	2.6.1.Exte		40	Double gla	PVC fram	MDEGD			P8
B3																																	**2.6.1.Exte**								
B4	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2		176363.9												176363.9													0	Windows	Glass-con	2.6.1.Exte		40	Double gla	PVC fram	MDEGD			P8
B5	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2	0	0												0													0	Windows	Glass-con	2.6.1.Exte		40	Double gla	PVC fram	MDEGD			P8

C3	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2		0												0														Windows a	Glass-cont	2.6.1.Exte		40	Double gla	PVC fram	MDEGD_F			P8
C3																																	**2.6.1.Exte**								
C4	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2		0												0														Windows a	Glass-cont	2.6.1.Exte		40	Double gla	PVC fram	MDEGD_F	Inert mate		P8
D	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2		0												0														Windows a	Glass-cont	2.6.1.Exte		40	Double gla	PVC fram	MDEGD_F			P8
TOTAL	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2		352727.8												352727.8														Windows a	Glass-cont	2.6.1.Exte		40	Double gla	PVC fram	MDEGD_F			P8
TOTAL																																	**2.6.1.Exte**								
bioC	PVC frame window, double glazed, Fenêtre en PVC double vitrage (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	1559.8	m2		0												0														Windows a	Glass-cont	2.6.1.Exte		40	Double gla	PVC fram	MDEGD_F			P8
bioC																																	**2.6.1.Exte**								
					352727.8												**352727.8**																**2.6.1.Exte**								
A1-A3	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2	4889.92	29125.67												29125.67											0		4889.92	Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F			P8
A4	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2		280.87												280.87														Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F			P8
A5	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2	0	0												0													0	Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F			P8
B3	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2		0												0														Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F			P8
B4	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2		29597.36												29597.36													4889.92	Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F			P8
B5	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2	0	0												0													0	Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F			P8
C2	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2		187.25												187.25														Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F	Trailer con		P8
C3	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2		1.02												1.02														Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F			P8
C4	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2		2.54												2.54														Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F	Inert mate		P8
D	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2		-102.4												-102.4														Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F			P8
TOTAL	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2		59194.72												59194.72														Windows a	Glass-cont	2.6.Windo		40		Glass door	MDEGD_F			P8

bioC	Door, PVC, flush, French average, Porte pleine en PVC (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	228	m2		0												0														Windows	Glass-con	2.6.Windc		40		Glass doo	MDEGD I			P8
				4889.92	**59194.72**												**59194.72**													**9779.83**			**2.6.Windc**								
A1-A3	Planed timber, conifer (Treindustrien)	1092.95	m2	44985.82	6496.78													6496.78										70692.01			Internal wa	Wood inci	2.7.1.Wall	Quantity a	As buildin	Wooden s	Plain wooc	Structural			P5
A1-A3	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	8329.048	m2	20822.62	23215.92													23215.92										0			Internal wa	Landfilling	2.7.1.Wall	Quantity a	As buildin	Wooden s	Glass woo	One Click			P3
A1-A3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2	105096.4	30301.96													30301.96										0		105096.4	Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
A1-A3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2	105096.4	30301.96													30301.96										0		105096.4	Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
A1-A3				**276001.3**	**90316.63**													**90316.63**										**70692.01**		**210192.9**			**2.7.1.Wall**								
A4	Planed timber, conifer (Treindustrien)	1092.95	m2		2583.94													2583.94													Internal wa	Wood inci	2.7.1.Wall	Quantity a	As buildin	Wooden s	Plain wooc	Structural			P5
A4	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	8329.048	m2		239.21													239.21													Internal wa	Landfilling	2.7.1.Wall	Quantity a	As buildin	Wooden s	Glass woo	One Click			P3
A4	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		1207.32													1207.32													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
A4	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		1207.32													1207.32													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
A4					**5237.79**													**5237.79**															**2.7.1.Wall**								
A5	Planed timber, conifer (Treindustrien)	1092.95	m2	8052.46	1759.82													1759.82													Internal wa	Wood inci	2.7.1.Wall	Quantity a	As buildin	Wooden s	Plain wooc	Structural			P5
A5	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	8329.048	m2	1665.81	1885.62													1885.62													Internal wa	Landfilling	2.7.1.Wall	Quantity a	As buildin	Wooden s	Glass woo	One Click			P3
A5	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2	13137.05	4236.27													4236.27												13137.05	Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
A5	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2	13137.05	4236.27													4236.27												13137.05	Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
A5				**35992.38**	**12117.98**													**12117.98**												**26274.11**			**2.7.1.Wall**								
B3	Planed timber, conifer (Treindustrien)	1092.95	m2		0													0													Internal wa	Wood inci	2.7.1.Wall	Quantity a	As buildin	Wooden s	Plain wooc	Structural			P5
B3	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	8329.048	m2		0													0													Internal wa	Landfilling	2.7.1.Wall	Quantity a	As buildin	Wooden s	Glass woo	One Click			P3
B3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		0													0													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232

B3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		0													0													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
B3																																	**2.7.1.Wall**								
C2	Planed timber, conifer (Treindustrien)	1092.95	m2		172.26													172.26													Internal wa	Wood inci	2.7.1.Wall	Quantity a	As buildin	Wooden s	Plain wooc	Structural	Trailer con		P5
C2	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	8329.048	m2		60.93													60.93													Internal wa	Landfilling	2.7.1.Wall	Quantity a	As buildin	Wooden s	Glass woo	One Click	Dumper tr		P3
C2	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		2306.48													2306.48													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click	Dumper tr		P232
C2	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		2306.48													2306.48													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click	Dumper tr		P232
C2					**4846.15**													**4846.15**															**2.7.1.Wall**								
C3	Planed timber, conifer (Treindustrien)	1092.95	m2		71270.4													71270.4													Internal wa	Wood inci	2.7.1.Wall	Quantity a	As buildin	Wooden s	Plain wooc	Structural			P5
C3	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	8329.048	m2		0													0													Internal wa	Landfilling	2.7.1.Wall	Quantity a	As buildin	Wooden s	Glass woo	One Click			P3
C3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		74.43													74.43													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
C3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		74.43													74.43													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
C3					**71419.25**													**71419.25**															**2.7.1.Wall**								
C4	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	8329.048	m2		54.14													54.14													Internal wa	Landfilling	2.7.1.Wall	Quantity a	As buildin	Wooden s	Glass woo	One Click	Inert mate		P3
D	Planed timber, conifer (Treindustrien)	1092.95	m2		-32954.9													-32954.9													Internal wa	Wood inci	2.7.1.Wall	Quantity a	As buildin	Wooden s	Plain wooc	Structural			P5
D	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		-260.07													-260.07													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
D	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		-260.07													-260.07													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
D																																	**2.7.1.Wall**								
TOTAL	Planed timber, conifer (Treindustrien)	1092.95	m2		11591.18													11591.18													Internal wa	Wood inci	2.7.1.Wall	Quantity a	As buildin	Wooden s	Plain wooc	Structural			P5
TOTAL	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	8329.048	m2		25455.82													25455.82													Internal wa	Landfilling	2.7.1.Wall	Quantity a	As buildin	Wooden s	Glass woo	One Click			P3
TOTAL	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		38126.47													38126.47													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232

