Statement of Verification

BREG EN EPD No.: 000460

Issue 01

BRE/Global

EPD

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This is to verify that the

Environmental Product Declaration provided by:

IG Masonry Support

is in accordance with the requirements of:

EN 15804:2012+A1:2013

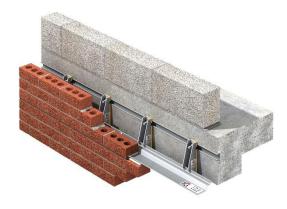
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BRE Global Scheme Document SD207

This declaration is for: Windpost

Company Address

IG Masonry Support Ryder Close Cadley Hill Industrial Estate Derbyshire DE11 9EU





ABaker

Emma Baker

12 September 2022 Date of this Issue

Signed for BRE Global Ltd 12 September 2022

Operator

11 September 2027 Expiry Date



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Environmental Product Declaration

EPD Number: 000460

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 15804:2012+A1:2013
Commissioner of LCA study	LCA consultant/Tool
IG Masonry Support Ryder Close Cadley Hill Industrial Estate Derbyshire DE11 9EU	Flavie Lowres/LINA v2.0
Declared Unit	Applicability/Coverage
3000 mm length and 125 mm depth @ 103.7 kg/unit including fixings	Product Average.
ЕРД Туре	Background database
Cradle to Gate with options	ecoinvent
Demonstra	tion of Verification
CEN standard EN 15	804 serves as the core PCR ^a
Independent verification of the declara	tion and data according to EN ISO 14025:2010 ⊠ External
	iate ^b)Third party verifier: at Hermon
a: Product category rules b: Optional for business-to-business communication; mandatory	for business-to-consumer communication (see EN ISO 14025:2010, 9.4)
Со	mparability
EN 15804:2012+A1:2013. Comparability is further depe	programmes may not be comparable if not compliant with endent on the specific product category rules, system boundaries ause 5.3 of EN 15804:2012+A1:2013 for further guidance

Information modules covered

1	Product		Construction		Related to the building tabric 1			Relat	ed to uilding	End-of-life			Benefits and loads beyond the system boundary			
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
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
\checkmark	V	$\mathbf{\nabla}$			$\mathbf{\nabla}$	\checkmark	\checkmark	\checkmark	$\mathbf{\nabla}$	\square	$\mathbf{\nabla}$					

Note: Ticks indicate the Information Modules declared.

Manufacturing site(s)

IG Masonry's Windpost is manufactured at IG Masonry Support's factory

Ryder Close Cadley Hill Industrial Estate Derbyshire DE11 9EU

Construction Product:

Product Description

IG Masonry Support manufactures three types of windposts that span vertically between floors to provide lateral support for large panels of brickwork, or large panels with wide openings. Designed for quick and easy installation. IG's windposts are available in a range of sizes to suit a variety of applications as explained below:

LP Windposts are designed to be built into the inner skin of the cavity wall and normally span between floor structures. Comprising of an 'L' shaped section, LP Windposts are designed to suit a range of loading conditions.

U Windposts are designed to be installed within the cavity and normally span between floor structures. The installation of U Windposts leaves the inner leaf of the cavity totally undisturbed.

DU Windposts are a heavier duty variant of the U Windpost. Comprised of a 'back to back' channel section engineered for heaver loading conditions. DU Windposts are designed to be installed within the cavity and normally span between floor structures. The installation of this product leaves the inner leaf of the cavity totally undisturbed.

Technical Information

Property	Value, Unit
Material	304 stainless steel grade



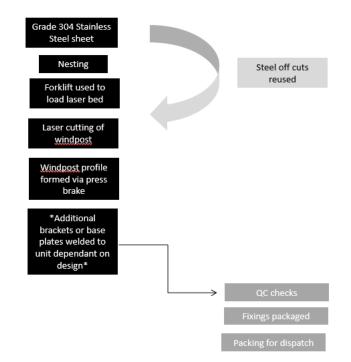
Main Product Contents

Material/Chemical Input	%
Stainless steel	97%
Fixing elements	3%

Manufacturing Process

The fabrication of a windpost begins with the nesting process to form the wind post profile. Once cut via laser the components are then folded into their unique form using a press brake. Depending on the design, windposts may also include a welded top plate or base plate.

Process flow diagram



Life Cycle Assessment Calculation Rules

Declared unit description

3000 mm length and 125 mm depth @ 103.7 kg/unit including fixings

System boundary

This cradle-to-gate EPD has assessed in accordance with the modular approach as defined in EN15804:2012+A1:2013 and includes the processes covered in the manufacturing site and product stage A1 to A3 and the use stages B1 to B7.

