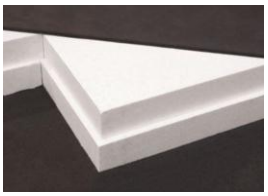
Technical data sheet

Bauder JFRI PREMIUM (300) Inverted Insulation

12.01.2026



Product description

Rigid expanded polystyrene (EPS). Has a higher compressive strength than the BauderJFRI PREMIUM (200) and BauderJFRI PREMIUM+ grade. The 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 technical department for advice relating to other membrane types.

Use in conjunction with BauderJFRI WFRL Membrane prior to installing paving, decking or ballast or Extensive, Brown, Biodiverse, Intensive Green, biosolar and Blue Roofs.
Use in conjunction with BauderXPS, BauderMINERAL NC 56mm, or BauderGLAS Inverted Upstand Boards to exposed vertical upstands.
For a comprehensive specification contact Bauder technical department.

Surface

Top	Un-faced
Bottom	Un-faced
Colour	White
Board edge	Rebated

Article Number (Thickness)

GB35027350 (50mm)	GB35027430 (130mm)	GB35027480 (180mm)
GB35027375 (75mm)	GB35027435 (135mm)	GB35027485 (185mm)
GB35027390 (90mm)	GB35027440 (140mm)	GB35027490 (190mm)
GB35027400 (100mm)	GB35027450 (150mm)	GB35027505 (205mm)
GB35027405 (105mm)	GB35027455 (155mm)	GB35027520 (220mm)
GB35027410 (110mm)	GB35027460 (160mm)	GB35027535 (235mm)
GB35027415 (115mm)	GB35027465 (165mm)	GB35027540 (240mm)
GB35027420 (120mm)	GB35027470 (170mm)	
GB35027425 (125mm)	GB35027475 (175mm)	

Website link

https://www.bauder.co.uk/products/jfri-premium-300

PRODUCT INFORMATION AND TECHNICAL PERFORMANCE WHEN USED IN HARD LANDSCAPING

Characteristic	Test Method	Unit	Value
Width	BS EN 822	mm	1215 (including 15 rebate)
Length	BS EN 822	mm	1215 (including 15 rebate)
Coverage		m^2	1.44
Single thickness	BS EN 823	mm	100 to 240mm in 5 mm increments (non-standard thicknesses are available as a special order)
Typical density	BS EN 1602	kg/m^3	40
Thermal Conductivity			
Declared thermal conductivity	BS EN 13163	W/mK	0.033
Design thermal conductivity	BS EN 13163	W/mK	0.033
Mechanical Properties			
Compressive strength	BS EN 826	N/mm^2	0.30 with 10% nominal compression
Long term compressive creep	BS EN 1606	N/mm^2	0.09 with 2% compression
Moisture Properties			
Long term water absorption by immersion	BS EN 12087		≤1%
Long term water absorption by diffusion	BS EN 12088		≤1%
Fire Properties			
Reaction to fire	BS EN 13501-1		Euroclass E
Properties in relation to fire	European Commission Directive 2000/553/EC		Unrestricted with stone, screed or paving cover (KIWA Certificate BAR-19-098-S-A-UK Section 2.1.12 Fire Performance)

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PRODUCT INFORMATION AND TECHNICAL PERFORMANCE WHEN USED IN GREEN ROOF			
Characteristic	**Test Method**	**Unit**	**Value**
Width	BS EN 822	mm	1215 (including 15 rebate)
Length	BS EN 822	mm	1215 (including 15 rebate)
Coverage		m^2	1.44
Single thickness	BS EN 823	mm	100 to 240mm in 5 mm increments (non-standard thicknesses are available as a special order)
Typical density	BS EN 1602	kg/m^3	40
Thermal Conductivity			
Declared thermal conductivity	BS EN 13164	W/mK	0.033
Green design thermal conductivity	BS EN 13164	W/mK	0.035 (Further adjustment included for green roof application)
Mechanical Properties			
Compressive strength	BS EN 826	N/mm^2	0.30 with 10% nominal compression
Long term compressive creep	BS EN 1606	N/mm^2	0.09 with 2% compression
Compressive strength for permanently sited loads. Contact Bauder Ltd where plant/equipment is to be sited on top of the Bauder system.			
Moisture Properties			
Long term water absorption by immersion	BS EN 12087		≤1%
Long term water absorption by diffusion	BS EN 12088		≤1%
Fire Properties			
Reaction to fire	BS EN 13501-1		Euroclass E
Properties in relation to fire	European Commission Directive 2000/553/EC		Unrestricted with stone, screed or paving cover (KIWA Certificate BAR-19-098-S-A-UK Section 2.1.12 Fire Performance)

Transport

BauderJFRI 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.

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

BauderJFRI PREMIUM (300) boards are shrink wrapped in polythene and delivered to site 2 packs high on timber pallets. Each Pack is 1.2 x 1.2 x 1.2m
Height of pallet with 2 with varies between 2.4 and 2.72m depending on board thickness.

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. BauderJFRI PREMIUM (300) 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 170604 "Insulation material").

Re-use options of product

Bauder JFRI PREMIUM (300) 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

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Certification and Environmental Information

KIWA Certificate	BAR-19-098-S-A-UK
Environmental Product Declaration (EPD)	BREG EN EPD No: 000395 Issue 01
Declaration of Performance (DoP)	13189450
Declaration of Conformity (DoC) - Hard Landscape	DoC-R-FRI-KWA-C-200-300-21
Declaration of Conformity (DoC) – Soft Landscape	DoC-R-FRI-KWA-GR-200-300-21
International Standards Organisation (ISO)	ISO 9001:2015 Quality Management Certificates GB 2005746 (UK) ISO 14001:2015 Environmental Management Certificates EM 2001097 (UK)
BRE Green Guide generic product rating	A (www.bre.co.uk/greenguide element number 1315320001)
Ozone depletion potential (ODP)	Zero
Global Warming Potential (GWP)	<5 kg CO_2 Eq./kg
Recyclability	100%

Installation Guidance

1. BauderJFRI PREMIUM (300) Inverted Roof 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.
3. Only install amount of BauderJFRI PREMIUM (300) Inverted Roof Insulation that can be ballasted, paved, or green roof installed in the same day.
4. BauderJFRI PREMIUM (300) Inverted Roof Insulation should always have a BauderJFRI 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. BauderJFRI 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 level of the ballast or paving.
8. Upstands can be finished using BauderXPS Upstand Board, BauderMINERAL NC 56mm Inverted Upstand Board, 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.

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**

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