

# Xtratherm Thin-R

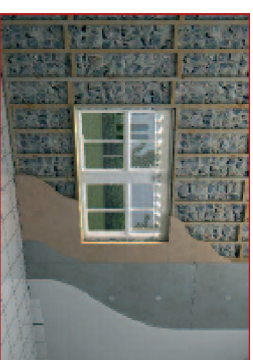
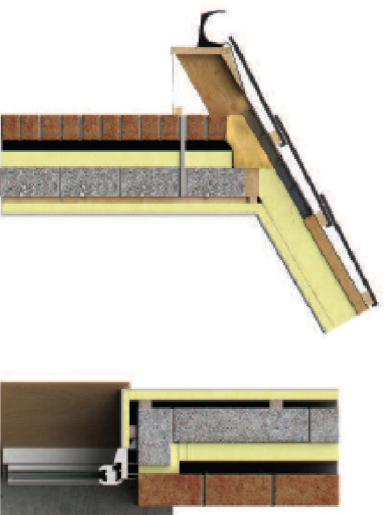
PROPERTY	UNITS
Density (Foam Core)	32 Kg/m <sup>3</sup>
Compressive Strength	> 140 kPa
Water Vapour Resistance	> 100 MNkg/m
Thermal Conductivity	0.022 W/mK
Surface Spread of Flame	Class 1*

\*When damaged or penetrated, Thin-R XT/TL-MF is deemed to be class 2 in accordance with the building regulations.

## Thin-R XT/TL-MF

### Thermal Lining Insulation

Xtratherm Thin-R Thermal Liner is a composite insulated panel of Xtratherm Polyiso (PIR) core with a foil face one side bonded to plasterboard for mechanical 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.



#### 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.

Enough 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.

Fit 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 battens should penetrate at least 25mm into the batten.

Installation must be in accordance with good dry lining practice. BS 8272:1988 should be considered, careful sealing out and planning is essential. Fill any gaps with foam filler.

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

### U-value calculations to BS EN ISO:6946

#### WALLS (XT/TL-MF) - Dry Lined

XTRATHERM THICKNESS (mm)

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

Contact Xtratherm Technical Support for specific U-value calculations.

#### Resistance 'R' Values

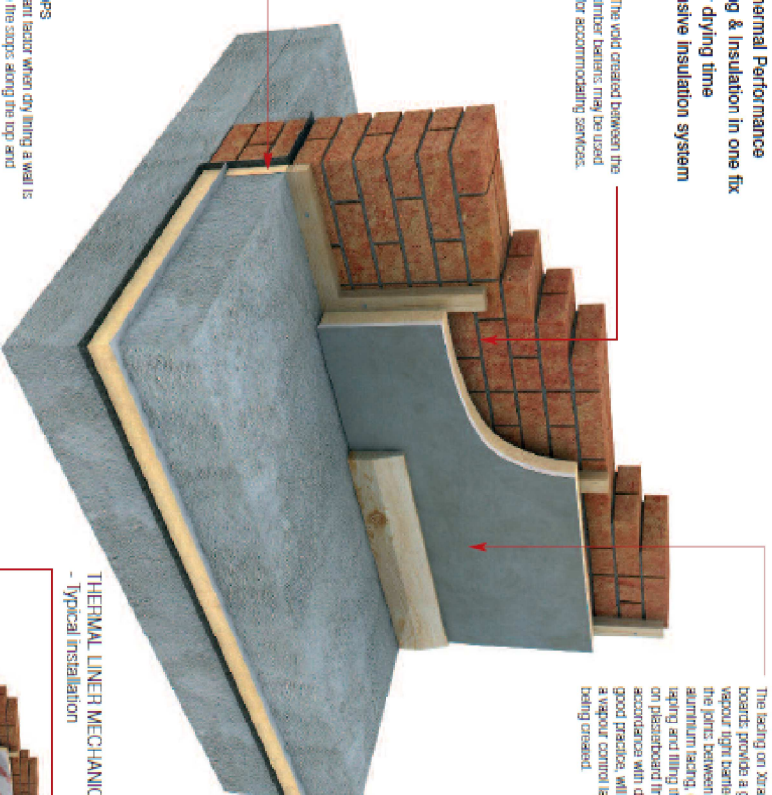
The resistance value of any thickness of Xtratherm PIR can be ascertained by simply dividing the thickness of the material (in metres) by its equivalent declared lambda value 0.022 W/mK. eg 50mm = 0.09090 022 = R2.27



## Thermal Lining

**High Thermal Performance**  
Drying & Insulation in one fix  
Shorter drying time  
Responsive insulation system

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



The lining on Xtratherm boards provides a gas and vapour tight barrier, sealing the joints between the aluminium facing, or facing and fitting the joints on plasterboard finishes in accordance with dry lining good practice. Will result in a vapour control layer being created.

#### THERMAL LINER MECHANICALLY FIXED - Typical installation

**FIRE STOPS**  
An important factor when dry lining a wall is to provide the 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 the penetrating behind the insulation layer. It also helps to prevent thermal looping.

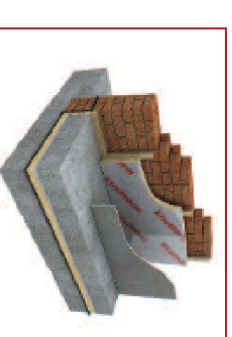
#### Specification Clause

The insulated dry lining wall insulation shall be Xtratherm Thin-R XT/TL-MF, 12.5mm plasterboard bonded to 75mm CFC-HCFC free rigid Polyisocyanurate core between low emitting foil faces manufactured to EN ISO 9001:2000 by Xtratherm. The insulated dry lining plasterboard XT/TL-MF shall be mechanically fixed to battens, or proprietary system in accordance with instructions issued by Xtratherm. Refer to NBS clause K10 205.

#### THIN-R SHEET SIZE

DIMENSIONS	SIZE (mm)
Length	2400
Width	1200
Thickness*	25/40/50
Plasterboard 9.5mm +	25/30/40/50/60/70/80/90

\*Other sizes available subject to quantity and lead time. Note: Standard product supplied finished - splayed edge



Ireland

## THERMAL INSULATION DETAILS FOR EXISTING WALLS

TITLE	PROPOSED DRAWINGS	ADDRESS	FLAT 1, 230 KENTISH TOWN ROAD LONDON, NW5
CLIENT	KUDOS PROPERTY INVESTMENTS Ltd.	SCALE	
		DRAWING NO.	141121/09
		DATE	NOV 2014
		REV.	