



Statement of Verification

BREG EN EPD No: 000741

Issue: 02

This is to verify that the Environmental Product Declaration provided by:

Nuspan Flooring Ltd

are in accordance with the requirements of:

EN 15804:2012+A2:2019

and

BRE Global Scheme Document SD207

This declaration is for:

1 m² of Nuspan precast insulated flooring (NUG375), with a mass of 250 kg/m²

Company Address

Nuspan Flooring Ltd
Tallington Factory Site,
Barholm Road,
Tallington,
Lincolnshire,
PE9 4RL



Hayley Thomson
Signed for BRE Global Limited

Hayley Thomson
Operator

08 December 2025
Date of this Issue

02 December 2025
Date of First Issue

01 December 2030
Expiry Date



This Statement of Verification is issued subject to terms and conditions (for details visit www.greenbooklive.com/terms).

To check the validity of this statement of verification please, visit www.greenbooklive.com/check or contact us.

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Environmental Product Declaration

EPD Number: 000741

General Information

EPD Programme Operator	Applicable Product Category Rules
BRE Global Watford, Herts WD25 9XX United Kingdom	BRE Environmental Profiles 2013 Product Category Rules for Type III environmental product declaration of construction products to EN 15804+A2 PN 514 Rev 3.2
Commissioner of LCA study	LCA consultant/Tool
Nuspan Flooring Ltd Tallington Factory Site, Barholm Road, Tallington, Lincolnshire, PE9 4RL	Chi Zhang / BRE LINA A2
Declared/Functional Unit	Applicability/Coverage
1 m ² of Nuspan precast insulated flooring (NUG375), with a mass of 250 kg/m ²	Other. Product Specific
EPD Type	Background database
Cradle to Gate with Module C and D	Ecoinvent 3.8

Demonstration of Verification

CEN standard EN 15804 serves as the core PCR ^a

Independent verification of the declaration and data according to EN ISO 14025:2010

Internal External

(Where appropriate ^b) Third party verifier:
Bala Subramanian

a: Product category rules

b: Optional for business-to-business communication; mandatory for business-to-consumer communication (see EN ISO 14025:2010, 9.4)

Comparability

Environmental product declarations from different programmes may not be comparable if not compliant with EN 15804:2012+A2:2019. Comparability is further dependent on the specific product category rules, system boundaries and allocations, and background data sources. See Clause 5.3 of EN 15804:2012+A2:2019 for further guidance



Information modules covered

Product			Construction		Use stage							End-of-life				Benefits and loads beyond the system boundary
A1	A2	A3	A4	A5	Related to the building fabric					Related to the building						D
					B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	
Raw materials supply	Transport	Manufacturing	Transport to site	Construction – Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction demolition	Transport	Waste processing	Disposal	Reuse, Recovery and/or Recycling potential
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				

Note: Ticks indicate the Information Modules declared.

Manufacturing site(s)

Nuspan Flooring Ltd

Tallington Factory Site,
Barholm Road,
Tallington,
Lincolnshire,
PE9 4RL

Construction Product:

Product Description

The Nuspan IPCU comprises precast concrete, steel reinforcement and expanded polystyrene forming insulated, suspended, primary ground floor structures fabricated and consolidated off-site. The flooring system, with purpose thermal moulded straight sides for the perimeter of the building and installed without loose lay infill panels provides a primary, structural closed floor panel systemised design approved by NHBC Accepts as CAT 2.

For this specific NUG375 product, the self-weight verified through BBA certification is reported as 227 kg/m². However, a 'worst-case' value of 250 kg/m² is applied to account for instance where narrow beams (<1200mm) are used to accommodate higher loadings or complex building geometries, which can increase the concrete volume per unit area. This is an increase in weight of approximately 10% to allow for these narrower elements.

Technical Information

The System is intended for use in domestic buildings not more than four storeys in height, corresponding to Load Category A (Areas for domestic and residential activities) in the National Annex to BS EN 1991-1-1. The System is intended for use in all nations within the United Kingdom.

