

## Appendix to Certificate of Verification

Appendix Number: ENP506f Issue: 1

### Knauf Insulation Ltd

Stafford Road  
St Helens  
Merseyside  
WA10 3NS



Characterised and normalised data for:

### Insulation:

**Knauf Glass Mineral Wool insulation with ECOSE Technology (0.036-0.039 W/mK) - density 18 kg/m³**

Including: Earthwool FrameTherm Slab 38; Earthwool DriTherm Cavity Slab 37; Earthwool Acoustic Roll (50mm); Earthwool Masonry Party Wall Slab; Earthwool Timber Frame Party Wall Slab; Earthwool Rafter Roll (200mm); Kalzip Plus 37; Knauf Insulation Glass MW Roll 16kg; Space Roll 037; Space Slab 037; EcoBlanket 037; EcoBatt 037; EcoBatt Mur Isol 37; EcoBlanket 036; EcoBatt 036; Building Roll 036

**1 m² over 60-year study period**

### Quality of data for profiled material

Start date	01/01/2012
End date	31/12/2012
Representativeness	1 site representing 100% production
LCA Methodology	BRE Environmental Profiles Methodology 2008
Allocation	100% to product
Date of data entry	16/03/2015
Boundary	Cradle to Grave over 60-year study period
Applicable buildings	All building types
Source of data	Company records
Geography	UK

(Data for other constituent materials are available from BRE Global)

### BRE Ecopoints score: 0.0156 Ecopoints

This certificate appendix is maintained and held in force through annual review and verification.

Signed for BRE Global Ltd.

Derek Hughes  
Certification Schemes Manager

11 May 2015  
Date of Issue

05 January 2018  
Expiry Date



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Issue: 1

### Knauf Insulation Ltd

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St Helens  
Merseyside  
WA10 3NS

### Insulation:

Knauf Glass Mineral Wool insulation with ECOSE Technology  
(0.036-0.039 W/mK) - density 18 kg/m<sup>3</sup>

1 m<sup>2</sup> over 60-year study period

### Characterised Data

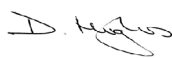
Issue	Value	Unit
Climate Change	2.63	kg CO <sub>2</sub> eq. (100 yr.)
Water Extraction	0.0317	m <sup>3</sup>
Mineral Resource Extraction	0.000757	tonnes
Stratospheric Ozone Depletion	0.00000207	kg CFC 11 eq.
Human Toxicity	0.461	kg 1,4-DB eq.
Ecotoxicity to Freshwater	0.045	kg 1,4-DB eq.
Nuclear Waste (higher level)	0.00000000766	m <sup>3</sup> high level waste
Ecotoxicity to Land	0.0116	kg 1,4-DB eq.
Waste Disposal	2.38	kg
Fossil Fuel Depletion	43.2	MJ
Eutrophication	0.00292	kg PO <sub>4</sub> eq.
Photochemical Ozone Creation	0.00111	kg ethene eq.
Acidification	0.0133	kg SO <sub>2</sub> eq.

### Normalised Data

Issue	Value	Western European Citizen's Annual Impacts
Climate Change	0.000214	12300 kg CO <sub>2</sub> eq. (100 yr.)
Water Extraction	0.0000839	378 m <sup>3</sup>
Mineral Resource Extraction	0.000031	24.4 tonnes
Stratospheric Ozone Depletion	0.00000953	0.217 kg CFC 11 eq.
Human Toxicity	0.0000233	19700 kg 1,4-DB eq.
Ecotoxicity to Freshwater	0.0000342	1320 kg 1,4-DB eq.
Nuclear Waste (higher level)	0.000323	2.37 x 10 <sup>-5</sup> m <sup>3</sup> high level waste
Ecotoxicity to Land	0.0000943	123 kg 1,4-DB eq.
Waste Disposal	0.000634	3750 kg
Fossil Fuel Depletion	0.000158	273 GJ
Eutrophication	0.0000897	32.5 kg PO <sub>4</sub> eq.
Photochemical Ozone Creation	0.0000515	21.5 kg ethene eq.
Acidification	0.000186	71.2 kg SO <sub>2</sub> eq.

**BRE Ecopoints score: 0.0156 Ecopoints**

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Signed for BRE Global Ltd.

Derek Hughes

Certification Schemes Manager

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