Data sources, quality and allocation

Specific primary data derived from the Windpost production process in Ryder Close, Cadley Hill Industrial Estate, Derbyshire. DE11 9EU factory, have been modelled using the LINA LCA software v2.0 and the BRE LINA database v2.0.92. In accordance with the requirements of EN15804, the most current available data has been used. The manufacturer-specific data from Windpost covers a period of one year (01/01/2020 – 31/12/2020). Secondary data has been obtained for all other upstream and downstream processes that are beyond the control of the manufacturer (i.e. raw material production) from the ecoinvent 3.2 database. All ecoinvent datasets are complete within the context used and conform to the system boundary and the criteria for the exclusion of inputs and outputs, according to the requirements specified in EN15804. Windpost are not the only product to manufactured at the Ryder Close factory. Site wide values for energy, water and wastewater have been allocated on a mass basis. Figures for the raw materials, ancillary materials and packaging were from actual usages. Allocation of energy, water, and waste has been done according to the provisions of the BRE PCR PN514 and EN 15804.

This LCA covers the IG Masonry Windpost product range. The system is available in four standard profiles to accommodate brick slips to achieve project design requirements: DU Windpost, U Windpost and LP Windpost. The LCA covers all of the products in the range and results for all inputs are averaged based on total output in tonnes for all products and calculated average kg/unit.

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Specific UK datasets have been selected from the ecoinvent LCI for this LCA. The quality level of geographical and technical representativeness is therefore good. The quality level of time representativeness is good as the background LCI datasets are based on ecoinvent v3.2 which was compiled in 2015. Therefore, there is approximately 5-6 years between the ecoinvent LCI reference year and the time period for which the LCA was undertaken.

Cut-off criteria

All processes associated with the manufacturing process and all fixings have been included. The impact of the bricks is not included in this EPD.

All inputs or outputs have been included and all raw materials, packaging and transport, energy, water use and wastes, are included, except for direct emissions to air, water and soil, which are not measured. Upstream extraction and/or processing of inputs are included within the use of the background datasets within LINA.

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LCA Results

(MND = module not declared; MNR = module not declared; INA = indicator not assessed; AGG = aggregated) Parameters describing environmental impacts