TOTAL	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		38126.47													38126.47													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
TOTAL																																	**2.7.1.Wall**								
bioC	Planed timber, conifer (Treindustrien)	1092.95	m2		-70692													-70692													Internal wa	Wood inci	2.7.1.Wall	Quantity a	As buildin	Wooden s	Plain wooc	Structural			P5
bioC	Glass wool insulation panels, unfaced, generic, L = 0.031 W/mK, R = 3.23 m2K/W (18 ft2°Fh/BTU), 25 kg/m3 (1.56 lbs/ft3), (applicable for densities: 0-25 kg/m3 (0-1.56 lbs/ft3)), Lambda=0.031 W/(m.K)	8329.048	m2		0													0													Internal wa	Landfilling	2.7.1.Wall	Quantity a	As buildin	Wooden s	Glass woo	One Click			P3
bioC	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		0													0													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
bioC	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	9422	m2		0													0													Internal wa	Gypsum r	2.7.1.Wall		As buildin	Wooden s	Regular gy	One Click			P232
bioC					**-70692**													**-70692**															**2.7.1.Wall**								
				311993.7	**113299.9**													**113299.9**										**70692.01**		**236467**			**2.7.1.Wall**								
A1-A3	Perforated light weight aggregate concrete block, 200 x 250 x 500 mm, 770 kg/m3, Leca Universalblokk (Weber)	7156	m2	826518	150546.8													150546.8										0		826518	Columns a	Concrete c	2.7.Interna	498x150x1	As buildin		Aerated/Ai	Leca Univ			P2
A1-A3	Masonry mortar, light, 1000 kg/m3 (quick-mix)	107340	kg	107340	61294.51													61294.51										0		107340	Columns a	Cement/m	2.7.Interna	Assumed	As buildin		Mortar (ma	EPD Mine			P2
A1-A3				**933858**	**211841.4**													**211841.4**												**933858**			**2.7.Intern**								
A4	Perforated light weight aggregate concrete block, 200 x 250 x 500 mm, 770 kg/m3, Leca Universalblokk (Weber)	7156	m2		9494.86													9494.86													Columns a	Concrete c	2.7.Interna	498x150x1	As buildin		Aerated/Ai	Leca Univ			P2
A4	Masonry mortar, light, 1000 kg/m3 (quick-mix)	107340	kg		205.52													205.52													Columns a	Cement/m	2.7.Interna	Assumed	As buildin		Mortar (ma	EPD Mine			P2
A4					**9700.37**													**9700.37**															**2.7.Intern**								
A5	Perforated light weight aggregate concrete block, 200 x 250 x 500 mm, 770 kg/m3, Leca Universalblokk (Weber)	7156	m2	61988.85	12205.96													12205.96												61988.85	Columns a	Concrete c	2.7.Interna	498x150x1	As buildin		Aerated/Ai	Leca Univ			P2
A5	Masonry mortar, light, 1000 kg/m3 (quick-mix)	107340	kg	13954.2	8040.66													8040.66												13954.2	Columns a	Cement/m	2.7.Interna	Assumed	As buildin		Mortar (ma	EPD Mine			P2
A5				**75943.05**	**20246.62**													**20246.62**												**75943.05**			**2.7.Intern**								
B3	Perforated light weight aggregate concrete block, 200 x 250 x 500 mm, 770 kg/m3, Leca Universalblokk (Weber)	7156	m2		0													0													Columns a	Concrete c	2.7.Interna	498x150x1	As buildin		Aerated/Ai	Leca Univ			P2
B3	Masonry mortar, light, 1000 kg/m3 (quick-mix)	107340	kg		0													0													Columns a	Cement/m	2.7.Interna	Assumed	As buildin		Mortar (ma	EPD Mine			P2
B3																																	**2.7.Intern**								
C2	Perforated light weight aggregate concrete block, 200 x 250 x 500 mm, 770 kg/m3, Leca Universalblokk (Weber)	7156	m2		2418.53													2418.53													Columns a	Concrete c	2.7.Interna	498x150x1	As buildin		Aerated/Ai	Leca Univ	Dumper tr		P2
C2	Masonry mortar, light, 1000 kg/m3 (quick-mix)	107340	kg		314.1													314.1													Columns a	Cement/m	2.7.Interna	Assumed	As buildin		Mortar (ma	EPD Mine	Dumper tr		P2
C2					**2732.63**													**2732.63**															**2.7.Intern**								
C3	Perforated light weight aggregate concrete block, 200 x 250 x 500 mm, 770 kg/m3, Leca Universalblokk (Weber)	7156	m2		285.88													285.88													Columns a	Concrete c	2.7.Interna	498x150x1	As buildin		Aerated/Ai	Leca Univ			P2
C3	Masonry mortar, light, 1000 kg/m3 (quick-mix)	107340	kg		37.13													37.13													Columns a	Cement/m	2.7.Interna	Assumed	As buildin		Mortar (ma	EPD Mine			P2
C3					**323.01**													**323.01**															**2.7.Intern**								
D	Perforated light weight aggregate concrete block, 200 x 250 x 500 mm, 770 kg/m3, Leca Universalblokk (Weber)	7156	m2		-20279.5													-20279.5													Columns a	Concrete c	2.7.Interna	498x150x1	As buildin		Aerated/Ai	Leca Univ			P2
D	Masonry mortar, light, 1000 kg/m3 (quick-mix)	107340	kg		-1903.22													-1903.22													Columns a	Cement/m	2.7.Interna	Assumed	As buildin		Mortar (ma	EPD Mine			P2
D																																	**2.7.Intern**								
TOTAL	Perforated light weight aggregate concrete block, 200 x 250 x 500 mm, 770 kg/m3, Leca Universalblokk (Weber)	7156	m2		174952.1													174952.1													Columns a	Concrete c	2.7.Interna	498x150x1	As buildin		Aerated/Ai	Leca Univ			P2
TOTAL	Masonry mortar, light, 1000 kg/m3 (quick-mix)	107340	kg		69891.91													69891.91													Columns a	Cement/m	2.7.Interna	Assumed	As buildin		Mortar (ma	EPD Mine			P2
TOTAL																																	**2.7.Intern**								
bioC	Perforated light weight aggregate concrete block, 200 x 250 x 500 mm, 770 kg/m3, Leca Universalblokk (Weber)	7156	m2		0													0													Columns a	Concrete c	2.7.Interna	498x150x1	As buildin		Aerated/Ai	Leca Univ			P2
bioC	Masonry mortar, light, 1000 kg/m3 (quick-mix)	107340	kg		0													0													Columns a	Cement/m	2.7.Interna	Assumed	As buildin		Mortar (ma	EPD Mine			P2

bioC																																	**2.7.Intern**								
				1009801	**244844**													**244844**												**1009801**			**2.7.Intern**								
A1-A3	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2	12004.2	11928.02														11928.02									22007.7			Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
A1-A3				**12004.2**	**11928.02**														**11928.02**									**22007.7**					**2.8.Intern**								
A4	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2		689.51														689.51												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
A5	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2	0	0														0												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
A5																																	**2.8.Intern**								
B3	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2		0														0												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
B3																																	**2.8.Intern**								
B4	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2		12793.21														12793.21												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
B5	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2	0	0														0												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
C2	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2		45.97														45.97												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F	Trailer con		P8
C3	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2		22131.17														22131.17												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
C3					**22131.17**														**22131.17**														**2.8.Intern**								
C4	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2		6.24														6.24												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F	Inert mate		P8
D	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2		0														0												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
TOTAL	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2		25586.42														25586.42												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
TOTAL																																	**2.8.Intern**								
bioC	Doors with wooden frame, interior, Portes intérieures de communication avec huisserie bois (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	923.4	m2		-22007.7														-22007.7												Internal wa	Wood-con	2.8.Interna		40	Wood inte	Wood and	MDEGD_F			P8
bioC					**-22007.7**														**-22007.7**														**2.8.Intern**								
				12004.2	**25586.42**														**25586.42**									**22007.7**					**2.8.Intern**								

