Insulated Upstand Boards

ACOUSTIC AND
INSULATION MANUFACTURING

Thermal insulation and protection to upstands parapet walls on flat roofs, typically inverted roof applications.

Technical Guide

PRODUCT

AlM Insulated Upstand Boards are manufactured from a variety of insulation materials including the leading brands of extruded polystyrene (XPS) foam or Stone Wool insulation, factory bonded to our external grade high impact fibre cement facing board.

APPLICATIONS

AlM Insulated Upstand Boards are used to provide thermal insulation to upstands and parapet walls in flat roof constructions, typically inverted roof systems.

The primary function is to insulate the parapet upstand and prevent cold bridging to the internal envelope of the building.

AIM Upstand Boards are designed to provide a tough, weather and impact resistant finish which can be decorated as required.

A limited-combustibility A2-s1,d0 stone wool option is available for buildings over 11m high.





Example product installation schematic using materials by others

FEATURES

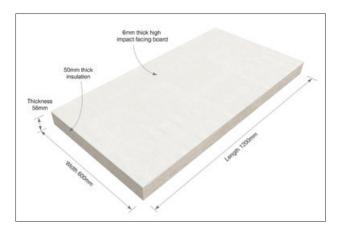
- A range of insulation substrates to meet the requirements of the project.
- A range of thermal performances to suit the requirements of the project.
- · Impact, weather resistant, facing board.
- A Euroclass A2-s1,d0 stone wool based option is available.
- Pre-decorated and through coloured facing boards are available.
- Standard sizes as well as custom dimension product available.

BENEFITS

- Low thermal conductivity helps provide a thermal break at the base of upstands and perimeter walls of a flat roof.
- Provides a robust substrate for decoration as required.
- Compatible with most flat roof waterproofing systems.
- Highly weather resistant and suitable for long term weather exposure.
- Wide range of sizes available to give flexibility of installation.
- · Easy to install
- Euroclass A2-s1,d0 option available for buildings over 11m high.
- Pre-cut boards available to suit specific parapet heights.

PHYSICAL INFORMATION

- 1200mm long x 600mm wide
- Insulation 50mm thick
- High Impact facing board = 6mm thick
- · Overall thickness of 56mm
- Non-standard thicknesses and sheet sizes also available
- · Also available pre-cut to specific heights.

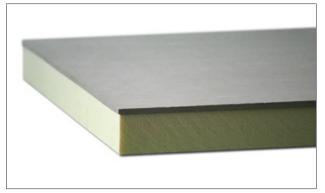


PACKAGING

AIM Upstand Boards are stretch wrapped onto wooden pallets with a showerproof polythene pallet cover and high quality edge protectors.

AS STANDARD





OPTIONS

AlM is able to manufacture the Upstand board using a variety of different thermal insulation (XPS and stone wool being the most common materials).

We are also able to manufacture boards up to 2400 x 1200mm and in a wide range of thicknesses to suit the project.

TECHNICAL INFORMATION

Thermal Performance

Varies according to the insulation used.

Generally in the range of 0.030 to 0.040 W/mK

The facing board has a thermal resistance of 0.30W/mK

Compressive Strength

The compressive strength of the insulation varies according to the insulation substrate used. Details available on request.

The facing board is highly resistant to impact damage and offers an extremely robust finish.

Reaction To Fire

AIM Upstand Boards backed with Stone Wool insulation achieve Euroclass A2-s1,d0.

Other insulation variants will not meet the requirements for limited-combustibility.

Water Repellence

XPS insulation is highly resistant to absorption of water so the XPS Upstand Board variants are the preferred choice where this could be of concern.

Should a Stone Wool backed Upstand board be required, for instances where a limited-combustibility construction is specified, water is unlikely to penetrate to a depth greater than a few mm into the body of Rockwool insulation unless the product is held in water and the air forced out. Subsequent to total immersion testing in accordance with BS 2972, Rockwool products will typically absorb less than 2% water by volume.

Weather resistance

The facing board is a fully external grade, freeze resistant.

Decoration

Where required the facing board may be painted without any special priming using an alkali resistant paint or emulsion.

Two coats of paint will usually give a satisfactory finish.

