

# ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

**TFSi-joist Timber Floors**  
**Staircraft Group Ltd**



EPD HUB, HUB-0927

Publishing date 18 December 2023, last updated on 18 December 2023, valid until 18 December 2028.

# GENERAL INFORMATION

## MANUFACTURER

Manufacturer	Staircraft Group Ltd
Address	Colliery Lane North, Bayton Road Industrial Estate, Exhall
Contact details	ben.humphries@staircraftgroup.com
Website	https://staircraftgroup.com/

## EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR version 1.0, 1 Feb 2022
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Ben Humphries, Environmental & Sustainability Analyst at Staircraft
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

## PRODUCT

Product name	TFSi-joist Timber Floors
Additional labels	N/A
Product reference	4.38m x 8.16m rectangular domestic timber I-joist floor excluding flooring boards
Place of production	Coventry, UK
Period for data	01/06/21 - 31/05/22
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	%

## ENVIRONMENTAL DATA SUMMARY

Declared unit	1 kg of installed TFSi-joist timber floor (excluding flooring boards)
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO <sub>2</sub> e)	4.24E-01
GWP-total, A1-A3 (kgCO <sub>2</sub> e)	-8.92E-01
Secondary material, inputs (%)	0.447
Secondary material, outputs (%)	0.0
Total energy use, A1-A3 (kWh)	2.76
Total water use, A1-A3 (m <sup>3</sup> e)	6.65E-02

### Note:

The declared unit was chosen as 1kg to enable the LCA data established for the representative size of timber I-joist floor chosen in this EPD to be scaled to suit TFSi-joist floors with alternative geometries.

# PRODUCT AND MANUFACTURER

## ABOUT THE MANUFACTURER

Staircraft are the world's largest manufacturer of timber staircases, as well as supplying integrated timber floor and door-kit solutions to the UK residential housing sector. We operate from 4 manufacturing sites in the Midlands, covering over 405 000 sq. ft.

Our team are passionate about innovation and sustainability. Using the latest CNC technology our products are designed to minimise waste, and create efficient, hassle-free and safe solutions for tradespeople to install.

