Thin-R
High Performance PIR

EST Approved

Thermal Conductivity

Extensive Range

High Performance PIR Wall Insulation Board (UK)

Walls

XT/TL-MF

Insulation for Drylining Walls Mechanically Fixed



Key Features

- High Thermal Performance
- Certified Thermal Conductivity as Low as 0.022W/mK
- Integral Vapour Control Layer
- Low Emissivity Foil Facings
- Energy Saving Trust Approved Product
- HCFC/CFC Free, GWP <5
- BRE Green Guide A+ Rated



energy saving trust recommended

BBA APPROVAL INSPECTION TESTING CERTIFICATION
08/4613

www.xtratherm.com

Xtratherm®
More than insulation

Thin-R | XT/TL-MF Insulation for Drylining Walls Mechanically Fixed to Battens

Xtratherm Thin-R XT/TL-MF Thermal Liner is a composite insulated panel of Xtratherm Polyiso (PIR) core with foil faces bonded to 12.5mm tapered edge plasterboard for mechanically fixing to internal walls. XT/TL-MF is designed to provide high levels of thermal insulation and dry lining in one operation for suitable masonry walls, sloped rafters and ceilings in new build and refurbishment situations. XT/TL-MF is only suitable for mechanical fixed applications.

Thermal Lining

Integral vapour control layer

Drylining & Insulation in one fix

Shorter drying time

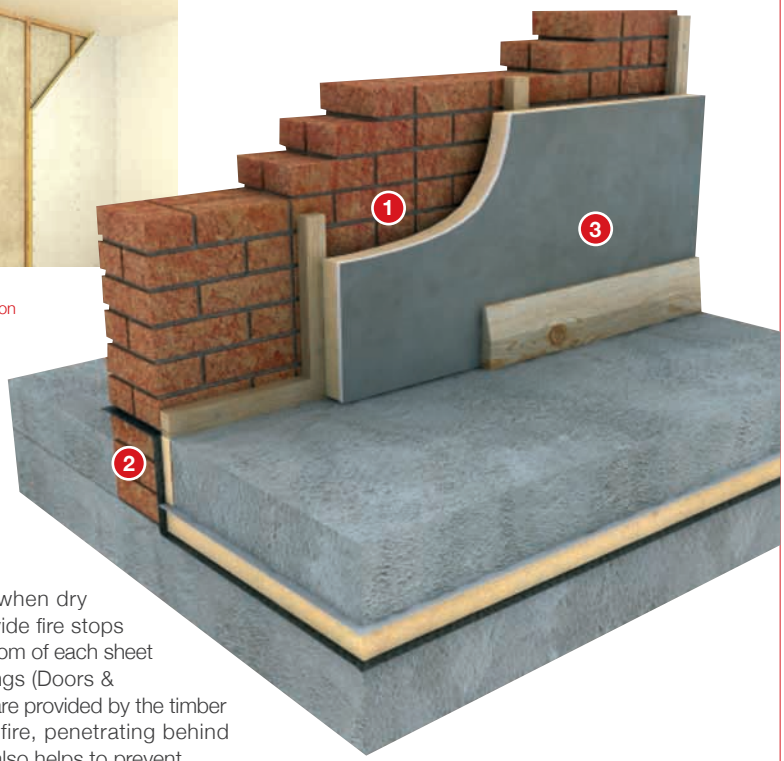
Responsive insulation system

1

The void created between the timber battens may be used for accommodating services.



Thermal Liner
DOT & DAB - Typical installation



2

Fire Stops

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 the timber battens and prevent fire, penetrating behind the insulation layer it also helps to prevent thermal looping.

3

Integral vapour control layer

The facing on Xtratherm boards provide a gas and vapour tight barrier, taping the joints between the aluminium facing, or taping and filling the joints on plasterboard finishes in accordance with drylining good practice, will result in a vapour control layer being created.

Further Guidance - Best Practice

Good workmanship and appropriate site procedures are necessary to achieve expected performance from insulation materials. Procedures set out in the EST Guidance Document CE17 'Internal wall insulation in existing housing - a guide for specifiers and contractors should be consulted whilst following detailing contained in the DCLG publication 'Accredited Details for Construction'.

Xtratherm Thin-R is a high performance foil faced Polyisocyanurate (PIR) insulation with a certified thermal conductivity as low as 0.022W/mK. Manufactured to strict EN 13165 standards, the closed cell structure and gas tight facings provides excellent thermal performance and moisture resistance. Xtratherm Thin-R products deliver genuine thermally robust performances and are supported with full third party assurances throughout the range.

Property & Units
Density (Foam Core) 32 (Kg/m^3)
Compressive Strength >140 (kPa)
Water Vapour Resistivity >100 (MNs/gm)
Thermal Conductivity 0.022 (W/mK)
Surface Spread of Flame Class 1*

*When laminated to plasterboard Thin-R XT/TL is deemed to be class 0 in accordance with the building regulations.

