

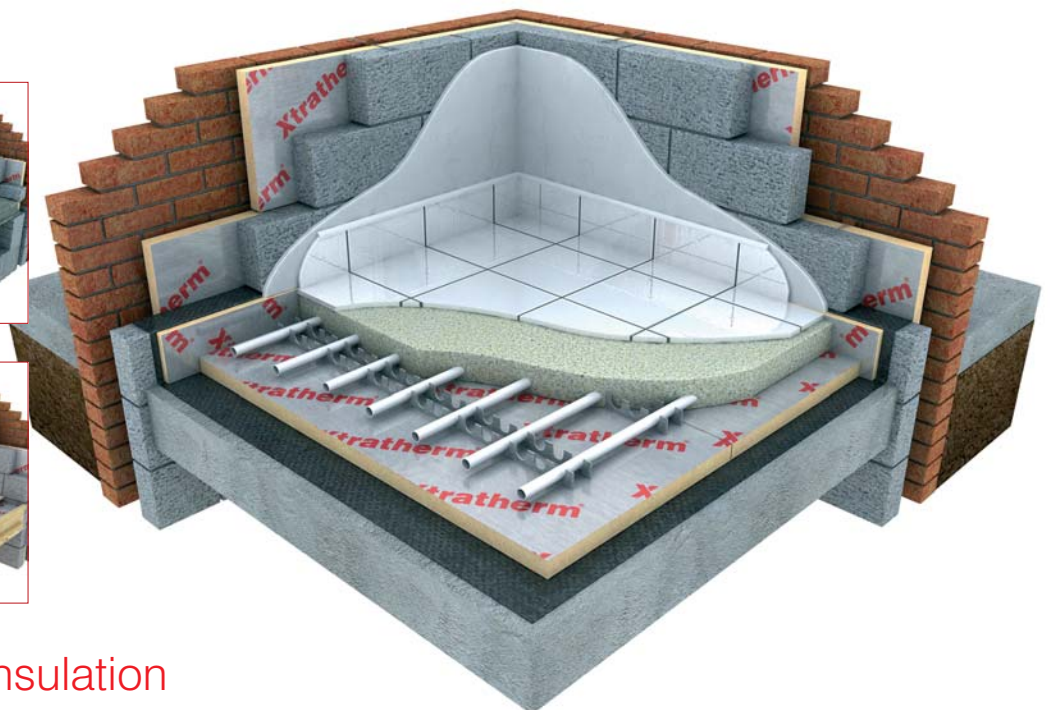
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# Xtratherm®

## High performance PIR floor insulation

### Under Floor XT/UF

[www.xtratherm.eu](http://www.xtratherm.eu)



More than insulation



Quality

Environmental



# Under Floor Board XT/UF

- High thermal performance
- Suitable for under floor heating
- Reduced insulation thickness
- High compressive strength