A1-A3	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2	12.15	10.08															10.08								0			Floor slab	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c			P7
A1-A3	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2	40.5	21.45															21.45								0		40.5	Floor slab	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
A1-A3	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), İnönü plant)	8.1	m2	155.52	90.22															90.22								0		155.52	Floor slab	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2
A1-A3	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg	2712.23	6031.55															6031.55								0			Floor slab	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, coa	EPD Herb			P7
A1-A3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	10123.3	m2	112919	32557.4															32557.4								0		112919	Floor slab	Gypsum r	3.Internal		As buildin	Plasterboa	Regular gy	One Click			P232
A1-A3				**115839.4**	**38710.7**															**38710.7**										**113115**			**3.Internal**								
A4	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2		1.69															1.69											Floor slab	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c			P7
A4	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2		0.47															0.47											Floor slab	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
A4	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), İnönü plant)	8.1	m2		8.93															8.93											Floor slab	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2
A4	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg		377.37															377.37											Floor slab	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, coa	EPD Herb			P7
A4	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	10123.3	m2		1297.19															1297.19											Floor slab	Gypsum r	3.Internal		As buildin	Plasterboa	Regular gy	One Click			P232
A4					**1685.64**															**1685.64**													**3.Internal**								
A5	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2	1.21	1.18															1.18											Floor slab	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c			P7
A5	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2	5.27	2.87															2.87										5.27	Floor slab	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
A5	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), İnönü plant)	8.1	m2	15.55	9.97															9.97										15.55	Floor slab	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2
A5	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg	271.22	642.39															642.39											Floor slab	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, coa	EPD Herb			P7
A5	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	10123.3	m2	14114.87	4551.59															4551.59										14114.87	Floor slab	Gypsum r	3.Internal		As buildin	Plasterboa	Regular gy	One Click			P232
A5				**14408.13**	**5208**															**5208**										**14135.69**			**3.Internal**								
B3	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2		0															0											Floor slab	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c			P7
B3	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2		0															0											Floor slab	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
B3	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), İnönü plant)	8.1	m2		0															0											Floor slab	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2
B3	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg		0															0											Floor slab	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, coa	EPD Herb			P7
B3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	10123.3	m2		0															0											Floor slab	Gypsum r	3.Internal		As buildin	Plasterboa	Regular gy	One Click			P232
B3																																	**3.Internal**								
B4	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2		23.68															23.68											Floor slab	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c			P7

B4	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2		22.05															22.05										40.5	Floor slabs	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
B4	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), İnönü plant)	8.1	m2		99.66															99.66										155.52	Floor slabs	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2
B4	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg		19271.7															19271.7											Floor slabs	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, coa	EPD Herb			P7
B4					**19417.09**															**19417.09**										**196.02**			**3.Internal**								
B5	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2	0	0															0											Floor slabs	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c			P7
B5	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2	0	0															0										0	Floor slabs	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
B5	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), İnönü plant)	8.1	m2	0	0															0										0	Floor slabs	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2
B5	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg	0	0															0											Floor slabs	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, coa	EPD Herb			P7
B5																																	**3.Internal**								
C2	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2		0.036															0.036											Floor slabs	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c	Dumper tr		P7
C2	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2		0.12															0.12											Floor slabs	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES	Dumper tr		P7
C2	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), İnönü plant)	8.1	m2		0.46															0.46											Floor slabs	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera	Dumper tr		P2
C2	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg		7.94															7.94											Floor slabs	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, coa	EPD Herb	Dumper tr		P7
C2	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	10123.3	m2		2478.15															2478.15											Floor slabs	Gypsum r	3.Internal		As buildin	Plasterboa	Regular gy	One Click	Dumper tr		P232
C2					**2486.7**															**2486.7**													**3.Internal**								
C3	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2		0															0											Floor slabs	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c			P7
C3	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2		0.014															0.014											Floor slabs	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
C3	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), İnönü plant)	8.1	m2		0.054															0.054											Floor slabs	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2
C3	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg		0															0											Floor slabs	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, coa	EPD Herb			P7
C3	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	10123.3	m2		79.97															79.97											Floor slabs	Gypsum r	3.Internal		As buildin	Plasterboa	Regular gy	One Click			P232
C3					**80.04**															**80.04**													**3.Internal**								
C4	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2		0.032															0.032											Floor slabs	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c	Inert mate		P7
C4	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg		7.05															7.05											Floor slabs	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, coa	EPD Herb	Inert mate		P7
C4					**7.08**															**7.08**													**3.Internal**								
D	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2		-1.35															-1.35											Floor slabs	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
D	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), İnönü plant)	8.1	m2		-1.28															-1.28											Floor slabs	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2

D	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	10123.3	m2		-279.42															-279.42											Floor slabs	Gypsum r	3.Internal		As buildin	Plasterboa	Regular gy	One Click			P232
D																																	**3.Internal**								
TOTAL	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2		36.7															36.7											Floor slabs	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c			P7
TOTAL	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2		46.97															46.97											Floor slabs	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
TOTAL	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), Inönü plant)	8.1	m2		209.28															209.28											Floor slabs	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2
TOTAL	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg		26337.99															26337.99											Floor slabs	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, co	EPD Herb			P7
TOTAL	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	10123.3	m2		40964.3															40964.3											Floor slabs	Gypsum r	3.Internal		As buildin	Plasterboa	Regular gy	One Click			P232
TOTAL																																	**3.Internal**								
bioC	Waterproof, protective, flexible coating, 1.5 kg/l, Lastogum (PCI Augsburg)	8.1	m2		0															0											Floor slabs	Landfilling	3.Internal		20	Ceramic ti	Sealants (	Oekobau.c			P7
bioC	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	8.1	m2		0															0											Floor slabs	Cement/m	3.Internal		30	Ceramic ti	Tile adhes	FDES			P7
bioC	Ceramic wall tiles, glazed or unglazed, 7.5 mm, 18 kg/m2 (Seranit (2020), Inönü plant)	8.1	m2		0															0											Floor slabs	Brick/ston	3.Internal		30	Ceramic ti	Wall and f	EPD Cera			P2
bioC	Water-borne wall paints for interior use, 0.346 kg/m2, 1.559 kg/l, Zenit Grund, Classic Grund (AkzoNobel Herbol)	2712.23	kg		0															0											Floor slabs	Landfilling	3.Internal	For both s	15	Plasterboa	Paints, co	EPD Herb			P7
bioC	Gypsum plaster board, regular, generic, 6.5-25 mm (0.25-0.98 in), 10.725 kg/m2 (2.20 lbs/ft2) (for 12.5 mm/0.49 in), 858 kg/m3 (53.6 lbs/ft3)	10123.3	m2		0															0											Floor slabs	Gypsum r	3.Internal		As buildin	Plasterboa	Regular gy	One Click			P232
bioC																																	**3.Internal**								
				130247.5	**67595.24**															**67595.24**										**127446.7**			**3.Internal**								
B1	Fluide frigorigène R32 (MDEGD)	148.2	kg		342346.7																	342346.7									Refrigeran		5.13.2.Spe		25		Refrigeran	MDEGD F		25.5	P7
TOTAL	Fluide frigorigène R32 (MDEGD)	148.2	kg		342346.7																	342346.7									Refrigeran		5.13.2.Spe		25		Refrigeran	MDEGD F		25.5	P7
					342346.7																	**342346.7**											**5.13.2.Spe**								
A1-A3	District heat distribution center, per 1kW	660.039	kW	3036.18	6093.6																	6093.6						0		3036.18	Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
A1-A3	Water circulation radiator, per 1kW / unit	1012.33	kW	52914.49	239124.9																	239124.9						0		52914.49	Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
A1-A3	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2	1873.82	6388.3																	6388.3						0		1873.82	Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
A1-A3				**57824.49**	**251606.8**																	**251606.8**								**57824.49**			**5.6.Space**								
A4	District heat distribution center, per 1kW	660.039	kW		2945.45																	2945.45									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
A4	Water circulation radiator, per 1kW / unit	1012.33	kW		51333.23																	51333.23									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
A4	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2		1817.83																	1817.83									Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
A4					**56096.51**																	**56096.51**											**5.6.Space**								
A5	District heat distribution center, per 1kW	660.039	kW	30.36	91.67																	91.67								30.36	Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
A5	Water circulation radiator, per 1kW / unit	1012.33	kW	529.14	2926.8																	2926.8								529.14	Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
A5	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2	112.43	497.09																	497.09								112.43	Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
A5				**671.94**	**3515.55**																	**3515.55**								**671.94**			**5.6.Space**								
B3	District heat distribution center, per 1kW	660.039	kW		0																	0									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
B3	Water circulation radiator, per 1kW / unit	1012.33	kW		0																	0									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
B3	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2		0																	0									Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
B3																																	**5.6.Space**								
B4	District heat distribution center, per 1kW	660.039	kW		9166.54																	9166.54								3036.18	Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
B4	Water circulation radiator, per 1kW / unit	1012.33	kW		292680.1																	292680.1								52914.49	Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8
B4	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2		8284.81																	8284.81								1873.82	Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
B4					**310131.4**																	**310131.4**								**57824.49**			**5.6.Space**								
B5	District heat distribution center, per 1kW	660.039	kW	0	0																	0								0	Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC con	One Click			P8

