

**BRE Global EN 15804 Verified EPD Scheme**  
**Verification Report BF1325 – Rev 1.0**  
**EPD No.: BREG EN EPD 000355**

BRE Global	VERIFICATION REPORT	Doc No:	BF1325
		Revision No:	1.0
Verification of Environmental Product Declarations (EPD) according to BRE Global EN 15804 Verified EPD Scheme for Type III environmental product declaration of construction products to EN 15804		Date:	21/12/2020
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## BRE Global EN 15804 EPD Verification Report

BREG EN EPD No. (Issue No.)	BREG EN EPD 000355
Type of EPD	Cradle to Gate
Commissioner of LCA study	IKO Insulations Ltd
Construction product	Enertherm Alu
Manufacturer	IKO Insulations Ltd
LCA Practitioner	Roger Connick BRE
Date of LCA Report	15/01/2021
Applicable PCR	PN514. BRE Environmental Profiles 2013. Product Category Rules for Type III environmental product declaration of construction products to EN 15804:2012+A1:2013
Applicable Standard	<b>The EN 15804:2012+A1. Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products</b>
Name of Verifier	Pat Hermon
Date of Verification Report	10/02/2020

## Part A: The LCA study and project report

Item	Aspect	Compliant? Y/N	Justification, reference to LCA Report
<b>1</b>	<b>General</b>		
1.1	LCA Report includes a statement that the study has been conducted according to the requirements of EN 15804 and the BRE PCR (PN514).	Y	LINA Report
<b>2</b>	<b>Goal of study</b>		
2.1	Goal of the study, intended application and audience stated, e.g. for b-2-b or b-2-c.	Y	Lina Report
<b>3</b>	<b>Scope of study</b>		
3.1	Product description provided, including composition, manufacturing flow process, technical and functional characteristics, and area of intended application in a building.	Y	
3.2	Declared or functional unit defined, including relevant technical specification stated.	N	The functional unit is “1m <sup>2</sup> of faced PIR insulation product at a thickness that gives an R-value of 3 m <sup>2</sup> .K/W “  It would be useful to add in the thickness that provides this R-value either in the technical information or here.
3.3	Calculation rules for, and representativeness of average data stated, if applicable.	Y	Single site
3.4	System boundary according to modular approach stated, including omissions of life cycle stages and processes.	Y	Cradle to gate

Item	Aspect	Compliant? Y/N	Justification, reference to LCA Report
3.5	Quantification of energy and material inputs and outputs, and allocation of site-wide data.	Y	Single product from single site,
3.6	Mass balance calculation details.	Y	Uplift of 5% included for mass balance
3.7	Assumptions about electricity production and other relevant background data stated.	Y	
3.8	Cut-off criteria for initial inclusion or exclusion of inputs and outputs stated.	Y	LINA report
<b>4</b>	<b>Life cycle inventory (LCI) analysis</b>		
4.1	Detailed description of unit processes necessary to model the declared life cycle stages, taking into account the provisions of EN ISO 14025 regarding data confidentiality.	Y	
4.2	Sources of all data or literature including process names and database used.	Y	Ecoinvent 3.2
4.3	Validation of data, including data quality assessment and treatment of missing data provided.	Y	5% uplift
4.4	Allocation principles and procedures, including documentation and justification of allocation procedures and uniform application of allocation procedures, provided.	Y	NA
<b>5</b>	<b>Life cycle impact assessment (LCIA)</b>		

Item	Aspect	Compliant? Y/N	Justification, reference to LCA Report
5.1	LCA Report includes the LCIA procedures, calculations including plans showing processes, flow names and quantities, e.g. screen shots from LCA software, and the results of the study.	Y	Results
5.2	Relationship of the LCIA results to the LCI results provided, e.g. using graphs or networks showing processes for key environmental impact parameters.	Y	
5.3	LCA Report includes references to all characterization models, characterization factors and methods used, as defined in EN 15804:2012+A1:2013.	Y	LINA report
5.4	LCA Report includes a statement that the LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.	Y	LINA report
<b>6</b>	<b>Life cycle interpretation</b>		
6.1	LCA Report includes the assumptions and limitations associated with the interpretation of results	Y	
6.2	The range of the variation of the LCIA results has been described, if generic data are declared from several sources or for a range of similar products, e.g. by showing the standard deviation for the indicators.	Y	NA
6.3	Full transparency in terms of value-choices, rationales and expert judgements.	Y	

