## Linear Thermal Transmittance $(\Psi)$ and Temperature Factor (f)

# Technical Services from **Xtratherm**

## Technical competency

The PSI value analysis has been undertaken by fully accredited BRE competent persons to EN 10211: 2007 and BR497. Our Xtratherm Technical team are qualified under the BBA calculation competency scheme CS/1006 to produce thermal and condensation calculations.



Certificate No

Date

XT-FF-E7-MCI-IF-02-0015

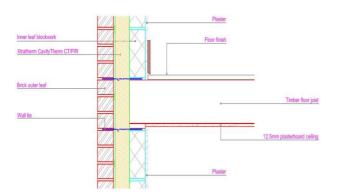
01-Aug-12

General Construction Specification
Wall
Plasterboard on dabs
Lightweight block inner leaf (0.15)
Xtratherm CT/PIR (CavityTherm)
Brick outer leaf

#### U value Range

Wall 0.12 W/m2 K to 0.20 W/m2 K

### Junction Detail



## Linear Thermal Transmittance W.m.K

 $\Psi =$ 

0.05

Table K1 (Accredited)

0.07

## Calculation prepared by Xtratherm Technical Services Source www.xtratherm.com

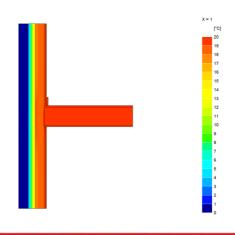
General Construction Specification
Floor
Timber floor
Timber joists
Plasterboard

## Description

Intermediate timber floor between dwellings

Reference

MCI-IF-02



## Temperature Factor (for humidity and mould)

f =

0.98

IP1/06 (Default)

0.75

## Notes

Calculations are based on accredited construction detail MCI-IF-01

- $\bullet$   $\Psi$  and f are only valid for the detail drawn and described above
- Calculations have been carried out in accordance with the following standards and guidance documents where relevant
- EN ISO 10211 2007

- EN ISO 13370 2007
- EN ISO 6846 2007
- BR 497
- BR 443
- BRE IP1/06

# Linear Thermal Transmittance $(\Psi)$ and Temperature Factor (f)



## **Specification Clauses**

## Thin-R CT/PIR Full Fill Cavity-Wall

The built in full fill cavity wall insulation shall be Xtratherm Thin-R CT/PIR manufactured to BS EN 13165:2008 by Xtratherm, comprising a CFC/HCFC free rigid Polyisocyanurate (PIR) core between low emissivity foil facings with engineered HIPS outer skin. The CT/PIR\_\_\_mm with a BBA certified Lambda value of 0.021 W/mK to achieve a U value of \_\_\_\_W/m2K for the wall element. To be installed in accordance with instructions issued by Xtratherm. Xtratherm PIR achieves an A+ rating under the BRE Green Guide. Refer to NBS clause F30 151, F30 12

### Insulation

Polyisocyanurate Rigid foam

### Standard

BS EN 13165:2008

#### Certification

BBA Certification No. 10/4786. Issue date: 31 March 2011

BS EN ISO 9001 Quality Management System

BS EN ISO 14001 Environmental Management System

BS OHSAS 18001 Health and Safety Management System

#### Manufacturer UK

Xtratherm UK Limited, Holmewood Industrial Park,

Holmewood Chesterfield, Derbyshire, S42 5UY.

Tel: 0371 222 1033. Fax: 0371 222 1044.

Email: info@xtratherm.com Web: www.xtratherm.com

## Product reference

Thin-R CT/PIR Full Fill Cavity-Wall

#### Face size

1200 x 450 mm

### Edge profile

Rebated all four edges

#### Thickness

75 mm / 90 mm / 100 mm / 125 mm / 150mm

#### Manufacturer Ireland

Xtratherm Limited, Kells Road, Navan,

County Meath, Ireland.

Tel: 04690 66000. Fax: 04690 66090.

Email: info@xtratherm.com Web: www.xtratherm.com

Intermediate floor with timber joists SCALE 1:10

