Statement of Verification

BREG EN EPD No.: 000457

Issue 02

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

anc

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 DE11 9EU





Emma Baker Operator 05 October 2023 Date of this Issue

Signed for BRE Global Ltd

12 September 2022

11 Sentember 2

2 September 202 Pate of First Issue 11 September 2027 Expiry Date



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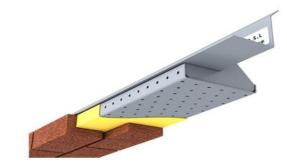


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EPD



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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.						
ЕРД Туре	Background database						
Cradle to Gate with options	ecoinvent						
Demonstra	tion of Verification						
CEN standard EN 15904 sames as the same BCB a							

CEN standard EN 15804 serves as the core PCR ^a

Independent verification of the declaration and data according to EN ISO 14025:2010 \Box Internal \boxtimes External

(Where appropriate ^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

	Droduo	oduct		Construction		Use stage				End of life		Benefits and loads beyond				
	Product		Const			Related to the building fabric Related to the building		End-of-life			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
$\overline{\mathbf{A}}$	$\overline{\mathbf{A}}$	\checkmark			$\mathbf{\Lambda}$	\checkmark	\checkmark	\checkmark	$\overline{\mathbf{A}}$	\checkmark	\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

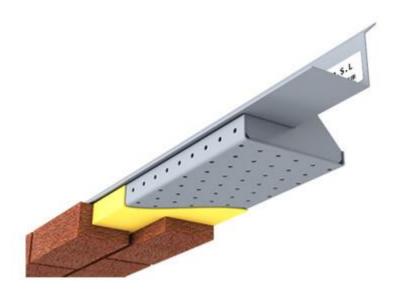
Construction Product

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



Main Product Contents

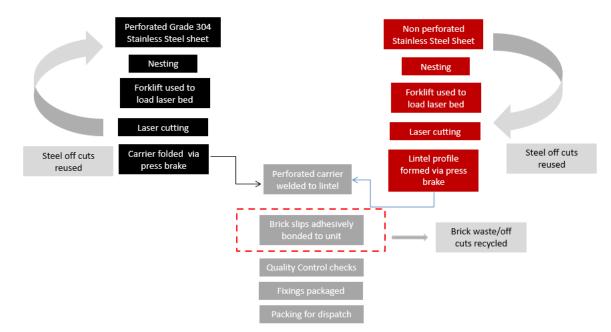
Material/Chemical Input	%
Stainless steel	84.8%
fixings	2.3%
adhesive	12.9%

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.

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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,

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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 environmental impacts										
			GWP	ODP	AP	EP	POCP	ADPE	ADPF	
			kg CO ₂ equiv.	kg CFC 11 equiv.	kg SO₂ 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	
1 Toddet Stage	Manufacturing	A3	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	B3	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	B6	0.00E+00	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	0.00E+00	
	Deconstruction, demolition	C1	MND	MND	MND	MND	MND	MND	MND	
End of life	Transport	C2	MND	MND	MND	MND	MND	MND	MND	
	Waste processing	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									
			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	
T Toduct stage	Manufacturing	A3	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	B3	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	C3	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	1.62E+00			
Desident stars	Transport	A2	0.00E+00	0.00E+00	0.00E+00	9.22E-04			
Product stage	Manufacturing	A3	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	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			
End of life	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 enviro					21/2
			HWD	NHWD	RWD
			kg	kg	kg
	Raw material supply	A1	1.06E+02	2.59E+01	4.27E-03
Product stage	Transport	A2	1.78E-03	1.98E-01	2.93E-05
i Toudet stage	Manufacturing	A3	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 stage	Transport to site	A4	MND	MND	MND
	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	B3	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	B7	0.00E+00	0.00E+00	0.00E+00
	Deconstructio n, demolition	C1	MND	MND	MND
End of life	Transport	C2	MND	MND	MND
End 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			
Flouder stage	Manufacturing	A3	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	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			
	Transport	C2	MND	MND	MND	MND			
End of life	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 addi	tional 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	No maintenance is required during the use phase of the BSL system as it is placed behind the brick slips and cannot be accessed								
	No maintenance	N/A	0						
B3 – Repair	No repair is required during the use phase the BSL system as it is placed behind the brick slips and cannot be accessed								
	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 life	The BSL system is assumed to have the same lifespan as t	he building it is use	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.

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