GWP ODP AP EP POCP APE APE RagOP RagCP RagCP RagOP											
Red US Red US<				GWP	ODP	AP	EP	POCP	ADPE	ADPF	
supply A1 8.89E+02 4.43E-05 5.21E+00 1.57E+00 5.70E-01 2.28E-02 1.13E404 Product stage Transport A2 1.49E+00 2.75E-07 4.99E-03 1.32E-03 8.71E-04 3.93E-06 2.26E+01 Manufacturing A3 1.95E+01 1.29E-06 1.34E-01 3.21E-02 1.61E-02 6.83E-05 5.03E+02 Installation stage A1-3 8.90E+02 4.58E-05 5.35E+00 1.60E+00 5.87E-01 2.29E-02 1.19E+04 Installation stage A4 MND									calorific		
Product stage Manufacturing A3 1.95E+01 1.29E+06 1.34E-01 3.21E-02 1.61E-02 6.83E+05 5.03E+02 Installation stage A13 8.90E+02 4.58E+05 5.35E+00 1.60E+00 5.87E+01 2.29E+02 1.19E+04 Installation stage Transport to site A4 MND MOE MOE </td <td></td> <td></td> <td>A1</td> <td>8.69E+02</td> <td>4.43E-05</td> <td>5.21E+00</td> <td>1.57E+00</td> <td>5.70E-01</td> <td>2.28E-02</td> <td>1.13E+04</td>			A1	8.69E+02	4.43E-05	5.21E+00	1.57E+00	5.70E-01	2.28E-02	1.13E+04	
Manufacturing Stage)A31.95E+011.29E-061.34E-013.21E-021.61E-026.83E-055.03E+02Installation stage)A1-38.90E+024.58E-055.35E+001.60E+005.87E-012.29E-021.19E+04Installation stageA4MNDMNDMNDMNDMNDMNDMNDMNDMNDMNDInstallation stageA5MNDMNDMNDMNDMNDMNDMNDMNDMNDMNDMNDMNDMNDUseB10.00E+00<	Broduct store	Transport	A2	1.49E+00	2.75E-07	4.99E-03	1.32E-03	8.71E-04	3.93E-06	2.26E+01	
stage) Al-3 8.90E+02 4.38E+05 5.35E+00 1.60E+00 5.87E+01 2.29E+02 1.19E+04 Installation stage Transport to site A4 MND MND </td <td>Floudel stage</td> <td>Manufacturing</td> <td>A3</td> <td>1.95E+01</td> <td>1.29E-06</td> <td>1.34E-01</td> <td>3.21E-02</td> <td>1.61E-02</td> <td>6.83E-05</td> <td>5.03E+02</td>	Floudel stage	Manufacturing	A3	1.95E+01	1.29E-06	1.34E-01	3.21E-02	1.61E-02	6.83E-05	5.03E+02	
Installation stage Installation A5 MND MND </td <td></td> <td></td> <td>A1-3</td> <td>8.90E+02</td> <td>4.58E-05</td> <td>5.35E+00</td> <td>1.60E+00</td> <td>5.87E-01</td> <td>2.29E-02</td> <td>1.19E+04</td>			A1-3	8.90E+02	4.58E-05	5.35E+00	1.60E+00	5.87E-01	2.29E-02	1.19E+04	
Local Installation AS MND <	Installation	Transport to site	A4	MND	MND	MND	MND	MND	MND	MND	
Maintenance B2 0.00 ± 00	stage	Installation	A5	MND	MND	MND	MND	MND	MND	MND	
Repair B3 0.00E+00 0.0		Use	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Use stage Replacement B4 0.00E+00 <		Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Refurbishment B5 0.00E+00		Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Image: Note of the section of the sectin of the sectin of the section of the section of the section of	Use stage	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Image: Second state B6 0.00E+00		Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Image: Second struction, demolition C1 MND MND MND MND MND MND MND MND MND Image: Second struction, demolition C1 MND <			B6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Image: demolition C1 MIND MI			B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
End of life Waste processing C3 MND MND MND MND MND MND MND			C1	MND	MND	MND	MND	MND	MND	MND	
Waste processing C3 MND MND MND MND MND MND MND	End of life	Transport	C2	MND	MND	MND	MND	MND	MND	MND	
Disposal C4 MND MND MND MND MND MND MND MND			C3	MND	MND	MND	MND	MND	MND	MND	
		Disposal	C4	MND	MND	MND	MND	MND	MND	MND	

GWP = Global Warming Potential;

ODP = Ozone Depletion Potential;

AP = Acidification Potential for Soil and Water;

EP = Eutrophication Potential;

POCP = Formation potential of tropospheric Ozone; ADPE = Abiotic Depletion Potential – Elements;

ADPF = Abiotic Depletion Potential – Fossil Fuels;

LCA Results (continued)

Parameters describing resource use, primary energy

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			PERE	PERM	PERT	PENRE	PENRM	PENRT
			MJ	MJ	MJ	MJ	MJ	MJ
	Raw material supply	A1	2.17E+03	1.53E-03	2.17E+03	1.21E+04	0.00E+00	1.21E+04
Product stage	Transport	A2	2.99E-01	1.11E-06	2.99E-01	2.24E+01	0.00E+00	2.24E+01
Flouder stage	Manufacturing	A3	1.23E+02	7.15E-03	1.23E+02	5.62E+02	4.08E+01	6.03E+02
	Total (of product stage)	A1-3	2.29E+03	8.68E-03	2.29E+03	1.27E+04	4.08E+01	1.27E+04
Installation	Transport to site	A4	MND	MND	MND	MND	MND	MND
stage	Installation	A5	MND	MND	MND	MND	MND	MND
	Use	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	В3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use stage	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	MND	MND	MND	MND	MND	MND
End of life	Transport	C2	MND	MND	MND	MND	MND	MND
	Waste processing	СЗ	MND	MND	MND	MND	MND	MND
	Disposal	C4	MND	MND	MND	MND	MND	MND

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 nonrenewable 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)

Parameters describing resource use, secondary materials and fuels, use of water									
			SM	RSF	NRSF	FW			
			kg	MJ net calorific value	MJ net calorific value	m³			
	Raw material supply	A1	0.00E+00	0.00E+00	0.00E+00	9.77E+00			
Product stage	Transport	A2	0.00E+00	0.00E+00	0.00E+00	4.89E-03			
FIDUUCI Slage	Manufacturing	A3	0.00E+00	0.00E+00	0.00E+00	3.01E-01			
	Total (of product stage)	A1-3	0.00E+00	0.00E+00	0.00E+00	1.01E+01			
Installation	Transport to site	A4	MND	MND	MND	MND			
stage	Installation	A5	MND	MND	MND	MND			
	Use	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
Use stage	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Operational energy use	B6	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Deconstruction, demolition	C1	MND	MND	MND	MND			
End of life	Transport	C2	MND	MND	MND	MND			
	Waste processing	C3	MND	MND	MND	MND			
	Disposal	C4	MND	MND	MND	MND			

