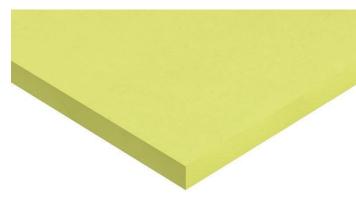


### **TECHNICAL DATA SHEET**

# **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 Upstand 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	40, 50, 60, 70, 80, 100, 120	
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			·	
Тор			Un-faced	
Bottom			Un-faced	

UNITED KINGDOM Bauder Ltd 70 Landseer Road, Ipswich, Suffolk IP3 0DH T: +44 (0)1473 257671 - E: <u>info@bauder.co.uk</u> www.bauder.co.uk Bauder reserves the right to update this data set without prior notice and this document is uncontrolled if printed or stored. Always confirm the latest version is used for the adoption of this product, available from our website: bauder.co.uk/technical centre. Intended use of this product should be verified with Bauder to ensure suitability and compliance with applicable guidance, regulations, legislations, project requirements, specifications, and installation techniques.



# TECHNICAL DATA SHEET

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 <sub>2</sub> 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.



## TECHNICAL DATA SHEET

#### 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**

BauderXPS Insulation should be stored outside and stacked clear of the ground and covered with a pale pigmented polythene sheet or weatherproof tarpaulin.

BauderXPS Insulation should not be left in the sun covered by either a transparent or a dark plastic sheet, since in both cases, board temperatures can build up to a level hot enough to appreciably alter their dimensions or warp them.

Care must be taken to avoid contact with solvents and materials containing organic components.

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.



Can be found via the website



Can be found via the website

UNITED KINGDOM Bauder Ltd 70 Landseer Road, Ipswich, Suffolk IP3 0DH T: +44 (0)1473 257671 - E: <u>info@bauder.co.uk</u> www.bauder.co.uk Bauder reserves the right to update this data set without prior notice and this document is uncontrolled if printed or stored. Always confirm the latest version is used for the adoption of this product, available from our website: bauder.co.uk/technical centre. Intended use of this product should be verified with Bauder to ensure suitability and compliance with applicable guidance, regulations, legislations, project requirements, specifications, and installation techniques.