Property	Value, Unit
Product Name	NUG375
Unit Depth	375mm
Max Span	6600 mm
Width	1200 mm
U-Value	0.11 w / m ² k

Note: Please contact Nuspan Flooring Ltd for more information or visit: [Precast Insulated Units | Nuspan](#)





Main Product Contents

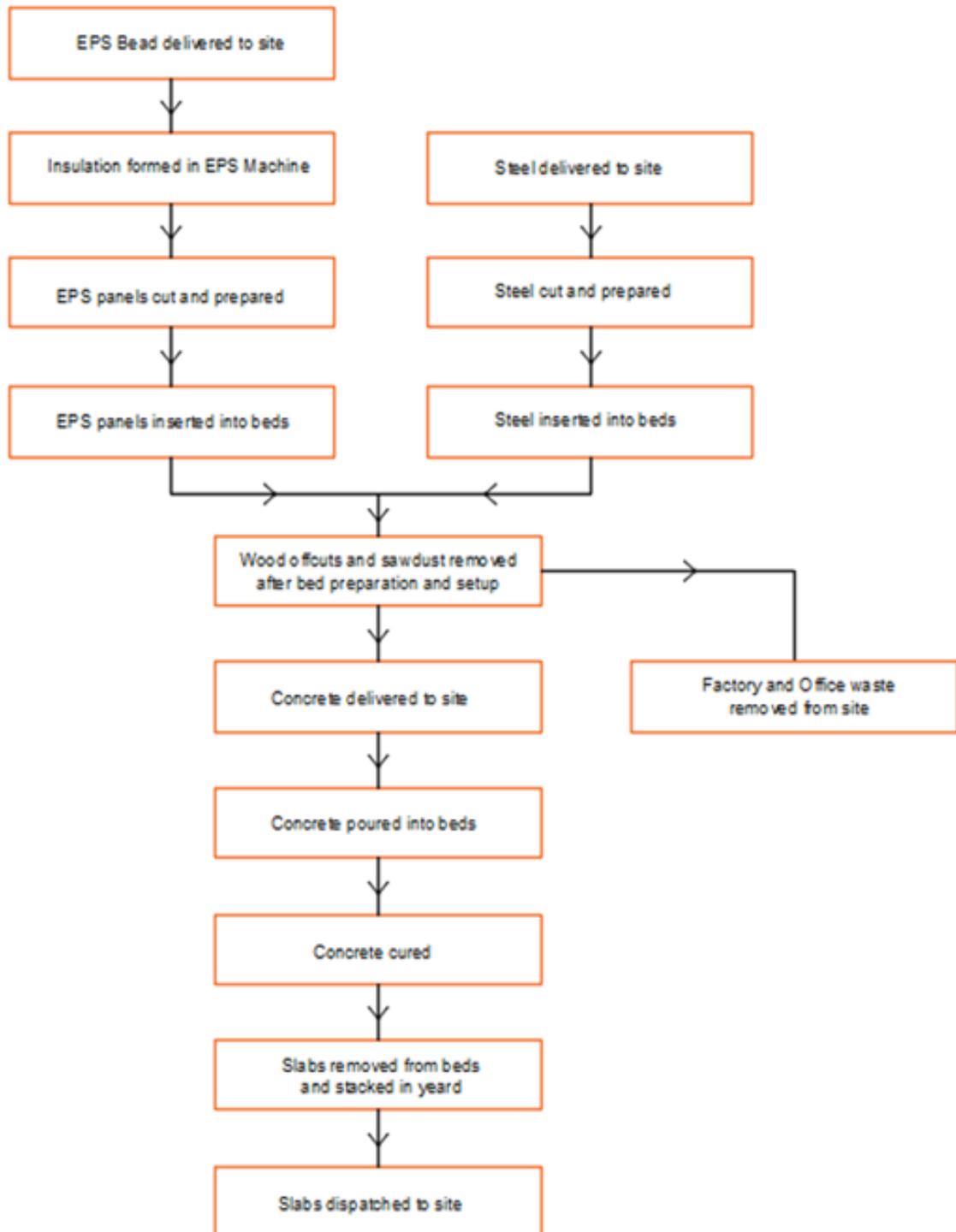
Material/Chemical Input	%
Concrete	95.9
Steel	2.7
EPS (Expanded Polystyrene)	1.4



