

Statement of Verification

BREG EN EPD No.: 000457 Issue 01

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

BRE Global Scheme Document SD207

This declaration is for: Brick Slip Lintel (BSL)

Company Address

IG Masonry Support Ryder Close Cadley Hill Industrial Estate Derbyshire DF11 9FU



Emma Baker

Operator

Date of this Issue

12 September 2022

12 September 2022

11 September 2027

Expiry Date









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Environmental Product Declaration

EPD Number: 000457

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
1200 mm length and 250 mm width @ 16.33 kg/unit with fixing	Product Average.
EPD Type	Background database
Cradle to Gate with options	ecoinvent
Demonstra	ation of Verification
CEN standard EN 15	5804 serves as the core PCR ^a
Independent verification of the declara □Internal	ation and data according to EN ISO 14025:2010 ⊠ External
	riate ^b)Third party verifier: Pat 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)

Comparability

Environmental product declarations from different programmes may not be comparable if not compliant with EN 15804:2012+A1:2013. 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+A1:2013 for further guidance



Information modules covered

	Produc	+	Const	ruction				Use sta	ge				End	of-life		Benefits and loads beyond
	rioduc		Const	ruction	Rel	ated to	the bui	lding fa	bric	Relat	ed to uilding		EIIU-	Ji-iiie		the system boundary
A 1	A2	А3	A4	A5	B1	B2	В3	B4	B5	В6	В7	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
$\overline{\checkmark}$	$\overline{\checkmark}$	$\overline{\mathbf{A}}$			$\overline{\mathbf{V}}$	$\overline{\mathbf{V}}$	$\overline{\mathbf{A}}$	$\overline{\mathbf{V}}$	$\overline{\mathbf{V}}$	$\overline{\checkmark}$	$\overline{\checkmark}$					

Note: Ticks indicate the Information Modules declared.

Manufacturing site(s)

The product Brick Slip Lintel (BSL) is manufactured at IG Masonry Support's factory

Ryder Close Cadley Hill Industrial Estate Derbyshire DE11 9EU

Construction Product

Product Description

IG Brick Slip Lintels (BSL) are a lightweight, stainless steel, pre-fabricated brick slip unit designed for openings up to 3.6 metres. Manufactured off-site, the units are delivered to site complete with brick slips bonded to the stainless steel carrier unit. These BBA approved lightweight units facilitate fast and efficient installation and integrate seamlessly with brickwork constructed onsite. Brick Slip Lintels can be designed to suit variations in shape, spans and loading conditions.

Technical Information

Property	Value, Unit
Material	Stainless steel grade 304

bre



Main Product Contents

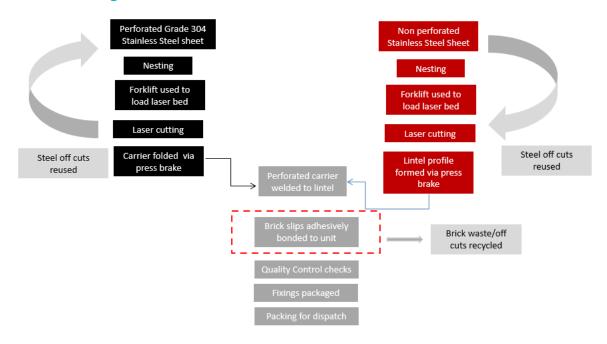
Material/Chemical Input	%
Stainless steel	84.8%
fixings	2.3%
adhesive	12.9%

Manufacturing Process

The fabrication of brick slip lintels begins with the nesting of stainless steel to suit the lintel profile, the nested components are cut out via laser cutting. The profile is achieved using a press brake. The carrier for the brick slips is fabricated by nesting perforated stainless steel, folded using a press brake and then welded to the underneath of our pre formed stainless steel lintel. Brick slips (Not included in this EPD) are adhesively bonded to the stainless steel lintel. Quality checks are then conducted before product sign off. Only approved units are sent to packing and dispatch. The units are compliant with Document B Fire Safety and BBA approved.



Process flow diagram



Life Cycle Assessment Calculation Rules

Declared unit description

1200 mm length and 250 mm width @ 13.69 kg/unit with 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 use stages B1 to B7.

Data sources, quality and allocation

Specific primary data derived from the BSL 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 BSL 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. BSL is 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 Brick Slip Lintel (B.S.L) product range. The system is available in different length up to 3.6 m in length. 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.

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 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.



