High Performance
PIR Floor Insulation Board

Floors

XT/UF
Insulation for Ground Supported and Suspended Floors

Key Features

High Thermal Performance
Certified Thermal Conductivity as Low as 0.022W/mK
High Compressive Strength
Low Emissivity Foil Facings
HCFC/CFC free, GWP <5
BRE Green Guide A+ Rated

www.xtratherm.com

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

**Under Floor Insulation**

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.

**Xtratherm Thin-R XT/UF**

- **Density (Foam Core):** 30 (Kg/m³)
- **Compressive Strength:** >140 (kPa)
- **Water Vapour Resistivity:** >100 (MNs/gm)
- **Thermal Conductivity:** 0.022 (W/mK)
- **Service Temperature:** -20 to 100°C
- **Surface Spread of Flame:** Class 1

**Xtratherm XT/UF**

- **Length (mm):** 2400
- **Width (mm):** 1200
- **Thickness (mm):** 25, 30, 35, 40, 50, 60, 65, 70, 75, 90, 100, 110, 125, 150

**Specification Clause**

The floor insulation shall be Xtratherm Thin-R XT/UF __ mm thick manufactured to EN ISO 9001:2008 by Xtratherm, comprising a CFC/HCFC free rigid Polyisocyanurate (PIR) core between low emissivity foil facings. The floor insulation shall be installed in accordance with instructions issued by Xtratherm. Refer to NBS clause E20 200, E20 30.
**Solid Under Floor**

Lay the hardcore in layers 150mm min/250mm max and compact well.

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

Place DPM eg. 1200g 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. RE BS 8203:1996

Lay screed to specification over concrete slab.

---

### Installation Guidelines

#### UK Solid Floor

<table>
<thead>
<tr>
<th>Typical U-values XT/UF</th>
<th>Perimeter/Area Ratio (PA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness (mm)</td>
<td>0.20</td>
</tr>
<tr>
<td>U-value</td>
<td>0.24</td>
</tr>
<tr>
<td>U-value</td>
<td>0.15</td>
</tr>
</tbody>
</table>

#### IRL Solid Floor

<table>
<thead>
<tr>
<th>Typical U-values XT/UF</th>
<th>Perimeter/Area Ratio (PA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness (mm)</td>
<td>0.20</td>
</tr>
<tr>
<td>U-value</td>
<td>0.25</td>
</tr>
<tr>
<td>U-value</td>
<td>0.15</td>
</tr>
</tbody>
</table>

### 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 ag’rement declared lambda value 0.022 W/mk. eg 50mm = 0.050/0.022 = R2.27.

---

### Standards


### 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 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. 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.
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**

Xtratherm UK Limited
Park Road Holmewood
Chesterfield Derbyshire
S42 5UY
Tel +44 (0) 371 222 1033
Fax +44 (0) 371 222 1044

Xtratherm Limited
Liscarton Industrial Estate
Kells Road, Navan
Co.Meath, Ireland
Tel +353 (46) 906 6000
Fax +353 (46) 906 6090

Contact
info@xtratherm.com

www.xtratherm.com

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.