B5	Water circulation radiator, per 1kW / unit	1012.33	kW	0	0																	0								0	Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click			P8
B5	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2	0	0																	0								0	Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
B5																																	**5.6.Space**								
C2	District heat distribution center, per 1kW	660.039	kW		116.26																	116.26									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click	Trailer con		P8
C2	Water circulation radiator, per 1kW / unit	1012.33	kW		2026.23																	2026.23									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click	Trailer con		P8
C2	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2		71.75																	71.75									Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click	Trailer con		P8
C2					**2214.25**																	**2214.25**											**5.6.Space**								
C3	District heat distribution center, per 1kW	660.039	kW		10.44																	10.44									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click			P8
C3	Water circulation radiator, per 1kW / unit	1012.33	kW		181.98																	181.98									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click			P8
C3	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2		6.44																	6.44									Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
C3					**198.87**																	**198.87**											**5.6.Space**								
C4	District heat distribution center, per 1kW	660.039	kW		0.79																	0.79									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click	Inert mate		P8
C4	Water circulation radiator, per 1kW / unit	1012.33	kW		13.76																	13.76									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click	Inert mate		P8
C4	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2		0.49																	0.49									Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click	Inert mate		P8
C4					**15.04**																	**15.04**											**5.6.Space**								
D	District heat distribution center, per 1kW	660.039	kW		-12108.9																	-12108.9									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click			P8
D	Water circulation radiator, per 1kW / unit	1012.33	kW		-211034																	-211034									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click			P8
D	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2		-7659.09																	-7659.09									Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
D																																	**5.6.Space**								
TOTAL	District heat distribution center, per 1kW	660.039	kW		18424.75																	18424.75									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click			P8
TOTAL	Water circulation radiator, per 1kW / unit	1012.33	kW		588286.9																	588286.9									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click			P8
TOTAL	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2		17066.71																	17066.71									Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
TOTAL																																	**5.6.Space**								
bioC	District heat distribution center, per 1kW	660.039	kW		0																	0									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click			P8
bioC	Water circulation radiator, per 1kW / unit	1012.33	kW		0																	0									Building s	Metal-cont	5.6.Space		30	Heat distri	HVAC cor	One Click			P8
bioC	Heat distribution piping network, per m2 heated area, all building types	10123.3	m2		0																	0									Building s	Metal-cont	5.6.Space		30	Heat distri	Pipes (wat	One Click			P8
bioC																																	**5.6.Space**								
				58496.43	**623778.4**																	**623778.4**								**116320.9**			**5.6.Space**								
A1-A3	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit	3332.99	27014.05																	27014.05						0		3332.99	Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC cor	One Click			P8
A1-A3	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m	2830.98	20588.68																	20588.68						0		2830.98	Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC cor	One Click			P8
A1-A3				**6163.97**	**47602.73**																	**47602.73**								**6163.97**			**5.7.Ventil**								
A4	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit		3233.39																	3233.39									Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC cor	One Click			P8
A4	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m		2746.39																	2746.39									Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC cor	One Click			P8
A4					**5979.77**																	**5979.77**											**5.7.Ventil**								
A5	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit	33.33	303.87																	303.87								33.33	Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC cor	One Click			P8
A5	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m	28.31	234.54																	234.54								28.31	Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC cor	One Click			P8
A5				**61.64**	**538.41**																	**538.41**								**61.64**			**5.7.Ventil**								
B3	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit		0																	0									Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC cor	One Click			P8
B3	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m		0																	0									Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC cor	One Click			P8
B3																																	**5.7.Ventil**								
B4	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit		60774.8																	60774.8								6665.97	Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC cor	One Click			P8
B5	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit	0	0																	0								0	Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC cor	One Click			P8

C2	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit		127.63																	127.63									Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC con	One Click	Trailer con		P8
C2	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m		108.41																	108.41									Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC con	One Click	Trailer con		P8
C2					**236.03**																	**236.03**											**5.7.Ventil**								
C3	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit		11.46																	11.46									Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC con	One Click			P8
C3	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m		9.74																	9.74									Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC con	One Click			P8
C3					**21.2**																	**21.2**											**5.7.Ventil**								
C4	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit		0.87																	0.87									Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC con	One Click	Inert mate		P8
C4	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m		0.74																	0.74									Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC con	One Click	Inert mate		P8
C4					**1.6**																	**1.6**											**5.7.Ventil**								
D	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit		-19905.9																	-19905.9									Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC con	One Click			P8
D	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m		-5673.36																	-5673.36									Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC con	One Click			P8
D																																	**5.7.Ventil**								
TOTAL	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit		91466.07																	91466.07									Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC con	One Click			P8
TOTAL	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m		23688.48																	23688.48									Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC con	One Click			P8
TOTAL																																	**5.7.Ventil**								
bioC	Air handling unit, with heat recovery through plate heat exchanger, 10 000 m3/h (5885.8 ft3/min), 1256 kg/unit (2769 lbs/unit)	2.6546	unit		0																	0									Building s	Metal-cont	5.7.Ventila		25	Ventilation	HVAC con	One Click			P8
bioC	Ventilation ducting, per m linear, D: 63 mm (2.48 in)	3330.57	m		0																	0									Building s	Metal-cont	5.7.Ventila		60	Ventilation	HVAC con	One Click			P8
bioC																																	**5.7.Ventil**								
				6225.61	**115154.6**																	**115154.6**								**12891.58**			**5.7.Ventil**								
A1-A3	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2	40088.27	204687.3																	204687.3						0		40088.27	Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
A1-A3	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2	2643.19	8943.35																	8943.35						0		2643.19	Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click			P8
A1-A3	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2	1866.74	4427.5																	4427.5						0		1866.74	Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8
A1-A3				**44598.2**	**218058.1**																	**218058.1**								**44598.2**			**5.Service**								
A4	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2		38890.3																	38890.3									Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
A4	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2		2564.21																	2564.21									Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click			P8
A4	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2		1810.95																	1810.95									Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8
A4					**43265.46**																	**43265.46**											**5.Service**								
A5	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2	400.88	2452.61																	2452.61								400.88	Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
A5	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2	158.59	697.11																	697.11								158.59	Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click			P8
A5	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2	112	379.01																	379.01								112	Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8
A5				**671.48**	**3528.73**																	**3528.73**								**671.48**			**5.Service**								
B3	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2		0																	0									Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
B3	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2		0																	0									Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click			P8
B3	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2		0																	0									Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8

