

AS LOW AS

Fire Performance

Thermal Conductivity

Extensive Range

# Superior Performance Insulation



**SR/TB** Insulation for

Drylining Walls Dot & Dab

# **Key Features**

Superior Performance Phenolic Thermal Conductivity as low as 0.020W/mK Low Smoke Obscuration HCFC/CFC Free Zero ODP Class 'O'/Low Risk Fire Rating For New Build or Refurbishment

Fast Response Heating





# Safe-R | SR Insulated Plaster Board

Xtratherm Safe-R is a superior performance rigid insulation with enhanced fire performance, consisting of a Class 'O' phenolic foam core with negligible smoke obscuration. Safe-R is faced with low emissivity aluminium/glass tissue facings, and has a thermal conductivity as low as 0.020W/mK.

### Thermal Lining Insulation

Xtratherm Safe-R Thermal Liner SR/TB is a composite insulated panel of Xtratherm Phenolic core with a composite tissue facing bonded to plasterboard for internal applications, fixed with propriety adhesive bonding. SR/TB is designed to provide high levels of thermal insulation and dry lining in one operation for masonry walls.

#### General

The joints between Xtratherm ST/TB boards should be taped and filled in accordance with drylining good practice. The Safe-R Thermal Liner boards achieve a resistance greater than 100 MN.s/g. Improved vapour resistivity when required, can be provided with two coats of Drywall Sealer. An important factor when dry lining a wall is to provide fire stops along the top and bottom of each sheet and around all openings (Doors & Windows etc.) These are provided by continuous plaster ribbons and prevent fire, penetrating behind the insulation layer, it also prevents Thermal Looping.

### **Specification Clause**

The insulated dry lining insulation shall be Xtratherm Safe-R SR/TB\_\_\_mm manufactured to BS EN 13166:2008 by Xtratherm, comprising a CFC/HCFC free rigid Phenolic core. To be installed in accordance with instructions issued by Xtratherm. Refer to NBS clause K10 205.



#### Property & Units

Density (Foam Core) 45 (Kg/m<sup>3</sup>)

Compressive Strength >125 (kPa)

Water Vapour Resistivity >100 (MNs/gm)

Thermal Conductivity 0.020 – 0.023 (W/mK)

Service Temperature -20 to +100 (°C)

#### Xtratherm SR/TB

Length (mm) 2400

Width (mm) 1200

Thickness (mm) Plasterboard 12.5mm+ 25, 40, 50, 60, 75, 80, 100

\*Other sizes available subject to quantity and lead time. Note: Standard product supplied UK-tapered edge -12.5mm only

## Xtratherm Safe-R

Typical Values

40mm R Value: 1.739

50mm R Value: 2.381

60mm R Value: 2.857

75mm R Value: 3.752

80mm R Value: 3.810

100mm R Value: 5.000



# Installation Guidelines







# Plaster-dab Bonding SR/TB

Align the SR/TB Thermal Liner squarely on wall. Allow a 15mm expansion joint at the top and bottom of the panel, and fill with foam filler.

Mark the position of the panel on the wall.

Apply adhesive dabs to the wall in accordance with BS8212:1986 & BS 800: Part 8:1994. Vertical dabs @ 300mm cs 25mm in from edge. Dabs 50-75mm wide approx 25mm deep to allow for tamping. Total contact with boards area should be 20%.

Max installation height for this system is 3m.

Ensure a 50mm continuous ribbon top and bottom and around any openings to provide firestops, and to achieve predicted U-value and airtightness performance. (See accredited details)

Lift the SR/TB Thermal Liner into position using wedges on the floor. Apply pressure to the board to level & embed in the adhesive.

Insulation should be cut back to accommodate an adjoining panel at external corners.

When the adhesive has dried, 3 mechanical fixings (fireproof) should be fixed through the centre of the board. Setting out and planning is essential.

The Safe-R Thermal Liner boards achieve a resistance greater than 100 MN.s/g. Improved vapour resistivity when required, can be provided with two coats of Drywall Sealer.

## **Typical U-Values**

## Xtratherm SR/TB Thickness (mm)

Wall Type	50	60	75	80	100
300mm Cavity Wall Brick/Block	0.32	0.28	0.23	0.22	0.17
600mm Random Stone Wall	0.32	0.28	0.23	0.22	0.18
215mm Solid Brickwork	0.33	0.29	0.24	0.22	0.18

Contact Xtratherm Technical Support for specific U-value calculations.

#### Standards

Xtratherm Safe-R range is manufactured to EN ISO 13166 under Quality Systems approved to EN ISO 9001:2008 Quality Management, EN ISO 14001:2004 Environmental Management and BS OHSAS 18001 Health and Safety Management System.

#### Storage

Xtrathern Safe-R should be stored off the ground, on a clean, flat surface and must be stored under cover. The polythene wrapping is not considered adequate protection for outside exposure.

#### Cutting

Xtratherm Safe-R can be readily cut using a sharp knife or fine toothed saw. Ensure tight fitting of the insulation boards to achieve continuity of insulation as asked for in accredited details.

#### Work Interuptions

During breaks in the build process and at the end of each working day, board edges and joints should be protected from inclement weather. Boards that have been allowed to get wet should not be used.

#### Packaging

Xtratherm Safe-R is wrapped in polythene packs and each pack is labelled with details of grade/type, size and number of pieces per pack. The packaging should not be considered as protection form the elements.

#### Availability

Xtratherm products are available through builder's merchants and specialist distributors throughout the UK and Ireland. For the location of your nearest stockist please contact Xtratherm.

#### Environmental

Xtratherm Safe-R is manufactured under ISO 14001:2004 Environmental Management with all major components sourced under 14001 accredited suppliers. It is manufactured without the use of CFC's or HCFC's and has Zero Ozone Depletion Potential with a GWP of less than 5.

#### Durability

Xtratherm Safe-R products are stable, rot proof and will remain effective for the life span of the building, dependent on specification and installation. Care should be taken to avoid contact with acids, petrol, alkalis and mineral oil, when contact is made, clean materials in a safe manner before installation. Solvent based adhesive containing methyl ethyl ketone, should not be used.



# Safe-R Superior performance phenolic insulation

# **Xtratherm Technical Services**

All the members of our technical team are individually BBA accredited to help you reach your low energy goals. BBA qualified in U-value calculation, condensation risk and also Thermal Bridging 3D analysis backed by BRE accreditation – when you call Xtratherm, you can be assured you're speaking to a qualified person.

Superior

Insulation

Performance





Walls Insulation for Partial Fill Cavity Wall

SR/CW



SR/TB Walls Insulation for Drylining Walls

Dot & Dab



SR/RS Rainscreen Insulation for Rainscreen Application





SR/TB-MF

Walls Insulation for Drylining Walls Mechanically Fixed to Battens



SR/STP Soffit Plus Insulation Composite for Structural Ceiling Applications



# SR/FB

Walls Insulation for Steel & Timber Framing



SR/UF Floors Insulation for Ground Supported and Suspended Floors

# Rigid Insulation Flexible Solutions

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Good workmanship and appropriate site procedures are necessary to achieve expected thermal and airtightness performance. The example calculations are indicative only. Default values for components and cavities have been used, for specific U-value calculations contact Xtratherm Technical Support. Comprehensive guidance on installation should be consulted. Xtratherm technical literature and Agrément certification is available for download on the Xtratherm website. The information contained in this publication is, to the best of our knowledge, true and accurate but any recommendations or suggestions which may be made are without guarantee since the conditions of use are beyond our control.