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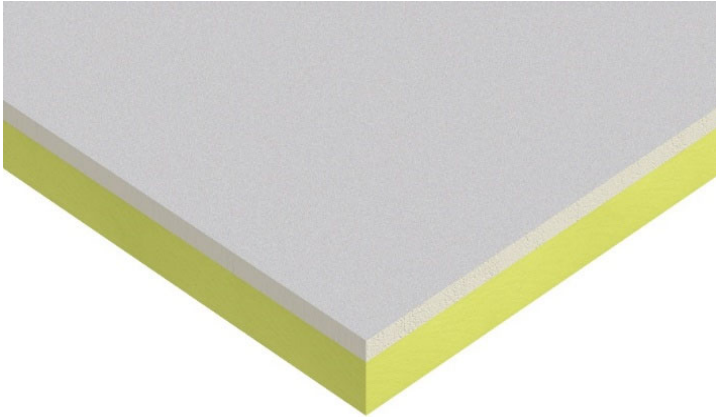
TECHNICAL DATA SHEET

BauderXPS Upstand Insulation

Product Description - Rigid extruded polystyrene (XPS) consisting of 50mm laminated XPS insulation and a 6mm weather resistant fibre-cement facing. The insulation facing provides impact resistance as well as UV protection to the extruded polystyrene core**.**

Application Fields - Provides an impact and weather resistant thermal insulation for use on low level inverted roof upstands including to, and across compartment walls.

This product is specifically for use at upstands where BauderXPS (300) and BauderJFRI Inverted Insulation is used on the main flat area.

For a comprehensive specification contact Bauder technical department.

Current interpretation of upstand insulation requirements for "Relevant Buildings" are:

1. If the insulation is a thermal break and finishes not more than 150mm above the finished roof level, then it is exempt from the ban. BauderXPS, BauderGLAS or BauderROCK NC 56mm Upstand Insulation are applicable.

2. If the insulation is taken up further above 150mm against a habited wall, then it is required to be Class A Upstand Board such as BauderROCK NC 56mm or BauderGLAS Upstand Insulation.

3. If upstand insulation is used against a parapet where it will extend beyond 150mm above the finished roof level, or the 300mm minimum requirement for a thermal break, but not greater than 1100mm, it is required to be a Class A Upstand Board such as BauderROCK NC 56mm or BauderGLAS Upstand Insulation. Exceeding the thermal break requirement with an upstand board should be questioned as to why it is needed.

The above guidance was appropriate at the time of writing but is often open to interpretation and therefore should always be confirmed by the Building Control officer for the project.

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PRODUCT INFORMATION AND TECHNICAL PERFORMANCE			
Characteristic	**Test method**	**Unit**	**Value**
Insulation and Facing Combined			
Length	BS EN 823	mm	1200
Width	BS EN 822	mm	600
Thickness	BS EN 823	mm	50mm insulation + 6mm fibre-cement layer
Weight (m^2)	-	kg	10.25
Declared Performance			
Facing: Fibre-cement board			
Colour	-		Grey
Thickness - nominal	BS EN 823	mm	6
Length	BS EN 822	mm	1200
Thickness	BS EN 822	mm	600
Density	-	kg/m^3	1390
Thermal conductivity – facing only	EN 12667	W/mK	0.47
Flexural strength (ave parallel & transverse)	-	MPa	18 (average)
Insulation			
Colour	-	-	Green
Length	BS EN 822	mm	1200
Width	BS EN 822	mm	600
Thickness	BS EN 823	mm	50
Compressive strength	BS EN 826	kPa	300
Thermal conductivity	BS EN 13162	W/mK	0.34
Nominal density – XPS only	BS EN 1602	kg/m^3	30
Water vapour resistivity	BS EN 12086:2013	MNs/gm	≥400
Reaction to fire	BS EN 13501-1		Euroclass E

CERTIFICATION AND ENVIRONMENTAL INFORMATION	
BBA Certificate No:	22/6048 product sheet 1
Environmental Product Declaration (EPD)	Pending
Declaration of Performance (DoP)	-
Declaration of Conformity (DoC)	Pending
International Standards Organisation (ISO)	ISO 9001:2015 Quality Management Certificate No 0001QMS-1 ISO 14001:2015 Environmental Management Certificate No 0001EMS
BRE Green Guide generic product rating	A+
Ozone depletion potential (ODP)	0
Global warming potential (GWP)	<5

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INSTALLATION GUIDANCE

The BauderXPS Upstand Insulation board is designed to be used with BauderXPS Inverted Roof Insulation.

BauderXPS Upstand Insulation is supplied as a 1200 x 600mm board and can be used either way up or cut to size as required.

When installed, provided that the top surface is protected by an appropriate coping, cill or cover flashing, BauderXPS Upstand Insulation is suitable for long term exposure – for example when used in conjunction with an inverted roof system.

Generally, the upstand insulation should be installed first, so it can be wedged in position at the base by the boards subsequently applied to the flat areas.

However, if there are two layers (multi layers) of insulation to the horizontal field areas, the bottom layer(s) of insulation can sit at deck level and the upstand board can be installed on top and then wedged into position using the uppermost layer (minimum thickness 100mm) of the insulation to the field area.

Low Level Installations

Up to 150mm above the ballast

Bauder XPS Upstand Boards require no additional restraint up to 150mm above the surfacing. Upstand Boards are pinned and restrained by the BauderXPS (300) Inverted Insulation.
Contact Bauder Technical or refer to Bauder J31 NBS project specific specification.