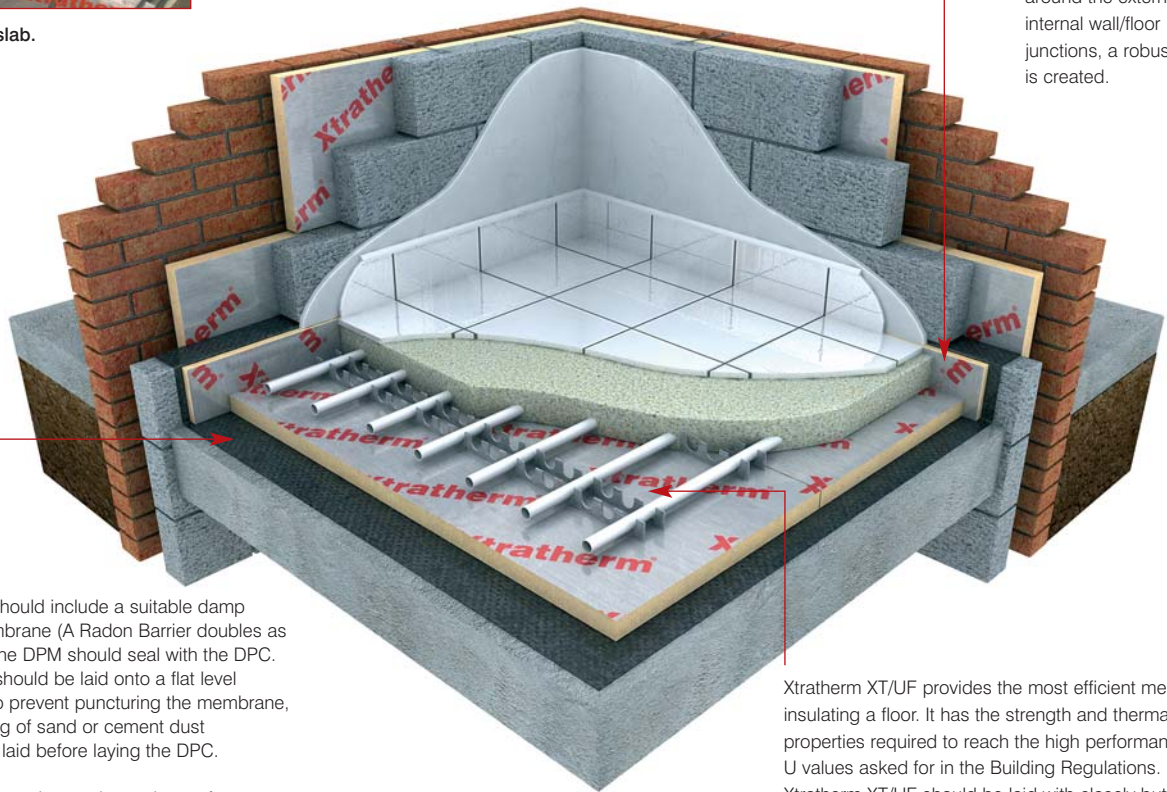


Below floor slab.



All suspended floors must be ventilated from the underside. Ventilation should not be restricted by any supporting or sleeper wall used to support the floor system.

Detailing at wall/floor junctions is essential to reduce thermal bridging. By placing an upstand of Xtratherm Perimeter insulation 25mm thick around the external and internal wall/floor junctions, a robust detail is created.



All floors should include a suitable damp proof membrane (A Radon Barrier doubles as a DPM). The DPM should seal with the DPC. The DPC should be laid onto a flat level surface. To prevent puncturing the membrane, a screening of sand or cement dust should be laid before laying the DPC.

It is good practice to place a layer of polythene over any under floor insulation to act as a separating layer in accordance with the National Code of Practise or any Good Building Guide.

Xtratherm XT/UF provides the most efficient means of insulating a floor. It has the strength and thermal properties required to reach the high performance U values asked for in the Building Regulations. Xtratherm XT/UF should be laid with closely butted joints, laid staggered with a break bonded pattern and fitted tightly at edges and around any service penetrations.

## XTRATHERM XT/UF SHEET SIZE

DIMENSIONS	SIZE (mm)
Length	2400
Width	1200
Thickness	30/40/50/60/70/80/90/100/110/ 120/125/140/150/165

Other sizes are available subject to quantity and lead time. Optional boards can be supplied with T&G edge finish.

## Xtratherm XT/UF

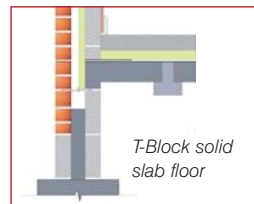
Xtratherm XT product range is CFC/HCFC free (Zero Ozone Depletion Potential)

### TYPICAL PHYSICAL CHARACTERISTICS

PROPERTY	UNITS
Density (Foam Core)	>30 Kg/m <sup>3</sup>
Compressive Creep	40kPa/<2%
Thermal Conductivity	0.023 W/mK
Service Temperature	-50°C to +110°C
Reaction to Fire	Euroclass F

## Under Floor Insulation

The floor in any building is an area of considerable heat loss if it is not properly insulated. Xtratherm XT/UF when installed within a floor structure, will significantly improve the U-value and R-value (Thermal Transmittance) of new or existing floors.