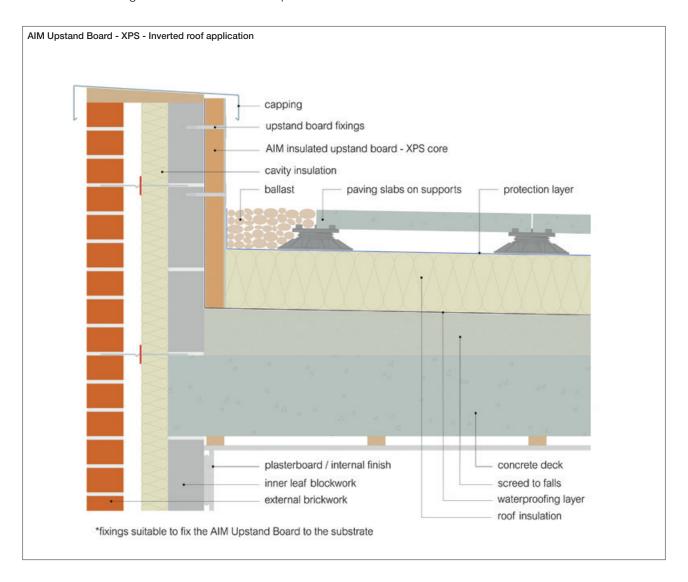
Suitable paints are: Gloss Paints, Acrylics, Chlorinated rubber, Epoxy, PVA, PVC, Polyurethane and silicate.

The standard facing board is not intended to provide

a final architectural/aesthetic finish as the cementitious facing may vary in colour from batch to batch.

Pre-finished and through coloured facing boards are available upon request.

NOTE: Decoration and the application of paint may impact on the overall fire classification / combustibility of the product.



TEST REPORTS

Classification of reaction to fire performance in accordance with EN 13501-1 Report Number WF514062 (applies stone wool version only).



AlM are partners with NBS. Our products can be found on NBS Source and have been authored to NBS specification standards and have both CAWS and Uniclass 2015 classifications.

Items required for installation







PPE impact resistant goggles



RPE dust mask - FFP3



Skill Saw and TCT blade

INSTALLATION GUIDELINES

Installation will vary according to the roof system which is being used. For specific guidance, please refer to the relevant waterproofing system holder.

AIM Upstand boards are supplied as 1200 x 600mm boards as standard and can be used either way up or cut to size as required.

The boards should be cut to size using a TCT saw (an FFP3 face mask is advised to guard against dust).

The Upstand Boards should be installed before the horizontal insulation which is then used to hold the base of the Upstand Board in place.

The board should be fixed directly to the upstand wall using through fixings. Fixing centres should not exceed 600mm. Fixings should be positioned at least 50mm from the top of the facing board, but should not exceed 200mm.

In the event that a roof deck is not supporting the bottom of the board, additional through mechanical fixings should be used to compensate.

The mechanical fixings used should be appropriate for the depth of insulation and type of substrate in which the fixing is to be made. The screws should be installed with a controllable speed screw gun and not overdriven, to prevent undue compression of the insulation backing. We suggest avoiding any counter sunk fixings and hammer fixings

The fixing pattern is dependent on the type of fixings used and the substrate in which the fixing is to be secured.

Please seek advice from your nominated fixing supplier

Mechanical Fixings:

AIM recommends a pan head fixing suitable for the substrate or similar approved when installing this product.

Ensure that the fixings are a minimum of 30mm longer than the overall thickness of the board.

When installed, provided that the top surface is protected by a sill or cover, the AIM Upstand Board is suitable for long term exposure - for example when used in conjunction with an inverted roof system.

Where the High Impact Soffit Liner Board needs to be cut to size, a skill saw fitted with TCT blade and suitable dust extraction should be used along with the appropriate personal protective equipment.

STORAGE

Products are supplied on wooden pallets with edge protection and a shower proof hood. Products should be stored away from the elements until ready for installation.

MAINTENANCE

This product does not contain moving parts and, if undisturbed, requires no routine inspections or maintenance.

DURABILITY

AIM Upstand Boards are chemically inert, will not sustain vermin and do not encourage the growth of rot, fungi, moulds or bacteria.

They are compatible with all normal building materials.

They do not degrade under the usual anticipated conditions found in buildings and will perform effectively for the life of the building.

HEALTH & SAFETY

Insulation products supplied by AIM are considered to be inert articles and as such are exempt from requirements to provide a Safety Data Sheet.

When dry working (cutting/drilling/screwing) the facing board dust protection must be considered.

Product Safety and Handling Information Sheets are available covering the various insulants and facing board used.

ENVIRONMENT

Stonewool global warming potential = zero XPS Foam Global Warming Potential = >5

ORDERING

To order this product the following information will be required:

- · Dimensions of the required boards
- · Approximate quantity
- · Thickness required
- · Delivery location

All AIM fire barriers are made to order. Products are typically supplied in seven to ten working days but lead times may vary depending on existing factory commitments.

There is no minimum order quantity or value although small orders may attract transport surcharges.

TECHNICAL SUPPORT

Technical Support is available from our experienced sales team on 01293 582 400 or sales@aimlimited.co.uk

ABOUT AIM

AIM are a quality insulation convertor with over 30 years experience in the design, testing & manufacturing of high quality fire barriers for customers worldwide.