High Level Installations Mechanical Fixing – Installations exceeding 150mm above the ballast*, **

Mechanical fixings should be stainless steel or galvanised steel with appropriate pressure plate washers (minimum 40mm diameter). Fixing type, material, grade, diameter, length, number and position etc. should be specified to suit substructure and site conditions. Alternatively, boards can be tightly clipped continuously on top edge with a minimum continuous cover depth of 75mm.
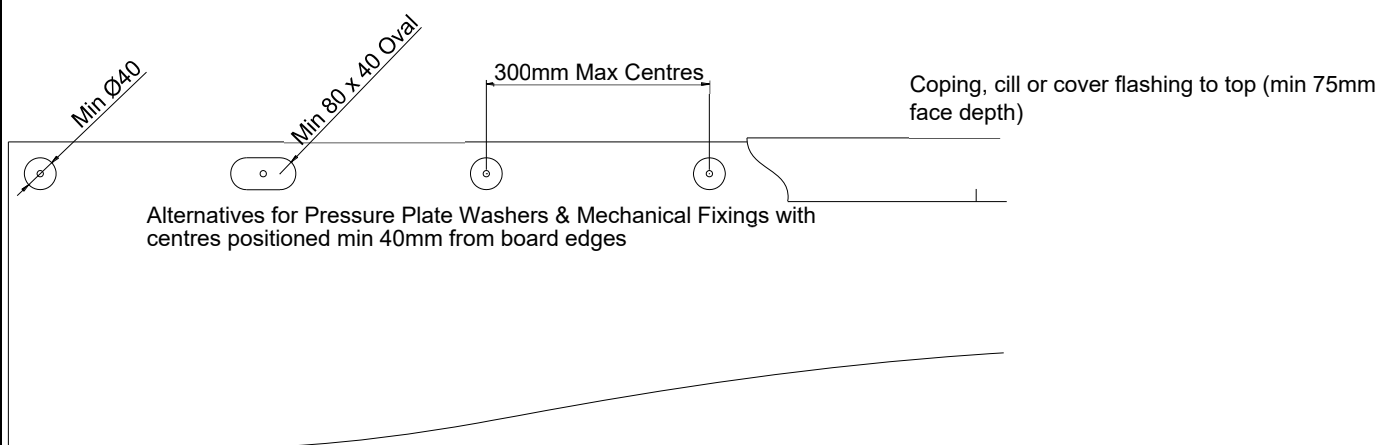
Boards should be pre-drilled with over-sized holes relevant to fibre cement board, (at least 2mm oversize), to allow for expansion. Fixings should typically be positioned across the top edge of the board at maximum 300mm centres, minimum 40mm from the corners of the board and 40mm in from the top edge to avoid damage to the board finish.

Additionally, one horizontal strip of suitable PU adhesive should be used at mid-point of the exposed board area if exposed area is greater than 750mm above the surfacing finish.

* Where appropriate, Upstand Board heights to be maximum of one board, longest length.
**Not an option for Approved Document B defined "Relevant Buildings"

Mechanical fixings are only allowed in the areas described in this document.

Min Ø40

Min 80 x 40 Oval

300mm Max Centres

Coping, cill or cover flashing to top (min 75mm face depth)

Alternatives for Pressure Plate Washers & Mechanical Fixings with centres positioned min 40mm from board edges

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Fixing Alternatives – Installation ** not appropriate for an option for Approved Document B defined "Relevant Building"	Low level Installation	High Level Installation defined "Relevant Buildings" **
Base of board pinned in place by the horizontal inverted roof insulation (by minimum 100mm)	✓	✓
Board edges must be tightly butted vertically	✓	✓
Board adhered to the vertical waterproofing detail with suitable adhesive in situations described in this document.		✓
Top edge of board mechanically fixed		✓
Board centre is adhered to the vertical detail with suitable adhesive. Mechanical fixings are only allowed in the areas described in this document.		✓
Top edge of board is fixed and protected by a minimum of 75mm by an appropriate coping, cill or cover flashing (by others)	✓	✓

Cutting & Drilling

When cutting and drilling BauderXPS Upstand Insulation, it may be cut by hand or with an appropriate power tool.

XPS Insulation - When cutting by hand, it can easily be cut with a long-bladed knife or insulation saw available from DIY/Builders Merchant outlets. Please ensure the correct PPE is worn when using or cutting insulation.

Fibre Cement particle topped boards - When cutting, use relevant power tools such as a disc cutter, jig saw, or angle grinders using a diamond tipped blade. Please ensure the correct PPE is worn when using or cutting cement particle board.

Holes required in fibre cement particle board should be drilled with standard masonry bits.

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TRANSPORT

BauderXPS Upstand Insulation is generally transported with related BauderXPS products on artic or rigid vehicles.
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

The polyethylene packaging of BauderXPS Upstand Insulation, which is recyclable, should not be considered adequate for outdoor protection and is delivered to site on wooden pallets.
Pallets are 1.2 x 1.2 x 1.3m approx.
42 no boards per pallet (30.24m^2)

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.
BauderXPS Insulation products are chemically inert and safe to use.

PPE should include safety goggles to protect against dust / projectile material, gloves to protect against possible sharp edges on the laminate board and a suitable dust mask to protect against dust inhalation. The mechanical effect of coarse fibres in contact with throat, skin or eyes may cause temporary itching/inconvenience.

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

EPD Pending
BauderXPS Upstand Insulation Board is recyclable.

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.

UK
CA   **Pending**