

## Appendix to Certificate of Verification

Appendix Number: ENP506g 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 (0.034-0.035 W/mK) - density 25 kg/m³**

Including: Earthwool FrameTherm Roll 35; Earthwool FrameTherm Slab 35; Earthwool OmniFit Slab; Earthwool OmniFit Stud; Earthwool DriTherm Cavity Slab 34; Earthwool DriTherm Cavity Slab 37 (50 & 65mm); Earthwool Acoustic Roll (25mm); Kalzip Plus 35; Space Roll 035; EcoBlanket 035; EcoBlanket 034; EcoBatt 034; EcoBatt Mur Isol 34

**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: 0.0195 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

Stafford Road  
St Helens  
Merseyside  
WA10 3NS

### Insulation:

Knauf Glass Mineral Wool insulation with ECOSE Technology  
(0.034-0.035 W/mK) - density 25 kg/m<sup>3</sup>

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

### Characterised Data

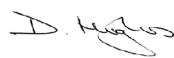
Issue	Value	Unit
Climate Change	3.28	kg CO <sub>2</sub> eq. (100 yr.)
Water Extraction	0.0395	m <sup>3</sup>
Mineral Resource Extraction	0.000944	tonnes
Stratospheric Ozone Depletion	0.00000258	kg CFC 11 eq.
Human Toxicity	0.574	kg 1,4-DB eq.
Ecotoxicity to Freshwater	0.0561	kg 1,4-DB eq.
Nuclear Waste (higher level)	0.00000000955	m <sup>3</sup> high level waste
Ecotoxicity to Land	0.0144	kg 1,4-DB eq.
Waste Disposal	2.96	kg
Fossil Fuel Depletion	53.8	MJ
Eutrophication	0.00364	kg PO <sub>4</sub> eq.
Photochemical Ozone Creation	0.00138	kg ethene eq.
Acidification	0.0165	kg SO <sub>2</sub> eq.

### Normalised Data

Issue	Value	Western European Citizen's Annual Impacts
Climate Change	0.000267	12300 kg CO <sub>2</sub> eq. (100 yr.)
Water Extraction	0.000105	378 m <sup>3</sup>
Mineral Resource Extraction	0.0000387	24.4 tonnes
Stratospheric Ozone Depletion	0.0000119	0.217 kg CFC 11 eq.
Human Toxicity	0.0000291	19700 kg 1,4-DB eq.
Ecotoxicity to Freshwater	0.0000426	1320 kg 1,4-DB eq.
Nuclear Waste (higher level)	0.000403	2.37 x 10 <sup>-5</sup> m <sup>3</sup> high level waste
Ecotoxicity to Land	0.000117	123 kg 1,4-DB eq.
Waste Disposal	0.000791	3750 kg
Fossil Fuel Depletion	0.000197	273 GJ
Eutrophication	0.000112	32.5 kg PO <sub>4</sub> eq.
Photochemical Ozone Creation	0.0000642	21.5 kg ethene eq.
Acidification	0.000232	71.2 kg SO <sub>2</sub> eq.

**BRE Ecopoints score: 0.0195 Ecopoints**

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Certification Schemes Manager

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