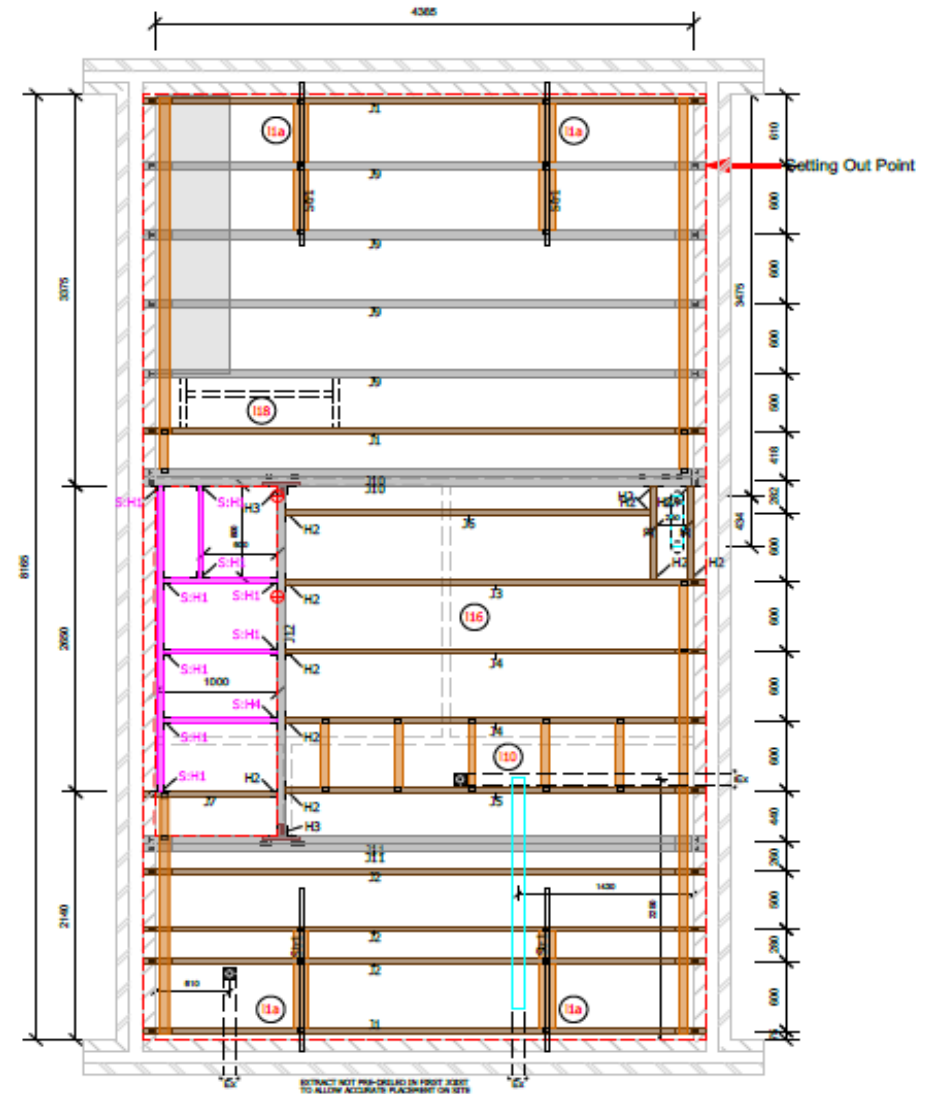
## PRODUCT DESCRIPTION

TFSi-joist timber floors comprise a framework of TFSi floor joists and beams connected together using metal fixings, clips and joist hangers to form a structural floor system for use in single or multi-family dwellings. The TFSi-joists are manufactured by Staircraft Group Ltd and comprise high-quality timber flanges separated by a central OSB web. The structural properties of TFSi-joists are declared in an independent 3<sup>rd</sup> party accreditation provided by BMTRADA (Q-Mark Cert #026), which also confirms their fitness for purpose as loadbearing timber joists and beams. For a given floor footprint, the joist flange size, joist spacing and joist depth can all be varied to suit the required spans and loads imposed on the floor. Each floor layout is therefore different depending on the geometry, loadings and client specifications for the floor in question.

For this EPD the floor layout opposite was chosen as a typical floor for which LCA parameters were defined. This type of rectangular floor measuring circa 4.3m x 8.1m with a rectangular stair opening on one side is a typical footprint for a semi-detached or terraced domestic property, and is the most common floor configuration we are asked to design. The LCA parameters derived from this reference floor are published in this EPD on a per kg basis, so that they can be scaled to suit all other floors with alternative geometries.

Once the structural framework of joists, beams and metal hangers has been installed on site, chipboard flooring is laid on top to form a walking surface. The type of floor decking required, and whether it is supplied as a loose pack of boards or factory pre-cut to size to suit the plot dimensions, is dependent on client choice. For this reason the LCA parameters pertaining to these various floor decking supply options are covered in a separate EPD produced by Staircraft Group Ltd and published by EPD Hub.

Comprehensive further information can be found on our timber floor system, and all other products we manufacture, at <https://staircraftgroup.com>.



## PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	4.59	UK
Minerals	0	N/A
Fossil materials	0	N/A
Bio-based materials	95.41	Europe

## BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0.404
Biogenic carbon content in packaging, kg C	0

## FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 kg of installed TFSi-joist timber floor
Mass per declared unit	1 kg
Functional unit	1 kg of installed TFSi-joist timber floor
Reference service life	60 years

## SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).



# PRODUCT LIFE-CYCLE

## SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
x	x	x	x	x	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = MND. Modules not relevant = MNR.

### MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for this product stage cover the extraction, manufacture and transport of raw materials used in the production process, as well as packaging materials and other ancillary materials used. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

Our manufacturing process is summarised in the flowchart overleaf. TFSi-joists are manufactured from softwood timber sourced from Scandinavia and OSB sourced from Europe. The OSB is cut and machined to make the central web, whilst the timber is cut to size and routed to make flanges into which the OSB web is then glued and pressed together to form an 11m long timber i-Joist. These stock joist lengths are then further trimmed to length to suit individual floor footprints, and notches, holes and end blocking is added to make floor construction quick and easy on site. Waste minimisation is an integral part of the cutting process used to produce these joists, using batch cutting software which simultaneously cuts the joists required for several

floors at once, using the 11m stock joists available, in order to minimise the amount of waste remaining. Any such waste is then used to heat the factory. Steel clips and hangers sourced from the UK are then assembled together with the i-joists necessary to form a floor kit, which are then delivered to site and installed in accordance with a floor framing plan showing how the various components should be assembled and fixed in position.

### TRANSPORT AND INSTALLATION (A4-A5)

Our I-joist factory delivers these pre-cut floor kits to the relevant construction sites using a mixture of vehicle sizes/types depending upon available site access, and delivery date requirements. Vehicle types and delivery sizes are chosen to optimise load size, fuel efficiency and mileage travelled. Transportation impacts incurred during delivery to site (A4) cover direct fuel exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

Site installation (A5) of the floor can be carried out using handheld hammers, saws and rechargeable drills.

### PRODUCT USE AND MAINTENANCE (B1-B7)

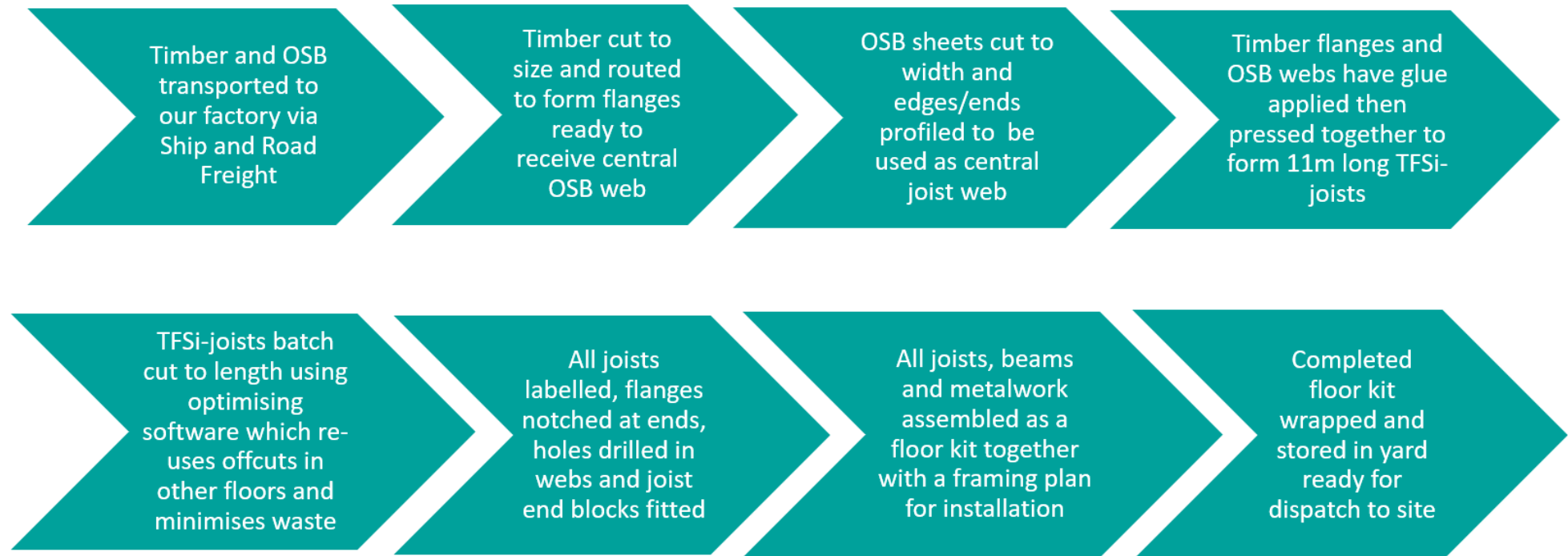
This EPD does not cover the use phase.