B3																																	**5.Service**								
B4	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2		245260.9																	245260.9								40088.27	Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
B4	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2		11618.55																	11618.55								2643.19	Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click			P8
B4	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2		6316.84																	6316.84								1866.74	Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8
B4					**263196.3**																	**263196.3**								**44598.2**			**5.Service**								
B5	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2	0	0																	0								0	Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
B5	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2	0	0																	0								0	Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click			P8
B5	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2	0	0																	0								0	Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8
B5																																	**5.Service**								
B6a	Electricity, United Kingdom, SAP 10.1 and 10.2	244114	kWh		1991970																	1991970									Electricity		5.Services				Electricity	SAP 10.0			P8
B6b	Electricity, United Kingdom, SAP 10.1 and 10.2	306214	kWh		2498706																	2498706									Electricity		5.Services				Electricity	SAP 10.0			P8
B7	Tap water, conventionally treated (One Click LCA)	17936	m3		291250.4																	291250.4									Total wate		5.Services				Water	One Click			P8
C2	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2		1535.08																	1535.08									Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click	Trailer con		P8
C2	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2		101.21																	101.21									Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click	Trailer con		P8
C2	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2		71.48																	71.48									Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click	Trailer con		P8
C2					**1707.78**																	**1707.78**											**5.Service**								
C3	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2		137.87																	137.87									Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
C3	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2		9.09																	9.09									Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click			P8
C3	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2		6.42																	6.42									Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8
C3					**153.38**																	**153.38**											**5.Service**								
C4	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2		10.42																	10.42									Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click	Inert mate		P8
C4	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2		0.69																	0.69									Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click	Inert mate		P8
C4	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2		0.49																	0.49									Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click	Inert mate		P8
C4					**11.6**																	**11.6**											**5.Service**								
D	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2		-159880																	-159880									Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
D	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2		-10803.8																	-10803.8									Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click			P8
D	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2		-7630.12																	-7630.12									Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8
D																																	**5.Service**								
TOTAL	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2		492974.5																	492974.5									Building s	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
TOTAL	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2		23934.21																	23934.21									Building s	Metal-cont	5.Services		30	Fresh wat	Pipes (wat	One Click			P8
TOTAL	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2		13012.7																	13012.7									Building s	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8
TOTAL	Tap water, conventionally treated (One Click LCA)	17936	m3		291250.4																	291250.4									Total wate		5.Services				Water	One Click			P8
TOTAL	Electricity, United Kingdom, SAP 10.1 and 10.2	244114	kWh		1991970																	1991970									Electricity		5.Services				Electricity	SAP 10.0			P8

TOTAL	Electricity, United Kingdom, SAP 10.1 and 10.2	306214	kWh		2498706																	2498706									Electricity		5.Services				Electricity	SAP 10.0			P8
TOTAL																																	**5.Service**								
bioC	Electricity distribution system, cabling and central, for all building types, per m2 GFA	10123.3	m2		0																	0									Building sy	Metal-cont	5.Services		30	Electricity	HVAC con	One Click			P8
bioC	Drinking water supply piping network, per m2 GIFA (residential buildings)	10123.3	m2		0																	0									Building sy	Metal-cont	5.Services		30	Fresh wate	Pipes (wat	One Click			P8
bioC	Sewage water drainage piping network, per m2 GIFA (residential buildings)	10123.3	m2		0																	0									Building sy	Metal-cont	5.Services		30	Wastewat	Pipes (wat	One Click			P8
bioC																																	**5.Service**								
				45269.68	**5311848**																	**5311848**								**89867.87**			**5.Service**								
A1-A3	Sand, compacted dry density, 1682 kg/m3	57524.4	kg	57524.4	133.46																				133.46			0			Materials a		8.2.1.Roa	3 cm	As buildin	Sidewalk (	Sand, soil	LCA inven			P3
A1-A3	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg	148320	10818.38																				10818.38			0	148320		Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3
A1-A3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	182400	kg	182400	456.39																				456.39			0			Materials a		8.2.1.Roa	10 cm	As buildin	Sidewalk (	Sand, soil	One Click			P3
A1-A3	Macadam (8…16 mm), wet bulk density, 2000 kg/m3	247200	kg	247200	1081.8																				1081.8			0			Materials a		8.2.1.Roa	4 cm	As buildin	Bike path	Sand, soil	LCA inven			P3
A1-A3	Precast concrete pavers/blocks, Danish average, 10 cm, 225 kg/m2 (Belægningsgruppen)	256500	kg	256500	32571.2																				32571.2			0		256500	Materials a	Rebar sep	8.2.1.Roa	10 cm	As buildin	Sidewalk (	Other prec	EPD Belæ			P2
A1-A3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	741600	kg	741600	1855.57																				1855.57			0			Materials a		8.2.1.Roa	15 cm	As buildin	Bike path	Sand, soil	One Click			P3
A1-A3				**1633544**	**46916.78**																				**46916.78**				**148320**	**256500**			**8.2.1.Roa**								
A4	Sand, compacted dry density, 1682 kg/m3	57524.4	kg		611.92																				611.92						Materials a		8.2.1.Roa	3 cm	As buildin	Sidewalk (	Sand, soil	LCA inven			P3
A4	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg		1577.75																				1577.75						Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3
A4	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	182400	kg		1940.28																				1940.28						Materials a		8.2.1.Roa	10 cm	As buildin	Sidewalk (	Sand, soil	One Click			P3
A4	Macadam (8…16 mm), wet bulk density, 2000 kg/m3	247200	kg		2629.59																				2629.59						Materials a		8.2.1.Roa	4 cm	As buildin	Bike path	Sand, soil	LCA inven			P3
A4	Precast concrete pavers/blocks, Danish average, 10 cm, 225 kg/m2 (Belægningsgruppen)	256500	kg		16371.11																				16371.11						Materials a	Rebar sep	8.2.1.Roa	10 cm	As buildin	Sidewalk (	Other prec	EPD Belæ			P2
A4	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	741600	kg		7888.77																				7888.77						Materials a		8.2.1.Roa	15 cm	As buildin	Bike path	Sand, soil	One Click			P3
A4					**31019.42**																				**31019.42**								**8.2.1.Roa**								
A5	Sand, compacted dry density, 1682 kg/m3	57524.4	kg	0	0																				0						Materials a		8.2.1.Roa	3 cm	As buildin	Sidewalk (	Sand, soil	LCA inven			P3
A5	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg	0	0																				0				0		Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3
A5	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	182400	kg	0	0																				0						Materials a		8.2.1.Roa	10 cm	As buildin	Sidewalk (	Sand, soil	One Click			P3
A5	Macadam (8…16 mm), wet bulk density, 2000 kg/m3	247200	kg	0	0																				0						Materials a		8.2.1.Roa	4 cm	As buildin	Bike path	Sand, soil	LCA inven			P3
A5	Precast concrete pavers/blocks, Danish average, 10 cm, 225 kg/m2 (Belægningsgruppen)	256500	kg	0	0																				0					0	Materials a	Rebar sep	8.2.1.Roa	10 cm	As buildin	Sidewalk (	Other prec	EPD Belæ			P2
A5	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	741600	kg	0	0																				0						Materials a		8.2.1.Roa	15 cm	As buildin	Bike path	Sand, soil	One Click			P3
A5																																	**8.2.1.Roa**								
B3	Sand, compacted dry density, 1682 kg/m3	57524.4	kg		0																				0						Materials a		8.2.1.Roa	3 cm	As buildin	Sidewalk (	Sand, soil	LCA inven			P3
B3	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg		0																				0						Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3
B3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	182400	kg		0																				0						Materials a		8.2.1.Roa	10 cm	As buildin	Sidewalk (	Sand, soil	One Click			P3
B3	Macadam (8…16 mm), wet bulk density, 2000 kg/m3	247200	kg		0																				0						Materials a		8.2.1.Roa	4 cm	As buildin	Bike path	Sand, soil	LCA inven			P3
B3	Precast concrete pavers/blocks, Danish average, 10 cm, 225 kg/m2 (Belægningsgruppen)	256500	kg		0																				0						Materials a	Rebar sep	8.2.1.Roa	10 cm	As buildin	Sidewalk (	Other prec	EPD Belæ			P2
B3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	741600	kg		0																				0						Materials a		8.2.1.Roa	15 cm	As buildin	Bike path	Sand, soil	One Click			P3
B3																																	**8.2.1.Roa**								
B4	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg		12874.48																				12874.48				148320		Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3