Manufacturing Process

1. Insulation formed in EPS machine – the unexpanded EPS beads are filled into the EPS performer unit. The beads are exposed to steam which then causes them to expand to the size required for final moulding. The EPS beads are blown into the storage silos where they are left to settle and stabilise. When the beads have stabilised, they are injected into the EPS moulding machine. The beads are further injected with steam and compressed to form a finished EPS panel. Any EPS waste created during production or post-production is fed into a recycling unit which shreds the panels back to their bead form. The recycled beads are mixed with the virgin bead silos and fed back into the moulding machine.
2. Steel prepared – the steel arrives in coils/rolls of different size (different diameters needed depending on engineer requirements, or their function with the slab), the information of each beds required steel quantities/lengths in transferred into the steel bending/cutting machine. The correct steel size is then fed into the steel machine, which bends and cuts the steel to the required length/quantities. The steel is then labelled and stacked, awaiting transportation to the correct production bed.
3. EPS prepared – EPS arrives in stacks to the preparation area, the employees then use the bed plans (detailed sheets that contain measurements/details on each slab) to determine the amount of EPS panels are needed for each slab, and use this as the basis to select the appropriate amount of full panels, and cut 1 panel to get the exact measurement needed for that particular slab. The selected/prepared panels are then stacked, with stickers for identification applied, and await to be transported to the correct production bed.
4. EPS put into beds – EPS stacks are transported from preparation area to moulds, where each stack/slab of EPS is inserted into the corresponding position within the bed, as shown on the bed plan.
5. Steel put into beds – Steel is transported from steel machine/preparation area to the corresponding bed which the steel applies/labelled for. This steel is then inserted into the correct EPS panels, for which that steel is applied to, stated on the production bed plans. The steel is tied together and now awaits concrete to be poured.
6. Concrete Poured – concrete arrives into the bed area within the factory. The steel and EPS already present within the moulds. Employees walk along spreading and levelling the concrete. Each mould is filled with concrete, with the lorry moving on the next bed and repeating the process again.
7. Concrete cured – concrete is left to cure in moulds, on average left for 20 hours, within moulds
8. Slabs removed and stacked – once the concrete has cured, slabs are removed from the mould, and stacked in the yard, each stack is created from slabs that all go to the same design. The stacks sit in the yard, they are then loaded onto lorries for dispatch to sites.

Process flow diagram





End of Life

At the end-of-life during the deconstruction phase, Nuspan precast insulated flooring is typically dismantled or demolished and transported to a waste processing facility. The precast concrete is crushed and used as recycled material in road construction or as fill material. So, there are no impacts associated with ancillary materials, energy or water consumption, and no emissions to air, water or soil. It's assumed as 100% of the product is recovered from the demolition site.

As per the scenario fault values stated in Appendix D of the BRE PCR document, using a generic transportation distance of 50 km. End-users of the EPD can use the Module C2 results to calculate a bespoke transport distance if required (divide results by 50 and multiply by required distance in km).

The product contains 95.9% concrete, 2.7% steel and 1.4% EPS: Nuspan uses cement, aggregate, sand, water, steel and EPS to produce this precast concrete onsite, therefore 95.9% concrete and 1.4% EPS are virgin, no secondary material. 2.7% steel contains 29.5% of secondary content (*based on Ecoinvent 3.8 reinforcing steel production Europe dataset*) that has been removed from the Module D calculation to avoid the double-counting of environmental benefits.

As per the scenario fault values stated in Appendix D of the BRE PCR document, Structure (floor), concrete (precast) – 95% recycling and 5% landfill.



Life Cycle Assessment Calculation Rules

Declared / Functional unit description

1 m² of Nuspan precast insulated flooring (NUG375), with a mass of 250 kg/m²

System boundary

In accordance with the modular approach as defined in EN15804:2012 +A2:2019 and BRE 2025 Product Category Rules (PN 524 Rev 3.2), this cradle to gate with module C and D EPD includes the processes covered during the raw material extraction and manufacturing phase in modules A1 to A3 and the end-of-life scenario in modules C1, C2, C3, C4 and module D.