Air, soil, and water impacts during the use phase have not been studied.

### PRODUCT END OF LIFE (C1-C4, D)

Our timber floors are installed in single and multi-occupancy dwellings where the end-of-life process for demolition and waste removal/recycling is either unknown or unclear. We have therefore assumed a worse-case scenario whereby the products we have supplied are sent to landfill at the end-of-life.

## MANUFACTURING PROCESS



# LIFE-CYCLE ASSESSMENT

## CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

## ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging materials	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

## AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	%

This EPD is product and factory specific and does not contain average calculations.

## LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. Ecoinvent v3.8 and One Click LCA databases were used as sources of environmental data.

# ENVIRONMENTAL IMPACT DATA

## CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total <sup>1)</sup>	kg CO <sub>2</sub> e	-1.08E+00	2.74E-03	1.80E-01	-8.92E-01	5.01E-03	7.60E-02	MND	MND	MND	MND	MND	MND	MND	3.31E-03	2.82E-03	0.00E+00	1.28E+00	0.00E+00
GWP – fossil	kg CO <sub>2</sub> e	4.01E-01	2.74E-03	2.04E-02	4.24E-01	5.01E-03	9.24E-04	MND	MND	MND	MND	MND	MND	MND	3.31E-03	2.82E-03	0.00E+00	1.05E-02	0.00E+00
GWP – biogenic	kg CO <sub>2</sub> e	-1.48E+00	6.35E-08	1.60E-01	-1.32E+00	0.00E+00	7.50E-02	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	1.27E+00	0.00E+00
GWP – LULUC	kg CO <sub>2</sub> e	1.16E-03	1.01E-06	5.99E-06	1.17E-03	2.00E-06	7.31E-07	MND	MND	MND	MND	MND	MND	MND	3.30E-07	1.04E-06	0.00E+00	1.09E-05	0.00E+00
Ozone depletion pot.	kg CFC <sub>11</sub> e	4.30E-08	6.30E-10	8.03E-09	5.17E-08	1.16E-09	2.38E-10	MND	MND	MND	MND	MND	MND	MND	7.07E-10	6.48E-10	0.00E+00	3.16E-09	0.00E+00
Acidification potential	mol H <sup>+</sup> e	2.77E-03	1.15E-05	1.47E-04	2.92E-03	1.42E-05	6.24E-06	MND	MND	MND	MND	MND	MND	MND	3.44E-05	1.19E-05	0.00E+00	8.91E-05	0.00E+00
EP-freshwater <sup>2)</sup>	kg Pe	1.21E-05	2.22E-08	2.59E-07	1.24E-05	3.58E-08	1.35E-08	MND	MND	MND	MND	MND	MND	MND	1.10E-08	2.31E-08	0.00E+00	2.01E-07	0.00E+00
EP-marine	kg Ne	8.81E-04	3.43E-06	5.19E-05	9.37E-04	2.84E-06	3.72E-06	MND	MND	MND	MND	MND	MND	MND	1.52E-05	3.54E-06	0.00E+00	5.82E-05	0.00E+00
EP-terrestrial	mol Ne	9.65E-03	3.78E-05	6.14E-04	1.03E-02	3.15E-05	2.29E-05	MND	MND	MND	MND	MND	MND	MND	1.67E-04	3.91E-05	0.00E+00	3.32E-04	0.00E+00
POCP (“smog”) <sup>3)</sup>	kg NMVOCe	2.62E-03	1.21E-05	1.59E-04	2.79E-03	1.21E-05	8.01E-06	MND	MND	MND	MND	MND	MND	MND	4.59E-05	1.25E-05	0.00E+00	1.18E-04	0.00E+00
ADP-minerals & metals <sup>4)</sup>	kg Sbe	2.45E-06	6.59E-09	1.57E-08	2.47E-06	1.81E-08	2.56E-09	MND	MND	MND	MND	MND	MND	MND	1.68E-09	6.60E-09	0.00E+00	3.54E-08	0.00E+00
ADP-fossil resources	MJ	5.86E+00	4.11E-02	1.79E-01	6.08E+00	7.46E-02	1.76E-02	MND	MND	MND	MND	MND	MND	MND	4.45E-02	4.23E-02	0.00E+00	2.42E-01	0.00E+00
Water use <sup>5)</sup>	m <sup>3</sup> e depr.	1.62E-01	1.84E-04	1.13E-02	1.74E-01	3.49E-04	9.84E-05	MND	MND	MND	MND	MND	MND	MND	1.20E-04	1.89E-04	0.00E+00	1.43E-03	0.00E+00