LCA Results

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

Parameters	describing e	nviro	nmental	impacts					
			GWP	ODP	AP	EP	POCP	ADPE	ADPF
			kg CO ₂ equiv.	kg CFC 11 equiv.	kg SO ₂ equiv.	kg (PO ₄) ³⁻ equiv.	kg C₂H₄ equiv.	kg Sb equiv.	MJ, net calorific value.
	Raw material supply	A1	1.67E+02	7.27E-06	8.49E-01	2.53E-01	9.23E-02	3.66E-03	1.84E+03
Product stage	Transport	A2	2.82E-01	5.18E-08	9.42E-04	2.48E-04	1.64E-04	7.42E-07	4.25E+00
Froduct stage	Manufacturing	А3	9.56E+00	6.24E-07	5.64E-02	1.31E-02	4.57E-03	1.87E-05	1.80E+02
	Total (of product stage)	A1-3	1.77E+02	7.95E-06	9.06E-01	2.66E-01	9.70E-02	3.68E-03	2.02E+03
Installation	Transport to site	A4	MND	MND	MND	MND	MND	MND	MND
stage	Installation	A5	MND	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	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
	Repair	В3	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	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	0.00E+00
	Operational energy use	В6	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational water use	В7	0.00E+00	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	MND
	Transport	C2	MND	MND	MND	MND	MND	MND	MND
End of life	Waste processing	СЗ	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;



			PERE	PERM	PERT	PENRE	PENRM	PENRT
			MJ	MJ	MJ	MJ	MJ	MJ
	Raw material supply	A1	3.50E+02	9.30E-04	3.50E+02	1.97E+03	0.00E+00	1.97E+03
Product stage	Transport	A2	5.65E-02	2.10E-07	5.65E-02	4.23E+00	0.00E+00	4.23E+00
Froduct stage	Manufacturing	А3	2.83E+01	1.16E-03	2.83E+01	2.22E+02	6.54E+00	2.29E+02
	Total (of product stage)	A1-3	3.78E+02	2.09E-03	3.78E+02	2.20E+03	6.54E+00	2.20E+03
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
End of life	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

PENRT = Total use of non-renewable primary energy resource

as raw materials;



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	1.62E+00			
Product stage	Transport	A2	0.00E+00	0.00E+00	0.00E+00	9.22E-04			
Froduct stage	Manufacturing	А3	0.00E+00	0.00E+00	0.00E+00	7.47E-02			
	Total (of product stage)	A1-3	0.00E+00	0.00E+00	0.00E+00	1.69E+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	В3	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	В7	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
	Deconstruction, demolition	C1	MND	MND	MND	MND			
	Transport	C2	MND	MND	MND	MND			
End of life	Waste processing	СЗ	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



Other enviro	nmental info	rmatic	on describing waste cate	egories	
			HWD	NHWD	RWD
			kg	kg	kg
	Raw material supply	A1	1.06E+02	2.59E+01	4.27E-03
Draduat ataga	Transport	A2	1.78E-03	1.98E-01	2.93E-05
Product stage	Manufacturing	А3	6.18E-02	3.04E-01	1.04E-03
	Total (of product stage)	A1-3	1.06E+02	2.64E+01	5.34E-03
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	В7	0.00E+00	0.00E+00	0.00E+00
	Deconstructio n, demolition	C1	MND	MND	MND
Ford of I'd	Transport	C2	MND	MND	MND
End of life	Waste processing	С3	MND	MND	MND
	Disposal	C4	MND	MND	MND

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



			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
Froduct stage	Manufacturing	А3	0.00E+00	4.21E+00	0.00E+00	0.00E+00
	Total (of product stage)	A1-3	0.00E+00	4.21E+00	0.00E+00	0.00E+00
Installation stage	Transport to site	A4	MND	MND	MND	MND
	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	В3	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	В6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational water use	В7	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
ind of life	Waste processing	С3	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

Scenario	Parameter	Units	Results					
B1 – Use	Once installed, there is no impact during the use phase the BSL system as it is placed behind the brick slips and cannot be accessed							
	No environmental impact	N/A	0					
B2 – Maintenance	Maintenance No maintenance is required during the use phase of the BSL system as it is placed bell brick slips and cannot be accessed							
	No maintenance	N/A	0					
B3 – Repair	No repair is required during the use phase the BSL system and cannot be accessed	as it is placed behin	d the brick slip					
	No repair	N/A	0					
B4 – Replacement	No replacement is required during the use phase the BSL s slips. The BSL system will therefore have the same lifespan							
	No replacement	N/A	0					
B5 – Refurbishment	No refurbishment is required during the use phase the BSL brick slips. The BSL system will therefore have the same life							
	No refurbishment	N/A	0					
Reference service	The BSL system is assumed to have the same lifespan as t	he building it is used	d on					
B6 – Use of energy; B7 – Use of water	The product does not require any water or energy in use							
	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.