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)

Other environmental information describing waste categories								
			HWD	NHWD	RWD			
			kg	kg	kg			
	Raw material supply	A1	6.58E+02	1.59E+02	2.62E-02			
Droduct store	Transport	A2	9.45E-03	1.05E+00	1.56E-04			
Product stage	Manufacturing	A3	2.92E-01	8.97E-01	1.98E-03			
	Total (of product stage)	A1-3	6.58E+02	1.61E+02	2.83E-02			
Installation	Transport to site	A4	MND	MND	MND			
stage	Installation	A5	MND	MND	MND			
	Use	B1	0.00E+00	0.00E+00	0.00E+00			
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00			
	Repair	В3	0.00E+00	0.00E+00	0.00E+00			
Use stage	Replacement	B4	0.00E+00	0.00E+00	0.00E+00			
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00			
	Operational energy use	B6	0.00E+00	0.00E+00	0.00E+00			
	Operational water use	al B7 0.00E+00		0.00E+00	0.00E+00			
	Deconstruction, demolition	C1	MND	MND	MND			
End of life	Transport	C2	MND	MND	MND			
Ena of life	Waste processing	C3	MND	MND	MND			
	Disposal	C4	MND	MND	MND			

HWD = Hazardous waste disposed;

NHWD = Non-hazardous waste disposed;

RWD = Radioactive waste disposed

LCA Results (continued)

Other environmental information describing output flows – at end of life									
			CRU	MFR	MER	EE			
			kg	kg	kg	MJ per energy carrier			
	Raw material supply	A1	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
Product stage	Transport	A2	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
Floduct stage	Manufacturing	A3	0.00E+00	2.13E+01	0.00E+00	0.00E+00			
	Total (of product stage)	A1-3	0.00E+00	2.13E+01	0.00E+00	0.00E+00			
Installation	Transport to site	A4	MND	MND	MND	MND			
stage	Installation	A5	MND	MND	MND	MND			
	Use	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
Use stage	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Operational energy use	B6	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Deconstruction, demolition	C1	MND	MND	MND	MND			
End of life	Transport	C2	MND	MND	MND	MND			
	Waste processing	C3	MND	MND	MND	MND			
	Disposal	C4	MND	MND	MND	MND			

CRU = Components for reuse; MFR = Materials for recycling

MER = Materials for energy recovery; EE = Exported Energy

Scenarios and additional technical information

Scenarios and add	tional technical information								
Scenario	Parameter	Units	Results						
B1 – Use	Once installed, there is no impact during the use phase the Windpost system as it is placed behind the brick slips and cannot be accessed								
	No environmental impact	N/A	0						
B2 – Maintenance	No maintenance is required during the use phase of the Wir the brick slips and cannot be accessed	ndpot system as it is	placed behind						
	No maintenance	N/A	0						
B3 – Repair	No repair is required during the use phase the Windpost sys slips and cannot be accessed	stem as it is placed	behind the brick						
	No repair	N/A	0						
B4 – Replacement	No replacement is required during the use phase the Windpost system is placed behind the brick slips. The Windpost system will therefore have the same lifespan as the building it is used on								
	No replacement	N/A	0						
B5 – Refurbishment	No refurbishment is required during the use phase the Wind the brick slips. The Windpost system will therefore have the used on								
	No refurbishment	N/A	0						
Reference service life	The Windpost system is assumed to have the same lifespar	as the building it is	s used on						
B6 – Use of energy; B7 – Use of water	The product does not require any water or energy in use	1	1						
	Energy use	kWh	0						
	Water use	kWh	0						

References

BSI. Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products. BS EN 15804:2012+A1:2013. London, BSI, 2013.

BSI. Environmental labels and declarations – Type III Environmental declarations – Principles and procedures. BS EN ISO 14025:2010 (exactly identical to ISO 14025:2006). London, BSI, 2010.

BSI. Environmental management – Life cycle assessment – Principles and framework. BS EN ISO 14040:2006. London, BSI, 2006.

BSI. Environmental management – Life cycle assessment – requirements and guidelines. BS EN ISO 14044:2006. London, BSI, 2006.