Data sources, quality and allocation

Specific primary data derived from Nuspan Flooring Ltd have been modelled using the LINA A2 tool for the period (01/01/2022 – 31/12/2022). In accordance with the requirements of EN15804, the most current available data have been used. Secondary data has been obtained for all remaining upstream and downstream processes that are beyond the control of the manufacturer from the ecoinvent 3.8 database. All ecoinvent datasets are complete within the context used and conform to the system boundary and criteria for the exclusion of inputs and outputs, according to the requirements specified in EN15804+A2:2019. The NUG375 is not the only product manufactured at the Tallington factory. An allocation by area(m²) of the site process data has therefore been carried out, according to EN15804 and ISO 14044 guidance, to determine the correct quantities of energy, water and non-production wastes attributable to the NUG375 production. This is because energy consumption and emissions are considered proportional to the mass of product output. Figures for the raw materials and ancillary materials were from actual usages. The mass balance for the NUG375 was within tolerance, and no uplift of the input materials was required to cover production output and waste.

There is no production waste, according to Nuspan ‘Steel is cut from a coil so there are no off cuts. All steel is used in the production of the slabs. There is very little excess concrete because it is batched in accordance with the daily production requirements. Where there is excess, it is made into concrete “lego blocks” for use around the factory and yard. Nuspan buy ready mixed concrete from Tarmac, so Nuspan are not involved in the use of raw aggregates. EPS – There is no waste EPS material generated in production. Off cuts etc. is broken down and recycled back into the production of the EPS panels.’

The quality level of geography, time and technology representativeness is very good as specific UK datasets have been selected from the ecoinvent LCI, the background LCI datasets are from ecoinvent v3.8 which was compiled in 2021, and manufacturer-specific primary data has been modelled. Therefore, the most appropriate LCA data have been used. The GWP of the electricity dataset used for this EPD is: 1 kWh UK electricity = 0.239 kgCO₂eq (Electricity GB (kWh) market for electricity, medium voltage). This is a 2022 UK consumption (or location-based) electricity mix dataset. The GWP of the natural gas dataset used for this EPD is 1 MJ UK natural gas = 0.065 kgCO₂eq (Natural gas, at industrial furnace MJ, GB).

Cut-off criteria

All raw materials, ancillary materials, energy, water, non-production wastes and processes associated with the manufacturing process have been included, except for packaging material, direct emissions to air, water, and soil, which are not measured.



LCA Results

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts			GWP-total	GWP-fossil	GWP-biogenic	GWP-luluc	ODP	AP	EP-freshwater
			kg CO ₂ eq	kg CFC11 eq	mol H ⁺ eq	kg (PO ₄) ³⁻ eq			
Product stage	Raw material supply	A1	5.73E+01	5.68E+01	4.43E-01	2.58E-02	2.03E-06	1.93E-01	1.07E-02
	Transport	A2	6.25E+00	6.24E+00	5.31E-03	2.45E-03	1.44E-06	2.55E-02	4.02E-04
	Manufacturing	A3	4.05E+00	4.07E+00	-2.56E-02	1.22E-03	5.15E-07	1.67E-02	2.05E-04
	Total	A1-3	6.76E+01	6.71E+01	4.23E-01	2.94E-02	3.99E-06	2.35E-01	1.13E-02
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	2.08E+00	2.08E+00	1.77E-03	8.16E-04	4.81E-07	8.43E-03	1.34E-04
	Waste processing	C3	1.28E+00	1.28E+00	4.53E-04	1.28E-04	2.74E-07	1.33E-02	3.98E-05
	Disposal	C4	6.25E-01	6.25E-01	4.48E-04	1.02E-04	3.78E-08	9.41E-04	1.17E-05
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-9.53E+00	-9.53E+00	-5.28E-04	-4.83E-03	-4.57E-07	-3.99E-02	-4.05E-03

GWP-total = Global warming potential, total;
 GWP-fossil = Global warming potential, fossil;
 GWP-biogenic = Global warming potential, biogenic;
 GWP-luluc = Global warming potential, land use and land use change;

ODP = Depletion potential of the stratospheric ozone layer;
 AP = Acidification potential, accumulated exceedance; and
 EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment



LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts			EP-marine	EP-terrestrial	POCP	ADP-mineral&metals	ADP-fossil	WDP	PM
			kg N eq	mol N eq	kg NMVOC eq	kg Sb eq	MJ, net calorific value	m ³ world eq deprived	disease incidence
Product stage	Raw material supply	A1	4.60E-02	4.98E-01	1.79E-01	1.71E-04	5.95E+02	2.63E+01	2.36E-06
	Transport	A2	7.66E-03	8.37E-02	2.56E-02	2.17E-05	9.43E+01	4.24E-01	5.38E-07
	Manufacturing	A3	7.73E-03	7.74E-02	2.12E-02	5.78E-06	7.21E+01	4.42E-01	3.92E-07
	Total	A1-3	6.14E-02	6.59E-01	2.26E-01	1.99E-04	7.62E+02	2.72E+01	3.29E-06
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	2.54E-03	2.78E-02	8.50E-03	7.22E-06	3.14E+01	1.41E-01	1.79E-07
	Waste processing	C3	5.91E-03	6.47E-02	1.78E-02	6.60E-07	1.76E+01	4.07E-02	2.05E-06
	Disposal	C4	2.73E-03	3.54E-03	1.15E-03	2.76E-07	2.71E+00	1.23E-01	1.88E-08
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-9.38E-03	-1.04E-01	-4.71E-02	-2.36E-05	1.05E+02	4.18E+00	-6.65E-07

EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment;
 EP-terrestrial = Eutrophication potential, accumulated exceedance;
 POCP = Formation potential of tropospheric ozone;
 ADP-mineral&metals = Abiotic depletion potential for non-fossil resources;

ADP-fossil = Depletion potential of the stratospheric ozone layer;
 WDP = Water (user) deprivation potential, deprivation-weighted water consumption; and
 PM = Particulate matter.



LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

			Parameters describing environmental impacts				
			IRP	ETP-fw	HTP-c	HTP-nc	SQP
			kBq U ²³⁵ eq	CTUe	CTUh	CTUh	dimensionless
Product stage	Raw material supply	A1	1.54E+00	7.77E+02	1.02E-07	6.20E-07	1.42E+02
	Transport	A2	4.85E-01	7.36E+01	2.38E-09	7.71E-08	6.47E+01
	Manufacturing	A3	7.25E-01	3.06E+01	1.60E-09	1.78E-08	3.03E+01
	Total	A1-3	2.75E+00	8.81E+02	1.06E-07	7.15E-07	2.37E+02
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	1.61E-01	2.45E+01	7.94E-10	2.57E-08	2.16E+01
	Waste processing	C3	7.94E-02	1.03E+01	3.99E-10	7.47E-09	2.24E+00
	Disposal	C4	1.24E-02	2.34E+00	5.98E-11	1.40E-09	5.93E+00
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-5.67E-01	-2.61E+02	-4.27E-08	-1.91E-07	-4.07E+01

IRP = Potential human exposure efficiency relative to U235;
 ETP-fw = Potential comparative toxic unit for ecosystems;
 HTP-c = Potential comparative toxic unit for humans;

HTP-nc = Potential comparative toxic unit for humans; and
 SQP = Potential soil quality index.



LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing resource use, primary energy			PERE	PERM	PERT	PENRE	PENRM	PENRT
			MJ	MJ	MJ	MJ	MJ	MJ
Product stage	Raw material supply	A1	1.18E+01	0.00E+00	1.18E+01	3.18E+02	1.39E+02	4.57E+02
	Transport	A2	1.33E+00	0.00E+00	1.33E+00	9.26E+01	0.00E+00	9.26E+01
	Manufacturing	A3	5.97E+00	2.81E+00	8.78E+00	7.85E+01	1.21E+00	7.97E+01
	Total	A1-3	1.91E+01	2.81E+00	2.19E+01	4.89E+02	1.40E+02	6.30E+02
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	4.43E-01	0.00E+00	4.43E-01	3.08E+01	0.00E+00	3.08E+01
	Waste processing	C3	9.87E-02	0.00E+00	9.87E-02	1.73E+01	0.00E+00	1.73E+01
	Disposal	C4	3.23E-02	0.00E+00	3.23E-02	-1.36E+02	1.39E+02	2.67E+00
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-4.21E+00	0.00E+00	-4.21E+00	-1.04E+02	0.00E+00	-1.04E+02

PERE = Use of renewable primary energy excluding renewable primary energy used as raw materials;
 PERM = Use of renewable primary energy resources used as raw materials;
 PERT = Total use of renewable primary energy resources;

PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials;
 PENRM = Use of non-renewable primary energy resources used as raw materials;
 PENRT = Total use of non-renewable primary energy resource



LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

			SM	RSF	NRSF	FW
			kg	MJ net calorific value	MJ net calorific value	m ³
Product stage	Raw material supply	A1	2.01E+00	0.00E+00	0.00E+00	6.23E-01
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	1.05E-02
	Manufacturing	A3	1.04E-02	1.59E-05	0.00E+00	1.34E-02
	Total	A1-3	2.02E+00	1.59E-05	0.00E+00	6.47E-01
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	3.50E-03
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	1.00E-03
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	2.89E-03
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	0.00E+00	0.00E+00	0.00E+00	-9.91E-02

SM = Use of secondary material;
RSF = Use of renewable secondary fuels;

NRSF = Use of non-renewable secondary fuels;
FW = Net use of fresh water



LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Other environmental information describing waste categories			HWD	NHWD	RWD
			kg	kg	kg
Product stage	Raw material supply	A1	4.13E+00	2.69E+01	3.92E-04
	Transport	A2	1.04E-01	1.85E+00	6.38E-04
	Manufacturing	A3	5.66E-02	1.00E+00	3.79E-04
	Total	A1-3	4.29E+00	2.97E+01	1.41E-03
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	3.46E-02	6.15E-01	2.13E-04
	Waste processing	C3	2.31E-02	1.62E-01	1.22E-04
	Disposal	C4	3.71E-03	3.65E+00	1.72E-05
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-8.65E-01	-1.94E+01	-2.24E-04

HWD = Hazardous waste disposed;
 NHWD = Non-hazardous waste disposed;
 RWD = Radioactive waste disposed



LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Other environmental information describing output flows – at end of life								
			CRU	MFR	MER	EE	Biogenic carbon (product)	Biogenic carbon (packaging)
			kg	kg	kg	MJ per energy carrier	kg C	kg C
Product stage	Raw material supply	A1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Manufacturing	A3	0.00E+00	2.56E-04	2.01E-07	1.45E-02	-6.79E-05	0.00E+00
	Total	A1-3	0.00E+00	2.56E-04	2.01E-07	1.45E-02	-6.79E-05	0.00E+00
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Waste processing	C3	0.00E+00	1.64E-05	2.62E-07	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

CRU = Components for reuse;
MFR = Materials for recycling

MER = Materials for energy recovery;
EE = Exported Energy



Scenarios and additional technical information

Scenarios and additional technical information			
Scenario	Parameter	Units	Results
C1 - Deconstruction	At the end-of-life during the deconstruction phase, Nuspan precast insulated flooring are typically dismantled or demolished and transported to a waste processing facility. The precast concrete is crushed and used as recycled in road construction or as fill material. So, there are no impacts associated with ancillary materials, energy or water consumption, and no emissions to air, water or soil. It's assumed as 100% of the product is recovered from the demolition site.		
	Compared to the whole building deconstruction, the impact in this stage is negligible. No data required in this stage.		
C2 – End of Life transport	50km by road has been modelled for module C2 as a typical distance from the demolition site to the factory. However, end-users of the EPD can use this information to calculate the impacts of a bespoke transport distance for module C2 if required.	Litres per km	0.227
	Distance: Deconstruction unit to pre-processing unit	km	50
C3 – Waste Processing	As per the scenario fault values stated in Appendix D of the BRE PCR document, Structure (floor), concrete (precast) – 95% recycling and 5% landfill, EPS waste within the 5% landfill. Per unit (250kg/m ²) of this product contains 239.7 kg concrete, 6.8 kg steel and 3.6 kg EPS, therefore:		
	Concrete waste to recycling	kg	227.68
	Steel waste to recycling	kg	6.41
C4 - Disposal	As per the scenario fault values stated in Appendix D of the BRE PCR document, Structure (floor), concrete (precast) – 95% recycling and 5% landfill, EPS waste within the 5% landfill. Per unit (250kg/m ²) of this product contains 239.7 kg concrete, 6.8 kg steel and 3.6 kg EPS, therefore:		
	Concrete waste to landfill	kg	11.98
	Steel waste to landfill	kg	0.34
Module D	EPS waste to landfill		
	The product contains 95.9% concrete, 2.7% steel and 1.4% EPS: Nuspan uses cement, aggregate, sand, water, steel and EPS to produce this precast concrete onsite, therefore 95.9% concrete and 1.4% EPS are virgin, no secondary material. 2.7% steel contains 29.5% of secondary content (<i>based on Ecoinvent 3.8 reinforcing steel production Europe dataset</i>) that has been removed from the Module D calculation to avoid the double-counting of environmental benefits.		
	Recovered for recycling – Steel	kg	4.52
	Recovered for recycling – Precast Concrete	kg	227.68

