

## 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-E15-MCI-RF-02-0046  
**Date** 01-Aug-13

**Calculation prepared by** Xtratherm Technical Services  
**Source** [www.xtratherm.com](http://www.xtratherm.com)

## General Construction Specification

### Wall

Plasterboard on Dabs  
Medium block inner leaf (0.46)  
Xtratherm CT/PIR (CavityTherm)  
Brick outer leaf

## General Construction Specification

### Flat roof

Membrane  
FR-ALU  
Plywood deck  
Timber joists  
Plasterboard

## U value Range

Wall 0.13 W/m<sup>2</sup> K to 0.20 W/m<sup>2</sup> K  
Ceiling 0.18 W/m<sup>2</sup> K

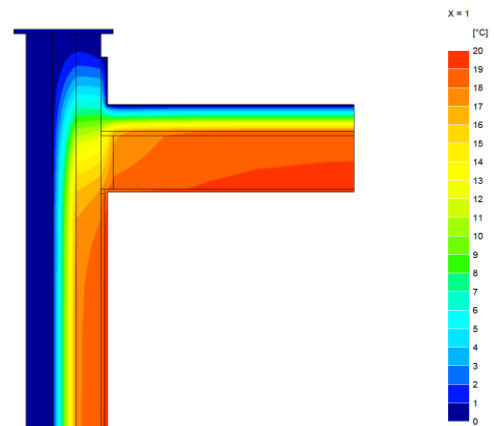
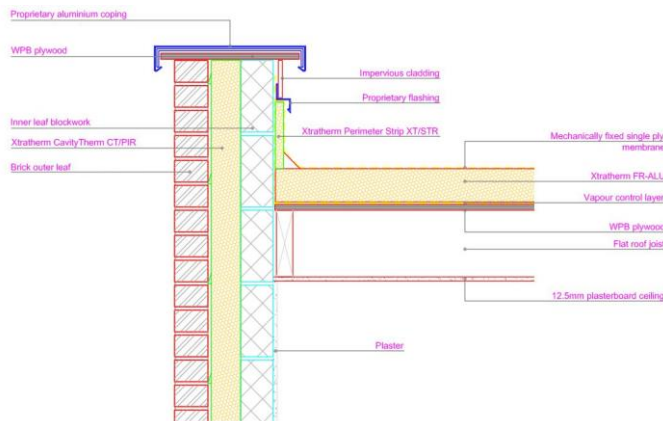
## Description

Flat roof with parapet and wall junction

## Reference

MCI-RF-02

## Junction Detail



## Linear Thermal Transmittance W.m.K

$\Psi =$  **0.13**

Table K1 (Accredited)

0.28

## Temperature Factor (for humidity and mould)

$f =$  **0.93**

IP1/06 (Default)

0.75

## Notes

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

Notes:

- $\Psi$  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

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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/m<sup>2</sup>K 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**

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**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

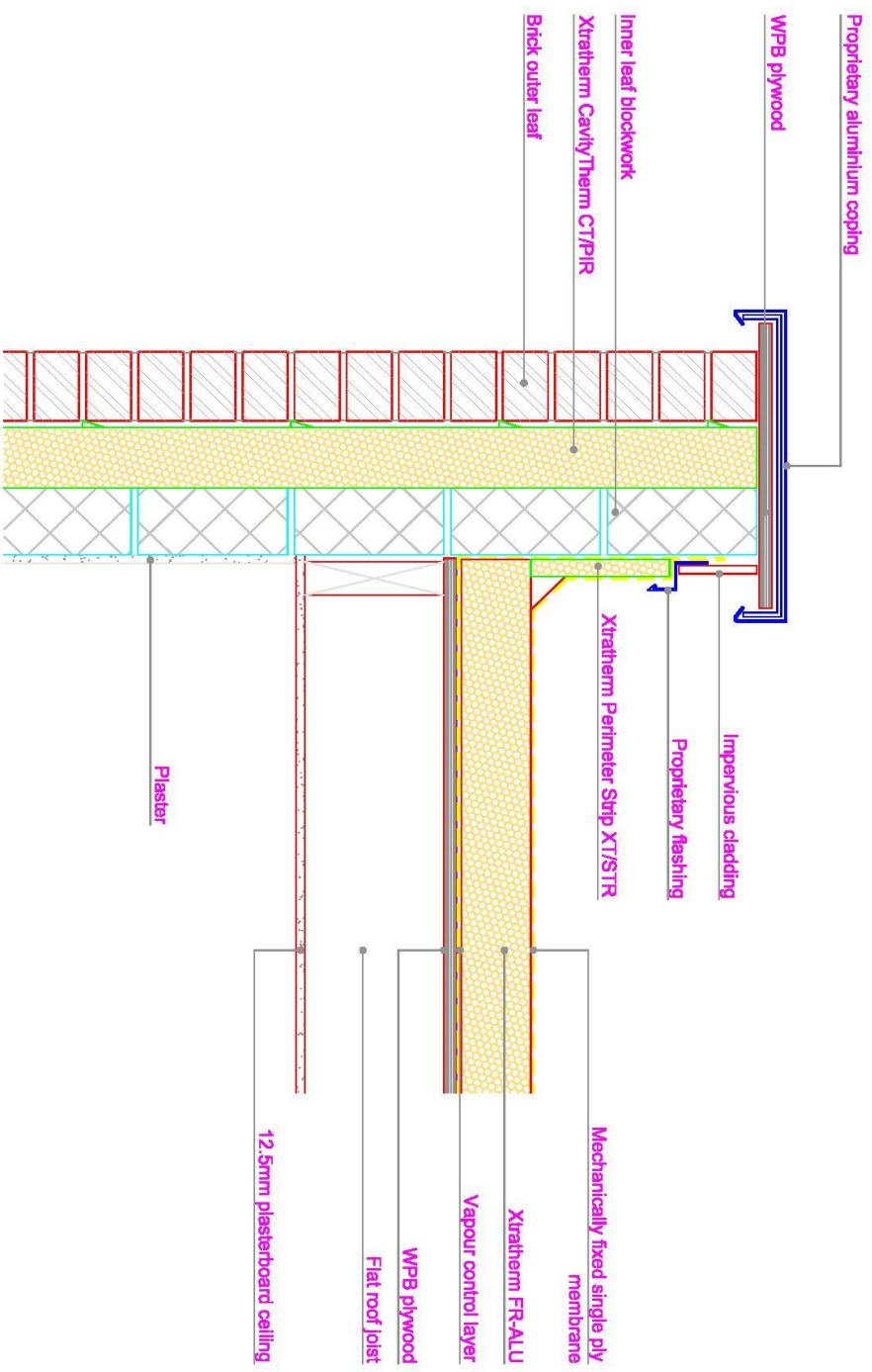
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The above calculations relate to the use of specific Xtratherm materials and specification only, any deviation from performances or jointing methods will effect the result.



Flat roof with parapet and wall junction  
SCALE 1:10

ACD REF	XT-FF-E15-MCH-RF-02
REFERENCE	As noted at A4
SCALE	-
REVISION	-
DATE	JUNE 2013