Item	Aspect	Compliant? Y/N	Justification, reference to LCA Report
<b>7</b>	<b>Additional documentation</b>		
7.1	Documentation on additional environmental information provided, where declared in the EPD, such as laboratory results or measurements for the content declaration and for functional/technical performance.	Y	N/A – No additional environmental information has been declared within the EPD.
7.2	Documentation on declared technical information on life cycle stages that have not been considered in the LCA of the construction product and that will be used for the assessment of buildings (e.g. transport distances, RSL according to Annex A of EN 15804:2012+A1:2013, energy consumption during use, cleaning cycles, etc.) provided.	Y	100 yr service life
7.3	Laboratory results/measurements for the declaration of emissions to indoor air, soil and water during the product's use stage provided.	Y	N/A – none declared.
<b>8</b>	<b>Additional data</b>		
8.1	LCIA results per module of unit processes (e.g. structured according to life cycle stages) provided.	Y	
8.2	LCIA results per production plant or product, if generic data is declared from several plants or for a range of similar products, provided.	Y	Single product
8.3	Documentation provided that substantiates the percentages or figures used for the calculations in the end-of-life scenario, e.g. references.	Y	NA

Item	Aspect	Compliant? Y/N	Justification, reference to LCA Report
8.4	Evidence provided of any sensitivity analysis and error assessment carried out.	Y	N/A no sensitivity carried out.

## Part B: The EPD

Item	Aspect	Compliant? Y/N	Comments, if required
<b>9</b>	<b>General</b>		
9.1	Name of the product, declared/functional unit and life cycle stages covered by the declaration are in line with the LCA Report.	Y	
9.2	Name of the declarer and the product manufacturing address(es) covered by the declaration are in line with the LCA Report.	Y	
<b>10</b>	<b>Product</b>		
10.1	A clear product description provided, in line with that contained in the LCA Report.	Y	These aspects are compliant.
10.2	If applicable, details of calculation of averages within a product group provided.	Y	NA
10.3	Brief description of product use provided.	Y	These aspects are compliant.
10.4	Relevant technical data and the applicable test standards provided.	Y	Technical data and standards provided within the EPD table.

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Item	Aspect	Compliant? Y/N	Comments, if required
10.5	The declared product contents are in line with the product contents in the LCA Report. This shall include any substance listed in the latest 'Candidate List of Substances of Very High Concern for authorisation' if their content exceeds the limits for registration.	Y	These aspects are compliant.  Would be useful to add a statement "no materials are currently on the list of substances of very high concern"
10.6	Description of the manufacturing process(es) provided, including a suitable process flow diagram.	Y	These aspects are compliant.
10.7	If applicable (i.e. if the life cycle stages/information modules are included in the EPD), information on Construction Installation, Use, Reference Service Life, and End of Life provided.	Y	NA
10.8	Specific details or links to publicly available information supporting the reference service life (if stated) provided.	Y	NA
<b>11</b>	<b>LCA Rules</b>		
11.1	Declared/functional unit complies with the requirements of PCR and are in line with the LCA Report.	N	The functional unit description should state the thickness or volume per m2 required to achieve stated R value. The space that the insulation takes up is a critical component of the product for comparability.
11.2	Description of system boundary provided.	Y	There aspects are compliant.
11.3	Source(s) of background data used, data quality (including age of data), and allocation (if any performed), provided and in line with the LCA Report.	Y	Ecoinvent 3.2

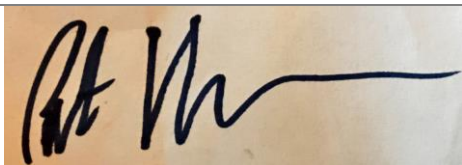


Item	Aspect	Compliant? Y/N	Comments, if required
11.4	Statement of assumptions and of cut-off criteria or exclusion of inputs and outputs included.	Y	These aspects are compliant
<b>12</b>	<b>LCA Results</b>		
12.1	Full declaration of all the indicators required according to the modular approach; INA = indicator not assessed, MNA = module not assessed.	Y	
12.2	Results in the EPD are the same as the results in the LCA Report.	Y	Ok PENRM calculated annually
<b>13</b>	<b>Scenarios and additional technical information</b>		
13.1	Details of the scenarios used for all the applicable declared modules provided.	Y	NA
<b>14</b>	<b>Interpretation</b>		
14.1	Brief interpretation of LCA results contained in the EPD (excluding marketing claims) provided. This may include graphs/images showing additional information from results of LCA study.	Y	NA
<b>15</b>	<b>References, Additional documentation</b>		
15.1	Full details of all referenced sources of information provided, including relevant Certificates, published laboratory results, publicly available product marketing literature, etc. (Standards may not be included).	Y	would be useful to reference any certification related to the technical information provided eg EN 13165

<b>Other Verifier Comments</b>

## Verification Statement

I hereby confirm that following detailed examination, I have identified relevant deviations (non-compliance) in the Environmental Product Declarations for IKO Enertherm, and by the LCA project report from the requirements outlined in the stated product category rules and the General Programme Instructions of the BRE Global EN 15804 Verified EPD Scheme.

Number of deviations	2
Verification outcome	Correction Requested
Name of Verifier	Pat Hermon
Signature	
Date	10/02/2021

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