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.



## USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy <sup>8)</sup>	MJ	3.70E+00	4.70E-04	1.09E-01	3.81E+00	1.08E-03	2.96E-04	MND	MND	MND	MND	MND	MND	MND	2.54E-04	4.76E-04	0.00E+00	4.42E-03	0.00E+00
Renew. PER as material	MJ	2.24E+01	0.00E+00	-2.45E+00	2.00E+01	0.00E+00	-1.16E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	-1.91E+01	0.00E+00
Total use of renew. PER	MJ	2.61E+01	4.70E-04	-2.34E+00	2.38E+01	1.08E-03	-1.16E+00	MND	MND	MND	MND	MND	MND	MND	2.54E-04	4.76E-04	0.00E+00	-1.91E+01	0.00E+00
Non-re. PER as energy	MJ	5.72E+00	4.11E-02	3.48E-01	6.11E+00	7.46E-02	1.76E-02	MND	MND	MND	MND	MND	MND	MND	4.45E-02	4.23E-02	0.00E+00	2.42E-01	0.00E+00
Non-re. PER as material	MJ	2.75E-01	0.00E+00	-4.08E-03	2.70E-01	0.00E+00	-4.27E-02	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	-2.43E-01	0.00E+00
Total use of non-re. PER	MJ	5.99E+00	4.11E-02	3.44E-01	6.38E+00	7.46E-02	-2.51E-02	MND	MND	MND	MND	MND	MND	MND	4.45E-02	4.23E-02	0.00E+00	-1.07E-03	0.00E+00
Secondary materials	kg	4.47E-03	1.15E-05	6.12E-05	4.54E-03	2.54E-05	5.92E-06	MND	MND	MND	MND	MND	MND	MND	1.74E-05	1.17E-05	0.00E+00	8.56E-05	0.00E+00
Renew. secondary fuels	MJ	4.64E-05	1.17E-07	2.37E-05	7.02E-05	2.79E-07	2.03E-07	MND	MND	MND	MND	MND	MND	MND	5.70E-08	1.18E-07	0.00E+00	3.27E-06	0.00E+00
Non-ren. secondary fuels	MJ	1.61E-03	0.00E+00	0.00E+00	1.61E-03	0.00E+00	0.00E+00	MND	MND	MND	MND	MND	MND	MND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water	m <sup>3</sup>	3.52E-02	5.32E-06	3.14E-02	6.65E-02	9.51E-06	1.64E-05	MND	MND	MND	MND	MND	MND	MND	2.70E-06	5.48E-06	0.00E+00	2.59E-04	0.00E+00

8) PER = Primary energy resources.

