Thermal Bridging

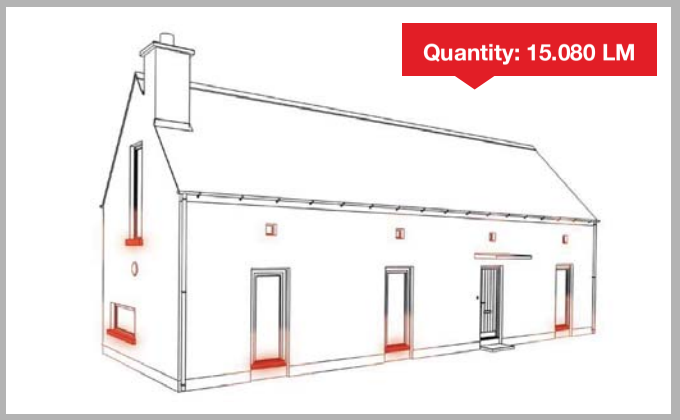
Opening - Concrete forward sill

ACD CODE 1.26

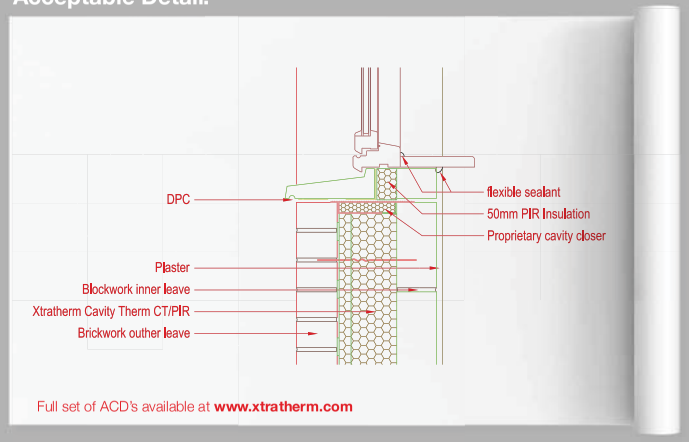
Example House:

Xtratherm Solution:

ACD Identified:



Acceptable Detail:



Xtratherm PSI Values Using Acceptable Details*

CavityTherm CT/PIR	125mm	150mm
PSI Value Ψ (W/mk)	0.036	0.028
Temperature Factor (*f*)	0.949	0.943
U-Value (W/m²k)	0.16	0.13

*Using Dense blocks

Checklist:

Thermal Performance -

- ☐ Ensure CT/PIR is secured firmly against inner leaf of cavity wall.
- ☐ Install proprietary cavity closer with minimum thermal resistance through the closer of not less than 0.45 M²k/w.
- ☐ Ensure minimum 50mm PIR XT/STR strip installed behind sill.

Air Barrier - Continuity -

- ☐ Seal all penetrations through air barrier using a flexible sealant.
- ☐ Apply flexible sealant to all junctions between plaster/plasterboard and sill board, and between sill board and window frame.
- ☐ Ensure air barrier continuity between the window and the wall air barrier line.
- ☐ If forming the wall air barrier with blockwork inner leaf or with scratch coat on blockwork, install a flexible sealant between the cavity closer and the blockwork wall.

General Notes:

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

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