

Thermal Bridging

Ground Floor Insulation Above Slab

ACD CODE 1.01a

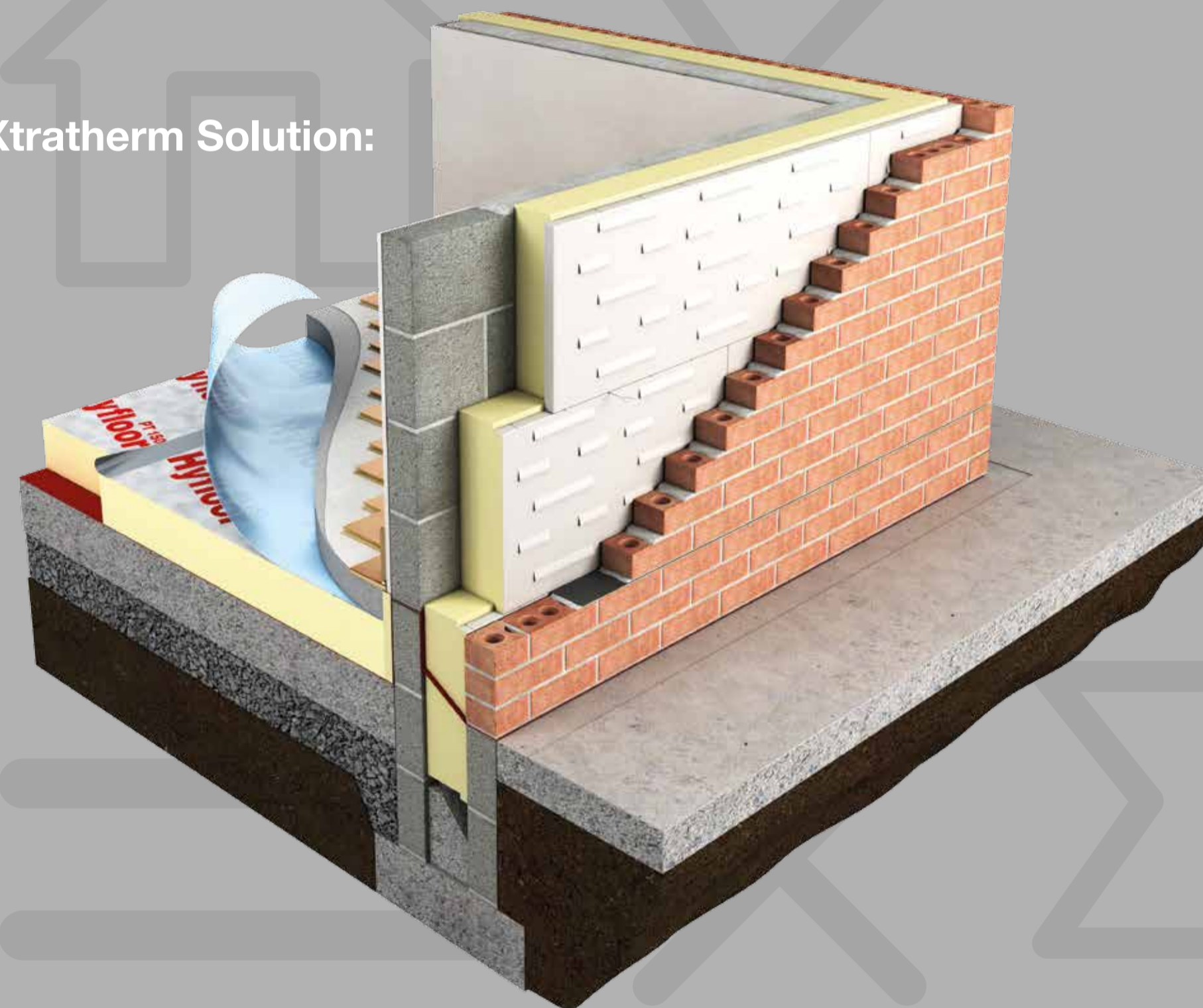
Example House:



