

Appendix to Certificate of Approval

Appendix Number: ENP508b Issue: 5

Ravago Building Solutions UK Ltd Beech Farm Offices Lymm Road Warrington WA4 2TG



Characterised and normalised data for:

Insulation: Insulation

Ravatherm XPS X 300 SB insulation with carbon dioxide blowing agent, 0.031 W/mK, 33 kg/m3

1 m² over 60-year study period

Quality of data for profiled material			
Start date	01/01/2016		
End Date	31/12/2016		
Representativeness	1 site representing 100% production		
LCA Methodology	BRE Environmental Profiles Methodology 2008		
Allocation	100% to product		
Date of data entry	18/06/2018		
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: 0.0507 Ecopoints

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



Signed for BRE Global Ltd.

Emma Baker Scheme Manager 14 February 2020

Date of Issue

29 August 2021

Expiry Date





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Appendix No: ENP508b Ravago Building Solutions UK Ltd

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1 m² over 60-year study period

Characterised Data

Issue	Value	Unit
Climate Change	14.5	kg CO _{2 eq.} (100 yr.)
Water Extraction	0.182	m^3
Mineral Resource Extraction	0.000247	tonnes
Stratospheric Ozone Depletion	0.0000234	kg CFC11 _{eq} .
Human Toxicity	1.7	kg 1,4-DB _{eq} .
Ecotoxicity to Freshwater	0.0453	kg 1,4-DB _{eq} .
Nuclear Waste (higher level)	0.000000105	m ³ high level waste
Ecotoxicity to Land	0.013	kg 1,4-DB _{eq} .
Waste Disposal	3.93	kg
Fossil Fuel Depletion	320	MJ
Eutrophication	0.00725	kg PO _{4 eq.}
Photochemical Ozone Creation	0.0189	kg ethene _{eq.}
Acidification	0.0801	kg SO _{2 eq.}

Normalised data

Issue	Value	Western European Citizen's Annual Impacts
Climate Change	0.00118	12300 kg CO _{2 eq.} (100 yr.)
Water Extraction	0.000481	378 m³
Mineral Resource Extraction	0.0000101	24.4 tonnes
Stratospheric Ozone Depletion	0.000108	0.217 kg CFC11 _{eq} .
Human Toxicity	0.000086	19700 kg 1,4-DB _{eq} .
Ecotoxicity to Freshwater	0.0000344	1320 kg 1,4-DB _{eq} .
Nuclear Waste (higher level)	0.000443	2.37 x 10 ⁻⁵ m ³ high level waste
Ecotoxicity to Land	0.000106	123 kg 1,4-DB _{eq} .
Waste Disposal	0.00105	3750 kg
Fossil Fuel Depletion	0.00117	273 GJ
Eutrophication	0.000223	32.5 kg PO _{4 eq.}
Photochemical Ozone Creation	0.000876	21.5 kg ethene _{eq.}
Acidification	0.00112	71.2 kg SO _{2 eq.}

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