### Installation Guidelines

#### Solid Under Floor

Lay the hardcore in layers 150mm min/ 225mm max and compact well.

Blind surface with quarry dust/sand to provide level surface.

Place DPM eg. 0.3mm polythene or Radon Barrier over blinding, tape joints to prevent passage of ground moisture.

Carry DPM up wall to meet and seal with DPC.

Lay the Xtratherm XT/UF boards in staggered jointed pattern.

Closely butt all edges.

Place Xtratherm floor upstand around floor perimeter to provide Robust detail.

Seal around any service penetrations.

Layer a polythene vapour control layer min 0.125mm thick over the insulation with 150mm lap joints.

Lay concrete slab to the correct thickness.

#### Below floor screed

Follow the same procedure as above.

Leave the concrete subfloor, (over which the insulation is to be laid), as long as possible to dry out.

Lay screed to specification over concrete slab.

### TYPICAL 'U' VALUES and 'R' VALUES

XT/UF Under Floor Insulation Board		
Thickness (mm)	Ud-Value (W/m <sup>2</sup> K)	Rd-Value (m <sup>2</sup> K/W)
50	0.46	2.17
60	0.38	2.60
70	0.32	3.04
80	0.28	3.47
90	0.26	3.91
100	0.23	4.34
120	0.20	5.21
140	0.17	6.08

*Rd and Ud values given are for insulation material only, for comprehensive calculations on all floor types and including any fixings contact Xtratherm Technical Support.*

### TOLERANCE

DIMENSIONS	SIZE (mm)	TOLERANCE
Length	2400	+/- 5mm
Width	1200	+/- 3mm
Thickness	<60	+/- 2 mm
	≥60	+/- 3 mm

The Xtratherm range of high performance insulation boards provides the complete solution for newbuild and refurbishment.

## Thin-R® Pitched Roof



### XT/PR

Effective insulation of sloped roof area  
Reduced insulation thickness  
Reduces thermal bridging  
Minimizes intrusion into living area

*Suitable for insulating:*

**Ventilated Pitched Roof**  
**Warm Pitched Roof**  
**Hybrid Pitched Roof**

## Thin-R® Pitched Roof



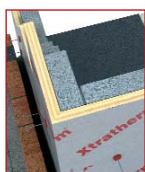
### XT/RL

Effective insulation of Rafter area  
Width Variable  
Reduced fitting time  
Minimizes intrusion into living area

*Suitable for insulating:*

**Ventilated Pitched Roof**  
**Warm Pitched Roof**  
**Hybrid Pitched Roof**

## Thin-R® Cavity Wall



### XT/CW

Robust tongue & groove jointing  
Clear cavity maintained  
Corner & reveal panels  
Low emissivity foil facings  
High thermal performance

*Suitable for insulating:*

**Partial Fill Cavity Walls**

## Thin-R® Thermal Liner



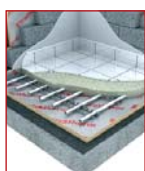
### XT/TL Plasterboard

High thermal performance  
Drylining & insulation in one fix  
Shorter drying time  
Responsive insulation system

*Suitable for insulating:*

**Masonry Walls**  
**Sloped Rafters**  
**Ceilings**

## Thin-R® Under Floor



### XT/UF

High thermal performance  
Suitable for under floor heating  
Reduced insulation thickness  
High compressive strength

*Suitable for insulating:*

**Solid Concrete Floors**  
**Suspended Concrete Floors**  
**Suspended Timber Floors**

### Technical Support

The Xtratherm Technical Support team provide a single point of contact to offer assistance on a wide range of issues for both the Designer and Builder and can be contacted by phone, fax or e-mail. Full details of all Xtratherm products, along with full technical literature can be downloaded from the website or requested by e-mail at:

**[www.xtratherm.eu](http://www.xtratherm.eu)**  
**[info@xtratherm.eu](mailto:info@xtratherm.eu)**

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