

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

XT-FF- E5-MCI-GF-02-0015

Date

01-Aug-12

Calculation prepared by Xtratherm Technical Services

Source www.xtratherm.com

General Construction Specification

Wall

Plasterboard on Dabs

Lightweight block inner leaf (0.15)

Xtratherm CT/PIR (CavityTherm)

Brick outer leaf

General Construction Specification

Floor

Concrete

Xtratherm Hyfloor (XT/HYF)

25mm XT/STR (Perimeter insulation)

U value Range

Wall 0.12 W/m² K to 0.20 W/m² K

Floor 0.11 W/m² K to 0.17 W/m² K

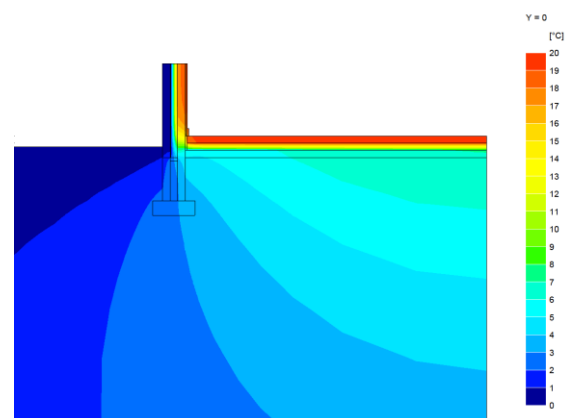
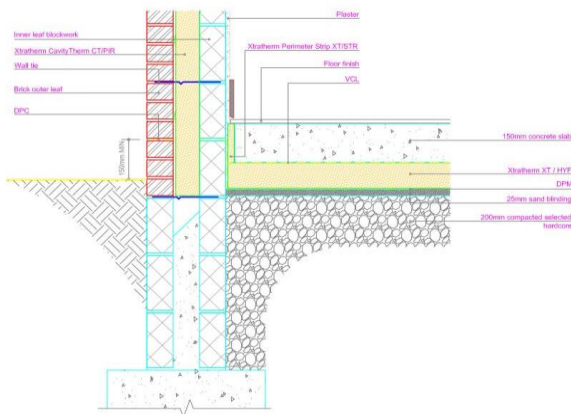
Description

Wall floor junction with insulation under slab

Reference

MCI-GF-02

Junction Detail



Linear Thermal Transmittance W.m.K

$\Psi =$ **0.04**

Table K1 (Accredited)

0.16

Temperature Factor (for humidity and mould)

$f =$ **0.87**

IP1/06 (Default)

0.75

Notes

Calculations are based on accredited construction detail MCI-GF-02

Notes:

- Ψ 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

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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

Thin-R XT/HYF Hyffloor Underfloor insulation

The floor insulation shall be Xtratherm Thin-R XT/HYF manufactured to BS EN 13165:2008 by Xtratherm, comprising a CFC/HCFC free rigid Polyisocyanurate (PIR) core between low emissivity gas tight facings. The XT/HYF ___mm with a BBA certified Lambda value of 0.022 W/mK to achieve a U value of ___ W/m²K for the floor 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 E20 200, E20 30

Insulation

Polyisocyanurate Rigid foam

Standard

BS EN 13165:2008

Certification

BBA Certification No. 08/4613

Issue date: 5 August 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,
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Email: info@xtratherm.com Web: www.xtratherm.com

Product reference

Xtratherm Thin-R XT/HYF Under Floor Insulation

Face size

2400 x 1200 mm

Edge profile

T&G all four edges

Thickness

75mm / 100mm / 125mm / 140mm

Other sizes available dependent on quantity & lead time.