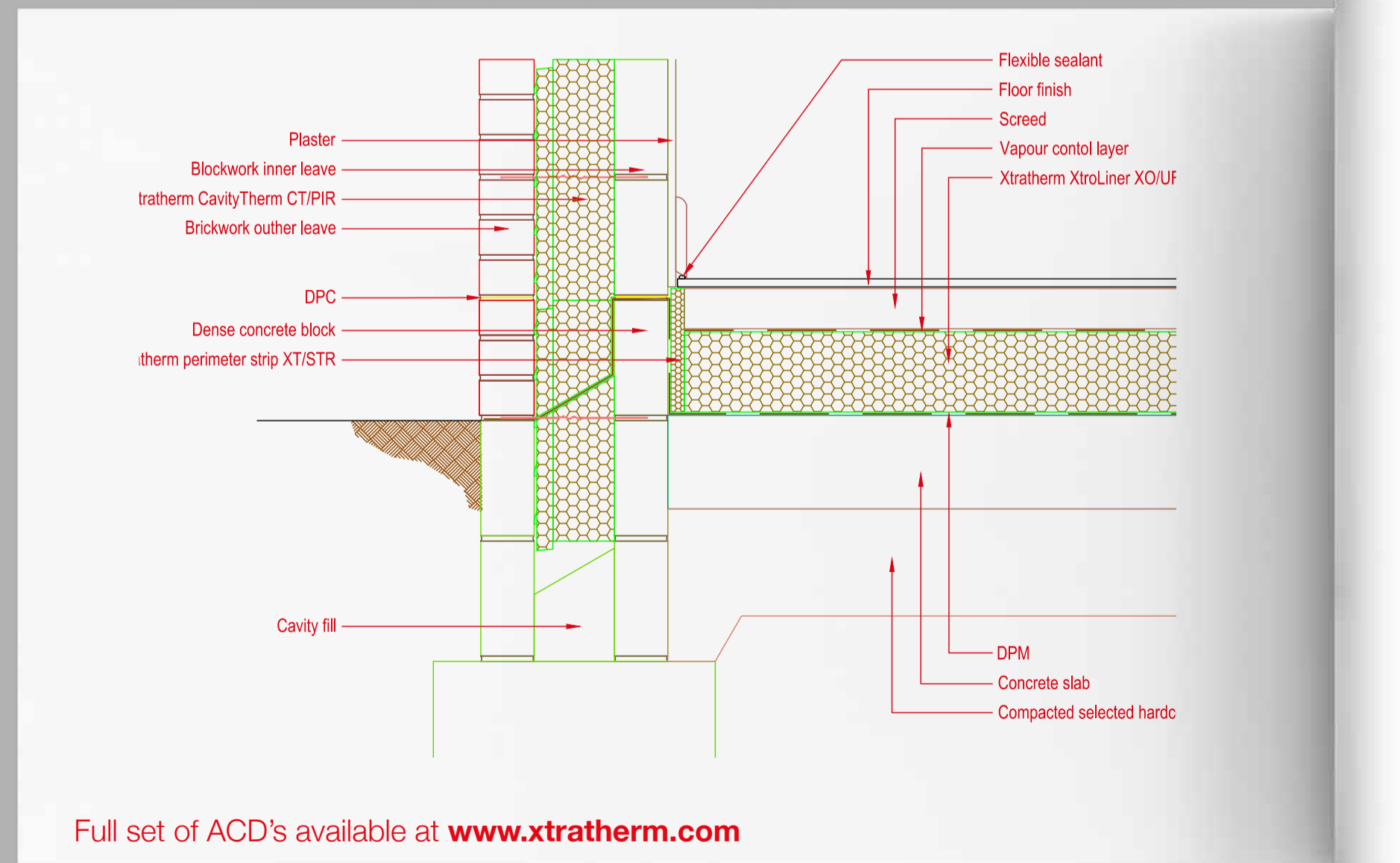
ACD Identified:



Xtratherm Solution:



Accredited Detail:



Full set of ACD's available at www.xtratherm.com

Xtratherm PSI Values Using Accredited Details

CavityTherm CT/PIR	125mm	150mm
PSI Value Ψ (W/mk)	0.165	0.152
Temperature Factor (f)	0.843	0.853
U-Value (W/m ² k)	0.16	0.13
U-Value Floor (W/m ² k)	0.12	

*Using Dense blocks

Checklist:

Thermal Performance -

- Ensure CT/PIR is secured firmly against inner leaf of cavity wall.
- XT/HYF PT 150 floor insulation to tightly abuts XT/STR.
- Ensure CT/PIR is installed at 225mm below top of XT/UF.
- Ensure 25mm XT/STR tightly abuts blockwork wall.

Air Barrier - Continuity -

- Seal between wall and floor air barrier with a flexible sealant or seal gap between skirting board and floor with flexible sealant
- Seal all penetrations through air barrier using a flexible sealant.

General Notes:

Keep cavities clean of mortar spots and other debris during construction.

UF above slab with timber floor finish.

Detail applicable; ground bearing floor, raft foundation, in-situ suspended ground floor slab, pre-cast suspended ground floor. XT/

Where blocks with a maximum Thermal Conductivity of 0.2 W/mk are being used consideration should be given to avoid cracking in plaster due to drying or mortar.

Y Value Calculation Table

Total Envelope Area	356.160		
Junction	L	Ψ	L x Ψ
Lintels	17.840 x	0.001 =	0.02
Sill	15.080 x	0.036 =	0.54
Jamb with return block	48.370 x	0.030 =	1.45
Ground Floor	39.200 x	0.165 =	6.47
Intermediate Floor within a dwelling	39.200 x	0.001 =	0.04
Sloped (Insulation at eaves)	29.600 x	0.034 =	1.01
Sloped (Insulation at gables)	13.440 x	0.071 =	0.95
Corner (Normal)	19.400 x	0.035 =	0.68
		Total =	11.16
	L x Ψ / Total Area	=	0.0313