B5	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg	0	0																				0				0		Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3
C2	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg		434.01																				434.01						Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click	Dumper tr		P3
C2	Precast concrete pavers/blocks, Danish average, 10 cm, 225 kg/m2 (Belægningsgruppen)	256500	kg		750.56																				750.56						Materials a	Rebar sep	8.2.1.Roa	10 cm	As buildin	Sidewalk (	Other prec	EPD Belæ	Dumper tr		P2
C2					**1184.57**																				**1184.57**								**8.2.1.Roa**								
C3	Sand, compacted dry density, 1682 kg/m3	57524.4	kg		0																				0						Materials a		8.2.1.Roa	3 cm	As buildin	Sidewalk (	Sand, soil	LCA inven			P3
C3	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg		44.34																				44.34						Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3
C3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	182400	kg		0																				0						Materials a		8.2.1.Roa	10 cm	As buildin	Sidewalk (	Sand, soil	One Click			P3
C3	Macadam (8…16 mm), wet bulk density, 2000 kg/m3	247200	kg		0																				0						Materials a		8.2.1.Roa	4 cm	As buildin	Bike path	Sand, soil	LCA inven			P3
C3	Precast concrete pavers/blocks, Danish average, 10 cm, 225 kg/m2 (Belægningsgruppen)	256500	kg		88.72																				88.72						Materials a	Rebar sep	8.2.1.Roa	10 cm	As buildin	Sidewalk (	Other prec	EPD Belæ			P2
C3	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	741600	kg		0																				0						Materials a		8.2.1.Roa	15 cm	As buildin	Bike path	Sand, soil	One Click			P3
C3					**133.06**																				**133.06**								**8.2.1.Roa**								
D	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg		-1164.54																				-1164.54						Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3
D	Precast concrete pavers/blocks, Danish average, 10 cm, 225 kg/m2 (Belægningsgruppen)	256500	kg		-11309.8																				-11309.8						Materials a	Rebar sep	8.2.1.Roa	10 cm	As buildin	Sidewalk (	Other prec	EPD Belæ			P2
D																																	**8.2.1.Roa**								
TOTAL	Sand, compacted dry density, 1682 kg/m3	57524.4	kg		745.37																				745.37						Materials a		8.2.1.Roa	3 cm	As buildin	Sidewalk (	Sand, soil	LCA inven			P3
TOTAL	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg		25748.96																				25748.96						Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3
TOTAL	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	182400	kg		2396.67																				2396.67						Materials a		8.2.1.Roa	10 cm	As buildin	Sidewalk (	Sand, soil	One Click			P3
TOTAL	Macadam (8…16 mm), wet bulk density, 2000 kg/m3	247200	kg		3711.39																				3711.39						Materials a		8.2.1.Roa	4 cm	As buildin	Bike path	Sand, soil	LCA inven			P3
TOTAL	Precast concrete pavers/blocks, Danish average, 10 cm, 225 kg/m2 (Belægningsgruppen)	256500	kg		49781.59																				49781.59						Materials a	Rebar sep	8.2.1.Roa	10 cm	As buildin	Sidewalk (	Other prec	EPD Belæ			P2
TOTAL	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	741600	kg		9744.34																				9744.34						Materials a		8.2.1.Roa	15 cm	As buildin	Bike path	Sand, soil	One Click			P3
TOTAL																																	**8.2.1.Roa**								
bioC	Sand, compacted dry density, 1682 kg/m3	57524.4	kg		0																				0						Materials a		8.2.1.Roa	3 cm	As buildin	Sidewalk (	Sand, soil	LCA inven			P3
bioC	Asphalt, generic, compacted, 5/95% bitumen-aggregate ratio, 2350 kg/m3	148320	kg		0																				0						Materials a	Asphalt re	8.2.1.Roa	2 cm	30	Bike path	Asphalt	One Click			P3
bioC	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	182400	kg		0																				0						Materials a		8.2.1.Roa	10 cm	As buildin	Sidewalk (	Sand, soil	One Click			P3
bioC	Macadam (8…16 mm), wet bulk density, 2000 kg/m3	247200	kg		0																				0						Materials a		8.2.1.Roa	4 cm	As buildin	Bike path	Sand, soil	LCA inven			P3
bioC	Precast concrete pavers/blocks, Danish average, 10 cm, 225 kg/m2 (Belægningsgruppen)	256500	kg		0																				0						Materials a	Rebar sep	8.2.1.Roa	10 cm	As buildin	Sidewalk (	Other prec	EPD Belæ			P2
bioC	Aggregate (crushed gravel), generic, dry bulk density, 1600 kg/m3	741600	kg		0																				0						Materials a		8.2.1.Roa	15 cm	As buildin	Bike path	Sand, soil	One Click			P3
bioC																																	**8.2.1.Roa**								
				1633544	**92128.32**																				**92128.32**				**296640**	**256500**			**8.2.1.Roa**								
A1-A3	Polyethylene waterproofing film, 0.135 kg/m2, Film d`étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2	307.8	1256.62																						1256.62	0			Internal wa	Plastic-ba	Not classif		30	Ceramic ti	Plastic me	MDEGD F			P7
A1-A3	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2	11400	6038.47																						6038.47	0		11400	Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7
A1-A3	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2	45600	17386.41																						17386.41	0		45600	Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2

