BAUDER
making roofs secure.

TECHNICAL DATA SHEET

BauderXPS (500) Inverted Insulation

Product Description Rigid extruded polystyrene (XPS). This product is rebated on all four sides to ensure thermal continuity.
Application Fields This product is for use within inverted (protected membrane) roof systems and can be laid directly onto Bauder Hot Melt and Bauder bitumen-based Waterproofing Membranes. Contact Bauder for advice relating to other membrane types.

Use in conjunction with BauderXPS WFRL Membrane prior to installing paving, decking or ballast or Extensive, Brown, Biodiverse, Intensive Green, biosolar and Blue Roofs.

Use in conjunction with BauderXPS, BauderROCK NC 56mm or BauderGLAS Inverted Insulation to exposed vertical upstands.

For a comprehensive specification contact Bauder technical department.

PRODUCT INFORMATION AND TECHNICAL PERFORMANCE

Characteristic	Test Method	Unit	Value
Width	BS EN 822	mm	600 with rebated edge
Length	BS EN 822	mm	1250 with rebated edge
Coverage	-	m²	0.75
Thickness	BS EN 823	mm	50,80,100
Weight	BS EN 1602	kg/m³	35
Declared thermal conductivity	BS EN 13164	W/mK	0.034 (40-60mm) 0.036 (>60mm)
Design thermal conductivity	BS EN 13164	W/mK	0.036 (40-60mm) 0.038 (>60mm)
Compressive strength at 10% compression	BS EN 826	kPa	500
Design load compressive creep	BS EN 1606	kPa	NPD
Long term water absorption by immersion	BS EN 12087		NPD
Long term water absorption by diffusion	BS EN 12088		NPD
Water vapour resistivity	BS EN 12086:2013	MNs/gm	≥400
Fire Properties			
Reaction to fire	BS EN 13501-1		Euroclass F
Properties in relation to fire	European Commission Directive 2000/553/EC		Unrestricted with stone, screed, or paving cover
SURFACE FINISH			
Top			Un-faced
Bottom			Un-faced

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Colour		Green

CERTIFICATION AND ENVIRONMENTAL INFORMATION	
BBA Certificate	-
Environmental Product Declaration (EPD)	Pending
Declaration of Performance (DoP)	1001.CPR.2013.GG500.007
Declaration of Conformity (DoC)	1001.UKDoP.GG500.001
International Standards Organisation (ISO)	ISO 9001:2015 Quality Management Certificates No 0001QMS-1 ISO 14001:2015 Environmental Management Certificates No 0001EMS
Ozone depletion potential (ODP)	Zero
Global Warming Potential (GWP)	<5 kg CO_2 Eq./kg
Recyclability	100%

INSTALLATION GUIDANCE

1. BauderXPS (500) Inverted Insulation is installed loose laid over the weatherproofing, ensuring all overlap joints are tightly butted together.

2. Boards are laid in a staggered pattern starting from the point of access to the roof, when using a second layer stagger joints of insulation from first layer. Top layer must be a minimum of 100mm in depth.

3. Only install amount of BauderXPS (500) Inverted Insulation that can be ballasted, paved, or green roof installed in the same day.

4. BauderXPS (500) Inverted Insulation should always have a BauderXPS WFRL Membrane loose laid to its upper surface.

5. Cutting should be carried out either by using a fine-toothed saw, a hot wire system or by scoring with a sharp knife and snapping the board over a straight edge.

6. Ensure accurate trimming to achieve close-butting joints and continuity of insulation.

7. BauderXPS WFRL Membrane is loose laid over the insulation running across the fall of the roof with 300mm overlaps. The membrane is turned up at all roof penetrations and upstands to a height to ensure it finishes above the top level of the ballast or paving.

8. Upstands can be finished using BauderXPS Upstand Boards, BauderROCK NC 56mm or BauderGLAS Inverted Upstand Board (fixing depends on height of upstand) to reduce the risk of cold bridging. Please refer to Technical Data Sheets for limitations of use.

9. Fixing instructions for Upstand Boards can be found on the relevant Technical Data Sheet.

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TRANSPORT

BauderXPS (500) Insulation is transported direct to site from the manufacturer on artic curtain sided vehicles with no offload facility.
Smaller specialist vehicles such as rigid/moffett/flat bed/pump truck & tail lift are available.

Due to the weight of this material all insulation must be offloaded via a forklift or crane and cannot be handballed.

PRODUCT STORAGE GUIDANCE

Store the materials outdoors with suitable robust UV resistant, flame-retardant tarpaulin. Ensure the product(s) are clear of buildings and any other storage areas. The products must not be exposed to a direct naked flame or other ignition sources, or to solvents or other chemicals. All insulation boards must be kept dry, on pallets and off the ground. The packaging of Bauder Insulation products should not be considered adequate for weather protection. Where there are storage containers on site, these may be suitable for storing products.

Damaged boards must not be used.

PACKAGING MATERIAL

BauderXPS Insulation is shrink wrapped in polyethylene and delivered to site on pallets/skids.
Pallet footprint is 1.2 x 1.2m.
Number of boards per pallet depends on thickness.
Each pack shows the manufacturer's name, grade and type marking

HANDLING/PPE

All persons using this product should be fully aware of the manual handling methods as roofing materials are heavy and can cause serious injury.
When using this product, installers should be provided with, and wear, suitable personal protective equipment.
There are no requirements for special PPE when installing or cutting the insulation panels. BauderXPS (300) is chemically inert and safe to use.
Insulation is non-toxic and not irritating to the eyes or skin.

SHELF LIFE

When stored correctly, the product has no stated shelf life.

DISPOSAL GUIDANCE

Off-cuts need to be disposed via an authorised disposal contractor to an approved waste disposal site, observing all relevant regulations.

(European waste catalogue EWC number 17 06 04 "Insulation material").

RE-USE OPTIONS OF PRODUCT

BauderXPS Inverted Insulation is 100% recyclable.

Please refer to EPD in Certification and Environmental information section. Document can be found at www.bauder.co.uk

FURTHER INFORMATION/DOCUMENTS

Current documents such as brochures, installation guides, etc can be found by visiting www.bauder.co.uk

Safety Data Sheets are designed to provide the necessary information to recipients of substances and mixtures in the EU & UK.
This product is classed as an article; therefore, this product does not have a requirement for a Safety Data Sheet.

CE **Can be found via the website**

UKCA **Can be found via the website**