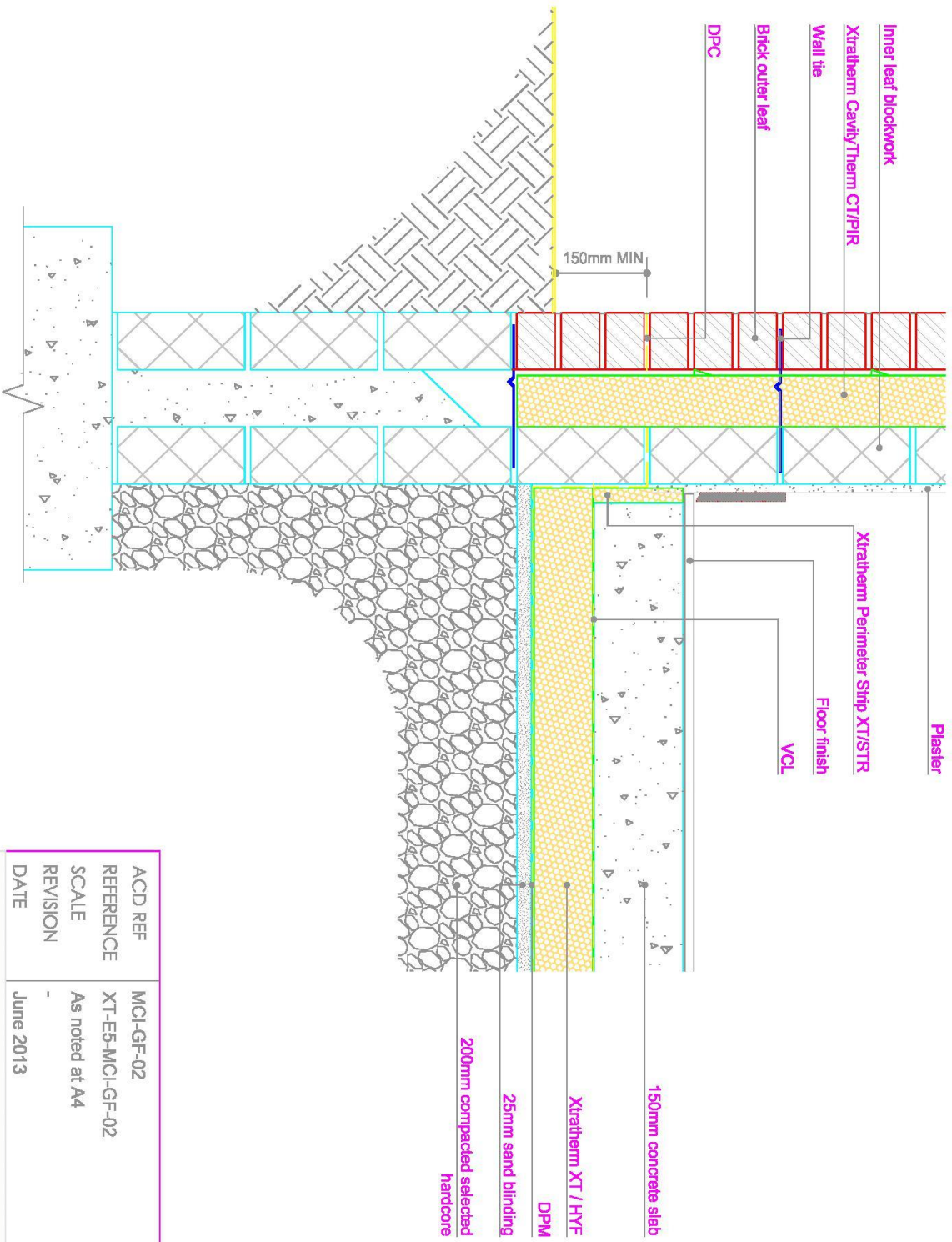
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The above calculations relate to the use of specific Xtratherm materials and specification only, any deviation from performances or jointing methods will effect the result.



Wall / Floor Junction. Insulation under slab.
SCALE 1:10

ACD REF	MCI-GF-02
REFERENCE	XT-E5-MCI-GF-02
SCALE	As noted at A4
REVISION	-
DATE	June 2013

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