Interpretation

The bulk of the environmental impacts and primary energy demand are attributed to the manufacturing of Nuspan precast insulated flooring - NUG375, covered by information modules A1-A3 of EN15804:2012 +A2:2019.

Out of the total mass of input materials, concrete (cement, EPS and Steel) makes up 96%, steel 3%, followed by EPS of 1%. The chart illustrates the relative contributions of various processes to overall greenhouse gas emissions, measured as global warming potential. It highlights that material production, particularly of concrete (cement, EPS and Steel) has the highest environmental impact. Transportation and waste management contributes moderately and energy use exhibit comparatively lower impacts in this case. Overall, the chart underscores the importance of material choice and waste management in reducing carbon emissions across the lifecycle.

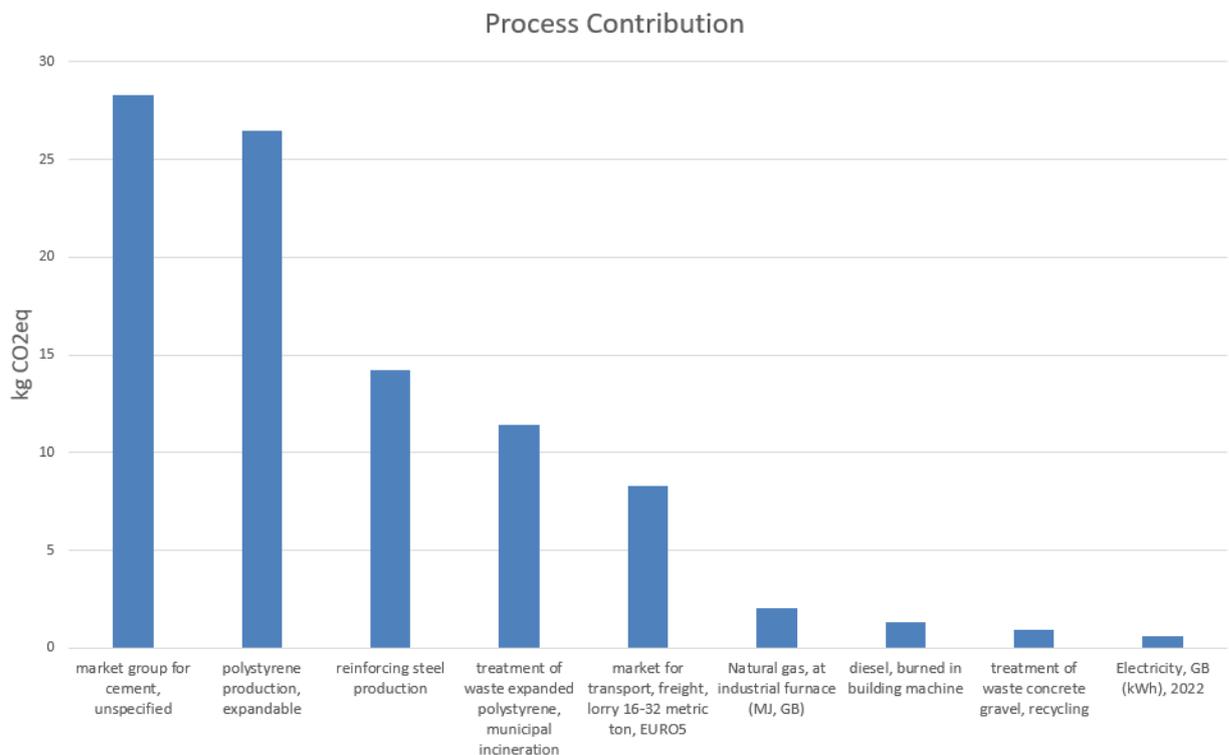


Figure 1 Process Contribution



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