

## Appendix to Certificate of Approval

Appendix Number: ENP500ac Issue: 3

**Kingspan Insulation Ltd**  
 Pembridge  
 Leominster  
 Herefordshire  
 HR6 9LA

Characterised and normalised data for:

### Insulation: Insulation

Kingspan Therma TR24, TT44 (0.026 W/m.K) with CGF facer on one side and bitumised glass fleece facer on the other - 32 kg/m<sup>3</sup>

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

#### Quality of data for profiled material

Start date	01/01/2015
End Date	31/12/2015
Representativeness	Four sites representing 100% production
LCA Methodology	BRE Environmental Profiles Methodology 2008
Allocation	100% to product
Date of data entry	13/06/2017
Boundary	Cradle to Grave over 60-year study period
Applicable buildings	All building types
Source of data	Company records
Geography	UK and Ireland

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

#### BRE Ecopoints score: 0.0557 Ecopoints

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



Signed for BRE Global Ltd.

Emma Baker  
 Scheme Manager

28 July 2017  
 Date of Issue

27 July 2020  
 Expiry Date



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### Kingspan Insulation Ltd

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### Insulation: Insulation

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

### Characterised Data

Issue	Value	Unit
Climate Change	12.8	kg CO <sub>2</sub> eq. (100 yr.)
Water Extraction	0.336	m <sup>3</sup>
Mineral Resource Extraction	0.0042	tonnes
Stratospheric Ozone Depletion	0.0000175	kg CFC11 eq.
Human Toxicity	2.4	kg 1,4-DB eq.
Ecotoxicity to Freshwater	0.338	kg 1,4-DB eq.
Nuclear Waste (higher level)	0.00000000375	m <sup>3</sup> high level waste
Ecotoxicity to Land	0.0391	kg 1,4-DB eq.
Waste Disposal	4.25	kg
Fossil Fuel Depletion	261	MJ
Eutrophication	0.0119	kg PO <sub>4</sub> eq.
Photochemical Ozone Creation	0.0256	kg ethene eq.
Acidification	0.083	kg SO <sub>2</sub> eq.

### Normalised data

Issue	Value	Western European Citizen's Annual Impacts
Climate Change	0.00104	12300 kg CO <sub>2</sub> eq. (100 yr.)
Water Extraction	0.000891	378 m <sup>3</sup>
Mineral Resource Extraction	0.000172	24.4 tonnes
Stratospheric Ozone Depletion	0.0000806	0.217 kg CFC11 eq.
Human Toxicity	0.000122	19700 kg 1,4-DB eq.
Ecotoxicity to Freshwater	0.000257	1320 kg 1,4-DB eq.
Nuclear Waste (higher level)	0.000158	2.37 x 10 <sup>-5</sup> m <sup>3</sup> high level waste
Ecotoxicity to Land	0.000318	123 kg 1,4-DB eq.
Waste Disposal	0.00113	3750 kg
Fossil Fuel Depletion	0.000958	273 GJ
Eutrophication	0.000365	32.5 kg PO <sub>4</sub> eq.
Photochemical Ozone Creation	0.00119	21.5 kg ethene eq.
Acidification	0.00117	71.2 kg SO <sub>2</sub> eq.

**BRE Ecopoints score: 0.0557 Ecopoints**

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Scheme Manager

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