Xtratherm XT/TL-MF
Length (mm) 2400
Width (mm) 1200
Thickness* (mm) Plasterboard 12.5mm+ 25, 40, 50, 70

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

Specification Clause

The insulated dry lining wall insulation shall be Xtratherm Thin-R XT/TL-MF, 12.5mm plasterboard bonded to_ _ _mm CFC/HCFC free rigid Polyisocyanurate core between low emissivity foil faces manufactured to EN ISO 9001:2008 by Xtratherm. The insulated dry lining plasterboard XT/TL-MF shall be mechanically fixed to battens, or proprietary sytem in accordance with instructions issued by Xtratherm. Refer to NBS clause K10 205.

Xtratherm®
More than insulation

Installation Guidelines

Mechanical Fixing XT/TL-MF

Fix a pre-treated timber batten horizontally at ceiling level and another 20mm above the finished floor level.

Fix vertical battens at max 600mm centres.

Ensure battens are wide enough to offer 20mm support to all four edges of the plasterboard.

Pack battens if necessary to level the wall.

Trim all openings and service penetrations with timber battens.

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

Lift the XT/TL-MF Thermal Liner into position using wedges on the floor.

Screws should be fixed to the timber batten at 150mm centres, at least 12mm in from the board edge. The fixings should penetrate at least 25mm into the batten.



Installation must be in accordance with good dry lining practice. BS 8212:1988 should be considered, careful setting out and planning is essential, fill any gaps with foam filler.

Accredited details should be followed to ensure that calculated performance is achieved.

For comprehensive guidance on Xtratherm Thermal Liners download the 'Xtratherm Guide to Insulated Drylining .





U-value calculations to BS EN ISO:6946

Walls (XT/TL-MF) Dry Lined — Thickness* (mm)

Wall Type	25	40	50	60	70
300mm Cavity Wall Brick/Block	0.43	0.33	0.29	0.25	0.23
215mm Solid Brickwork	0.45	0.35	0.30	0.26	0.23

*Insulation thickness only. Contact Xtratherm Technical Support for specific U-value calculations.

Resistance R values

The resistance value of any thickness of Xtratherm PIR can be ascertained by simply dividing the thickness of the material (in metres) by it's agrèment declared lambda value 0.022 W/mk. eg 50mm = 0.050/0.022 = R2.27.

Standards

Xtratherm Thin-R range is manufactured to EN ISO 13165 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

Xtratherm Thin-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 Thin-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.

Packaging

Xtratherm Thin-R is wrapped in polythene packs and each pack is labelled with details of grade/type, size and number of pieces per pack.

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 Thin-R is manufactured under ISO 14001:2004 Environmental Management with all major components sourced under 14001 accredited supplliers. 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. Thin-R has been awarded an A+ Rating under the BRE Green Guide.

Durability

Xtratherm Thin-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.

Thin-R

High Performance PIR

XT/TL-MF 06/12

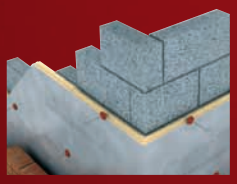
Xtratherm Technical Services

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.



XT/CW (T&G)

Walls:
Insulation for Partial Fill Cavity Wall



XT/CWP

Walls:
Insulation with enhanced performance for Partial Fill Cavity Walls



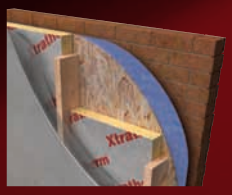
XT/TL

Walls:
Insulation for Drylining walls Fixed with Adhesive Dabs



XT/TL-MF

Walls:
Insulation for Drylining walls Mechanically Fixed to Battens



XT/TF

Walls:
Insulation for Timber Framed Walls



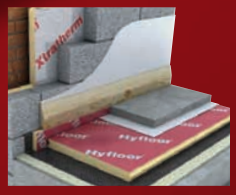
CT/PIR

Walls:
Full Fill Built-in Insulation for Traditional Build



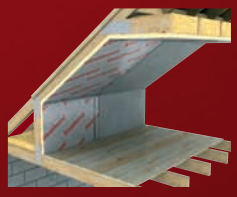
XT/UF

Floors:
Insulation for Ground Supported and Suspended Floors



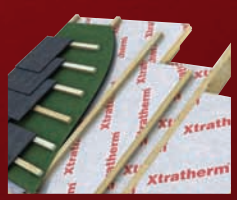
XT/HYF

Floors:
Insulation for Ground Supported and Suspended Floors with Engineered Jointing.



XT/PR

Roofs:
Insulation for Pitched Roofs



XT/SK

Roofs:
Insulation for Sarking (Warm Roof) Constructions with Engineered Jointing

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 certifications are 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.