A1-A3	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg	5637.04	13892.84																						13892.84	0			Internal wa	Landfilling	Not classif		15	Interior pa	Paints, coa	EPD Sikke			P7
A1-A3				**62944.84**	**38574.34**																						**38574.34**			**57000**			**Not classi**								
A4	Polyethylene waterproofing film, 0.135 kg/m2, Film d`étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2		17.68																						17.68				Internal wa	Plastic-bas	Not classif		30	Ceramic ti	Plastic me	MDEGD f			P7
A4	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2		130.96																						130.96				Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7
A4	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2		2619.21																						2619.21				Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2
A4	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg		784.31																						784.31				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, coa	EPD Sikke			P7
A4					**3552.16**																						**3552.16**						**Not classi**								
A5	Polyethylene waterproofing film, 0.135 kg/m2, Film d`étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2	30.78	191.12																						191.12				Internal wa	Plastic-bas	Not classif		30	Ceramic ti	Plastic me	MDEGD f			P7
A5	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2	1482	806.88																						806.88			1482	Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7
A5	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2	4560	2015.48																						2015.48			4560	Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2
A5	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg	563.7	1470.83																						1470.83				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, coa	EPD Sikke			P7
A5				**6636.48**	**4484.31**																						**4484.31**			**6042**			**Not classi**								
B3	Polyethylene waterproofing film, 0.135 kg/m2, Film d`étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2		0																						0				Internal wa	Plastic-bas	Not classif		30	Ceramic ti	Plastic me	MDEGD f			P7
B3	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2		0																						0				Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7

B3	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2		0																						0				Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2
B3	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg		0																						0				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, coa	EPD Sikke			P7
B3																																	**Not classi**								
B4	Polyethylene waterproofing film, 0.135 kg/m2, Film d`étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2		1911.2																						1911.2				Internal wa	Plastic-ba	Not classif		30	Ceramic ti	Plastic me	MDEGD I			P7
B4	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2		6206.73																						6206.73			11400	Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7
B4	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2		20154.83																						20154.83			45600	Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2
B4	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg		44124.89																						44124.89				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, coa	EPD Sikke			P7
B4					**72397.66**																						**72397.66**			**57000**			**Not classi**								
B5	Polyethylene waterproofing film, 0.135 kg/m2, Film d`étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2	0	0																						0				Internal wa	Plastic-ba	Not classif		30	Ceramic ti	Plastic me	MDEGD I			P7
B5	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2	0	0																						0			0	Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7
B5	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2	0	0																						0			0	Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2
B5	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg	0	0																						0				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, coa	EPD Sikke			P7
B5																																	**Not classi**								
C2	Polyethylene waterproofing film, 0.135 kg/m2, Film d`étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2		1.18																						1.18				Internal wa	Plastic-ba	Not classif		30	Ceramic ti	Plastic me	MDEGD I	Trailer con		P7

C2	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2		33.36																						33.36				Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES	Dumper tr		P7
C2	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2		133.43																						133.43				Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click	Dumper tr		P2
C2	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg		16.49																						16.49				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, co	EPD Sikke	Dumper tr		P7
C2					**184.47**																						**184.47**						**Not classi**								
C3	Polyethylene waterproofing film, 0.135 kg/m2, Film d`étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2		635.72																						635.72				Internal wa	Plastic-ba	Not classif		30	Ceramic ti	Plastic me	MDEGD I			P7
C3	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2		3.94																						3.94				Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7
C3	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2		15.77																						15.77				Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2
C3	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg		0																						0				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, co	EPD Sikke			P7
C3					**655.44**																						**655.44**						**Not classi**								
C4	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg		14.66																						14.66				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, co	EPD Sikke	Inert mate		P7
D	Polyethylene waterproofing film, 0.135 kg/m2, Film d`étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2		-967.73																						-967.73				Internal wa	Plastic-ba	Not classif		30	Ceramic ti	Plastic me	MDEGD I			P7
D	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2		-381.01																						-381.01				Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7
D	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2		-375.93																						-375.93				Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2
D																																	**Not classi**								

TOTAL	Polyethylene waterproofing film, 0.135 kg/m2, Film d'étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2		4013.52																						4013.52				Internal wa	Plastic-ba	Not classif		30	Ceramic ti	Plastic me	MDEGD F			P7
TOTAL	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2		13220.34																						13220.34				Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7
TOTAL	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2		42325.15																						42325.15				Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2
TOTAL	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg		60304.02																						60304.02				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, co	EPD Sikk			P7
TOTAL																																	**Not classi**								
bioC	Polyethylene waterproofing film, 0.135 kg/m2, Film d'étanchéité en polyéthylène pour dalle (DONNEE ENVIRONNEMENTALE GENERIQUE PAR DEFAUT)	2280	m2		0																						0				Internal wa	Plastic-ba	Not classif		30	Ceramic ti	Plastic me	MDEGD F			P7
bioC	Tile adhesive, 5 kg/m2, webercol pro (SAINT GOBAIN WEBER FRANCE)	2280	m2		0																						0				Internal wa	Cement/m	Not classif		30	Ceramic ti	Tile adhes	FDES			P7
bioC	Ceramic glazed tile, 20 kg/m2 (One Click LCA)	2280	m2		0																						0				Internal wa	Brick/ston	Not classif		30	Ceramic ti	Wall and f	One Click			P2
bioC	Wall paints for interior use, 0.16 mm, 0.249 kg/m2, 1552 kg/m3, Alpha unidecor BL mat, Alpha unidecor BL satin, Alphacryl Morpha, Alphacryl Perlino, Alphacryl Pure Mat SF, Alpha Rezisto Easy Clean, Alpha Rezisto Mat, Alpha Rezisto Anti Marks, Alphacryl Plafond, Alpha Cover Mat, Alpha Projecttex, Alphamat SF, Alphatex SF, Alpha Tex Acryl, Alpha Humitex SF, Alpha Sanocryl, Alpha Sanoprotex, Alpha Tex Schimmelwerend, Alpha Isolux SF / Isolux SF (AkzoNobel)	5637.041	kg		0																						0				Internal wa	Landfilling	Not classif		15	Interior pa	Paints, co	EPD Sikk			P7
bioC																																	**Not classi**								
				69581.33	**119863**																						**119863**			**120042**			**Not classi**								
A5	Average site impacts - temperate climate (South), EU electricity mix, 2024	10123.4	m2		140816.5																					140816.5					Constructi		Other site				Other site	One Click			
TOTAL	Average site impacts - temperate climate (South), EU electricity mix, 2024	10123.4	m2		140816.5																					140816.5					Constructi		Other site				Other site	One Click			
					140816.5																					**140816.5**							**Other site**								

Appendix B Leti Embodied Carbon Declaration Report

1. Project Input

Project Name	Woolley Colliery Road, Darton, Barnsley
Project Sector	Residential (6+ storeys)
Assessment Date	23.09.24
Assessment By (name)	Rob Waiting
Assessment By (company)	Stroma Built Environment
RIBA Workstage	RIBA Stage 2
GIA (m^2)	10,123
Est. Year of Project Completion	17/07/1905
Location of data	-
Project Description (overview of the projects, e.g. building type, number of stories, basement, site conditions, materials, constraints, structural system, servicing strategy):	The development site is located within Darton, Barnsley on land off Woolley Colliery Road. The proposal will consist of the development of 114 dwellings split into 72 dwellings on Site A and 42 dwellings on Site B. There will be a mixture of 2-4 bedroom detached and semi-detached houses, with associated access, landscaping and parking. Whilst the development is low rise housing, the closest benchmark data is for 6+ storey residential use so this has been chosen.
Analysis Method (e.g. software)	Oneclick LCA
Data Notes (other descriptions about the process, omissions, additions, etc. that would help future analysis)	