## END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	2.13E-02	5.40E-05	5.46E-04	2.19E-02	8.48E-05	3.58E-06	MND	MND	MND	MND	MND	MND	MND	5.96E-05	5.61E-05	0.00E+00	0.00E+00	0.00E+00
Non-hazardous waste	kg	3.20E-01	8.91E-04	3.92E-02	3.60E-01	1.51E-03	6.39E-02	MND	MND	MND	MND	MND	MND	MND	4.19E-04	9.21E-04	0.00E+00	1.00E+00	0.00E+00
Radioactive waste	kg	1.30E-05	2.75E-07	2.21E-06	1.55E-05	5.13E-07	1.81E-08	MND	MND	MND	MND	MND	MND	MND	3.13E-07	2.83E-07	0.00E+00	0.00E+00	0.00E+00

### END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO <sub>2</sub> e	3.44E-01	2.71E-03	2.20E-02	3.69E-01	4.97E-03	4.48E-03	MND	MND	MND	MND	MND	MND	MND	3.27E-03	2.79E-03	0.00E+00	7.24E-02	0.00E+00
Ozone depletion Pot.	kg CFC <sub>11</sub> e	1.86E-08	4.99E-10	7.41E-09	2.65E-08	9.20E-10	1.89E-10	MND	MND	MND	MND	MND	MND	MND	5.60E-10	5.13E-10	0.00E+00	2.51E-09	0.00E+00
Acidification	kg SO <sub>2</sub> e	1.52E-03	8.97E-06	1.06E-04	1.64E-03	1.17E-05	4.75E-06	MND	MND	MND	MND	MND	MND	MND	2.45E-05	9.26E-06	0.00E+00	6.76E-05	0.00E+00
Eutrophication	kg PO <sub>4</sub> <sup>3</sup> e	4.89E-04	2.04E-06	1.05E-04	5.96E-04	2.52E-06	1.64E-04	MND	MND	MND	MND	MND	MND	MND	5.69E-06	2.11E-06	0.00E+00	2.76E-03	0.00E+00
POCP ("smog")	kg C <sub>2</sub> H <sub>4</sub> e	1.12E-04	3.52E-07	4.20E-06	1.17E-04	5.90E-07	9.77E-07	MND	MND	MND	MND	MND	MND	MND	5.36E-07	3.62E-07	0.00E+00	1.61E-05	0.00E+00
ADP-elements	kg Sbe	2.32E-06	6.39E-09	1.51E-07	2.48E-06	1.77E-08	2.47E-09	MND	MND	MND	MND	MND	MND	MND	1.65E-09	6.39E-09	0.00E+00	3.42E-08	0.00E+00
ADP-fossil	MJ	4.80E+00	4.11E-02	3.76E-01	5.22E+00	7.46E-02	1.76E-02	MND	MND	MND	MND	MND	MND	MND	4.45E-02	4.23E-02	0.00E+00	2.42E-01	0.00E+00

### ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO <sub>2</sub> e	3.44E-01	2.71E-03	2.20E-02	3.69E-01	4.97E-03	4.48E-03	MND	MND	MND	MND	MND	MND	MND	3.27E-03	2.79E-03	0.00E+00	7.24E-02	0.00E+00
Ozone depletion Pot.	kg CFC <sub>11</sub> e	1.86E-08	4.99E-10	7.41E-09	2.65E-08	9.20E-10	1.89E-10	MND	MND	MND	MND	MND	MND	MND	5.60E-10	5.13E-10	0.00E+00	2.51E-09	0.00E+00
Acidification	kg SO <sub>2</sub> e	1.52E-03	8.97E-06	1.06E-04	1.64E-03	1.17E-05	4.75E-06	MND	MND	MND	MND	MND	MND	MND	2.45E-05	9.26E-06	0.00E+00	6.76E-05	0.00E+00
Eutrophication	kg PO <sub>4</sub> <sup>3</sup> e	4.89E-04	2.04E-06	1.05E-04	5.96E-04	2.52E-06	1.64E-04	MND	MND	MND	MND	MND	MND	MND	5.69E-06	2.11E-06	0.00E+00	2.76E-03	0.00E+00
POCP ("smog")	kg C <sub>2</sub> H <sub>4</sub> e	1.12E-04	3.52E-07	4.20E-06	1.17E-04	5.90E-07	9.77E-07	MND	MND	MND	MND	MND	MND	MND	5.36E-07	3.62E-07	0.00E+00	1.61E-05	0.00E+00
ADP-elements	kg Sbe	2.32E-06	6.39E-09	1.51E-07	2.48E-06	1.77E-08	2.47E-09	MND	MND	MND	MND	MND	MND	MND	1.65E-09	6.39E-09	0.00E+00	3.42E-08	0.00E+00
ADP-fossil	MJ	4.80E+00	4.11E-02	3.76E-01	5.22E+00	7.46E-02	1.76E-02	MND	MND	MND	MND	MND	MND	MND	4.45E-02	4.23E-02	0.00E+00	2.42E-01	0.00E+00

## VERIFICATION STATEMENT

### VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? [Read more online](#)

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

### THIRD-PARTY VERIFICATION STATEMENT

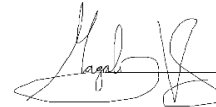
I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

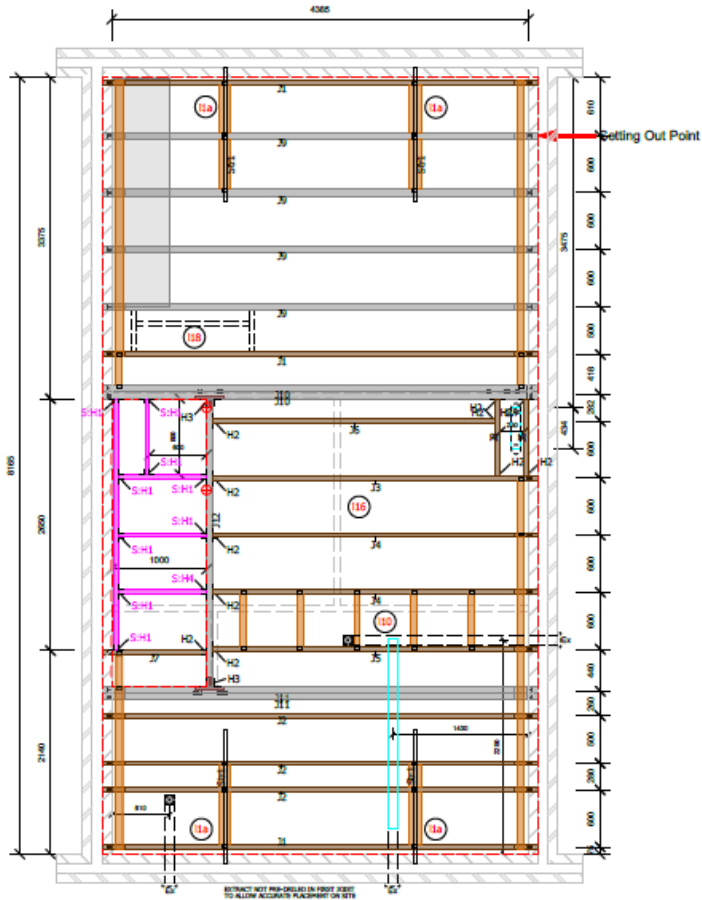
I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Magaly González Vázquez, as an authorized verifier acting for EPD Hub Limited  
18.12.2023



## Annex

The LCA parameters of primary importance to specifiers, for the reference TFSi-joint timber floor included in the body of this EPD and illustrated below, are given in the table opposite on a per kg basis, so that they can be scaled to suit all other such floors with alternative geometries.



GWP-total (kg CO2e per kg)			GWP-Fossil (kg CO2e per kg)
Cradle to Gate A1-A3	Cradle to Installation A1-A5	Cradle to Grave A1-C4	Cradle to Gate A1-A3
-0.892	-0.811	0.473	0.424