Residential Houses Low Rise

Project Name	Woolley Colliery Road, Darton, Barnsley
Project Sector	Residential (6+ storeys)
Assessment Date	23.09.24
Assessment By (name)	Rob Waiting
Assessment By (company)	Stroma Built Environment
RIBA Workstage	RIBA Stage 2
GIA (m^2)	10,123
Est. Year of Project Completion	2025

Embodied Carbon per Module per Element ($kgCO_2e/m^2$, GIA)

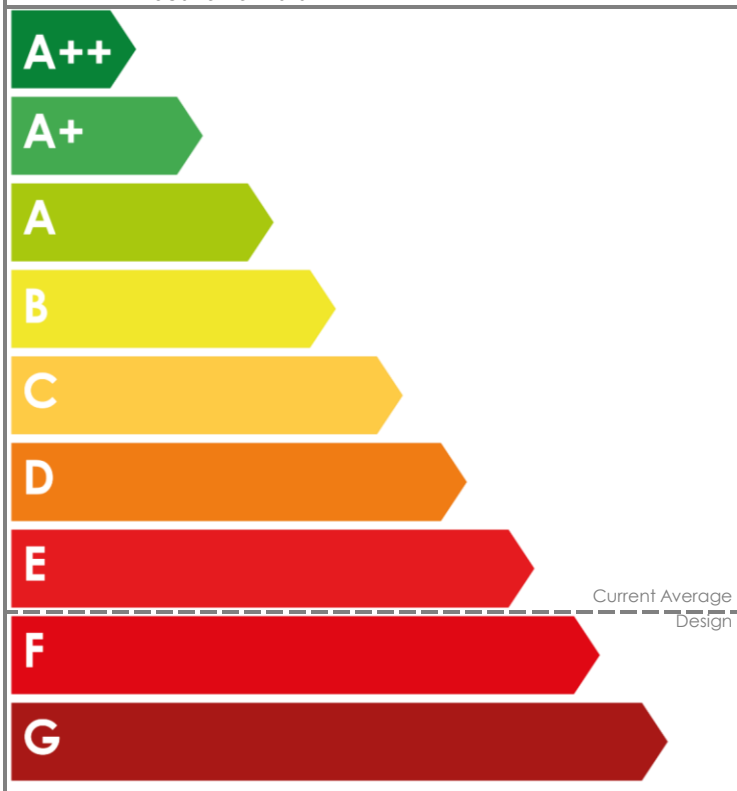
		A1-3	A1-3 (Sequestered)	A4	A5	B1-3	B4&5	C1-4	D
Demolition	Toxic Material Treatment								
	Major Demolition Works								
Facilitating Works	Temporary/ Enabling Works								
	Specialist Ground works								
Substructure	Substructure	82.85631705	0	9.460822451	4.839837406		0.40286465	8.3647569	-19.1085327
Superstructure	Frame							0	
	Upper Floors	15.77455598	-22.34890946	0.604095462	2.253566983			22.78413478	-10.2671553
	Roof	15.22187309	-17.49637671	0.918467116	1.427550033		4.464103957	19.47151451	-13.3113203
	Stairs and Ramp	1.613369026	-2.472586285	0.018417725	0.296513029			2.497295375	-1.08479661
	External Walls	182.047896	0	5.727437422	14.54635103		0.831129858	2.257815556	-7.46939171
	Windows and External Doors	20.29847482	0	0.027744631	0		20.34506786	0.018848411	-0.01011518
	Internal Walls and Partitions	29.84748207	-6.983029417	1.47560701	3.19700891		0	7.840761997	-5.49792955
	Internal Doors	1.178262244	-2.173943537		0		1.263726614	2.19129739	
Finishes	Wall Finishes	3.82388328		0.166509276	0.514451666		1.918040382	0.254244621	-0.02786218
	Floor Finishes								
	Ceiling Finishes								
FF&E	FF&E (Fixed)								
	FF&E (non-fixed)								
Building Services	Building Services	54.9		10.3	15.09	12.5	69.33	0.53	-42.93
	Refrigerant Leakage					33.81			
	Renewable Electricity Generation								
Prefabricated Buildings	Pre-fab Building Units								
Work to Existing Building	Minor Demolition and Alterations								

External Works	External Works	4.63		3.06	0		12.84	0.13	
	TOTAL	**408**	**-51**	**29**	**42**	**46**	**99**	**66**	**-100**

Benchmarking

Upfront Embodied Carbon A1-5 exc. Sequestration	C	**478**	$kgCO_2e/m^2$
Life Cycle Embodied Carbon A1-5, B1-5, C1-4	C	**638**	$kgCO_2e/m^2$
Sequestered Carbon A1-3		**-51**	$kgCO_2e/m^2$
Module D		**-100**	$kgCO_2e/m^2$

Project Name Woolley Colliery Road, Darton, B **Project Sector** Residential (6+ storeys) **Assessment Date** 23.09.24 **Assessment By (company)** Stroma Built Environment **Location of Data** -	**Upfront Embodied Carbon** A1-5 exc. sequestration ($kgCO_2e/m^2$)	**Life Cycle Embodied Carbon** A1-5, B1-5, C1-4 ($kgCO_2e/m^2$)
A++	100	150
A+	200	300
A	300	450
B	400	625
C	500	800
D	675	1000
E	850	1200
Current Average / Design		
F	1000	1400
G		
Non-Listed Typology:		
Sequestered Carbon:	**-51 $kgCO_2e/m^2$**	
	Module D:	**-100 $kgCO_2e/m^2$**

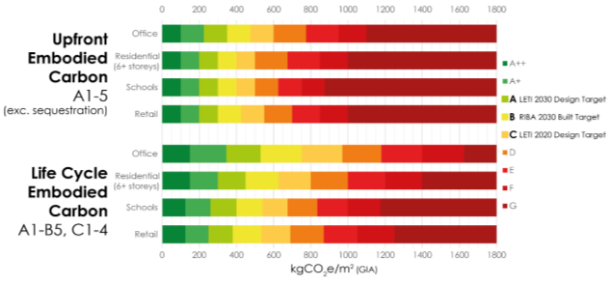


Upfront Embodied Carbon, A1-5 (exc. sequestration)

	Band	Office	Residential (6+ storeys)	Education	Retail
	A++	<100	<100	<100	<100
	A+	<225	<200	<200	<200
LETI 2030 Design Target	A	<350	<300	<300	<300
	B	<475	<400	<400	<425
LETI 2020 Design Target	C	<600	<500	<500	<550
	D	<775	<675	<625	<700
	E	<950	<850	<750	<850
	F	<1100	<1000	<875	<1000
	G	<1300	<1200	<1100	<1200

Life Cycle Embodied Carbon, A1-5, B1-5, C1-4

	Band	Office	Residential (6+ storeys)	Education	Retail
	A++	<150	<150	<125	<125
	A+	<345	<300	<260	<250
	A	<530	<450	<400	<380
RIBA 2030 Build Target	B	<750	<625	<540	<535
	C	<970	<800	<675	<690
	D	<1180	<1000	<835	<870
	E	<1400	<1200	<1000	<1050
	F	<1625	<1400	<1175	<1250
	G	<1900	<1600	<1350	<1450



Band Colours (RGB)	
A++	048337
A+	45AA50
A	A8C812
B	F3E72C
C	FECC46
D	EF7C1A
E	E52320
F	D10913
G	A81916