

Thermal Bridging

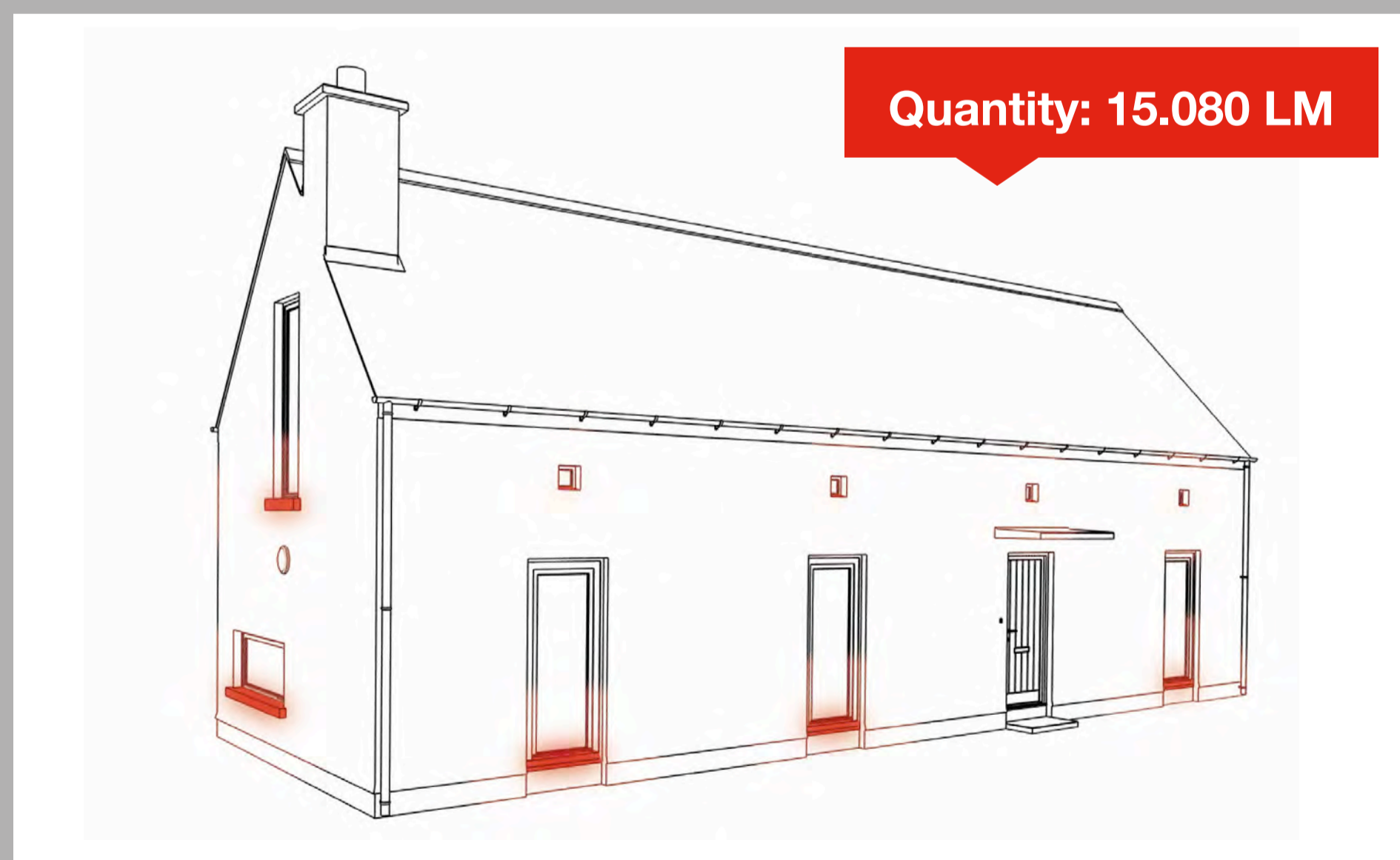
Opening - Concrete forward sill

ACD CODE 1.26

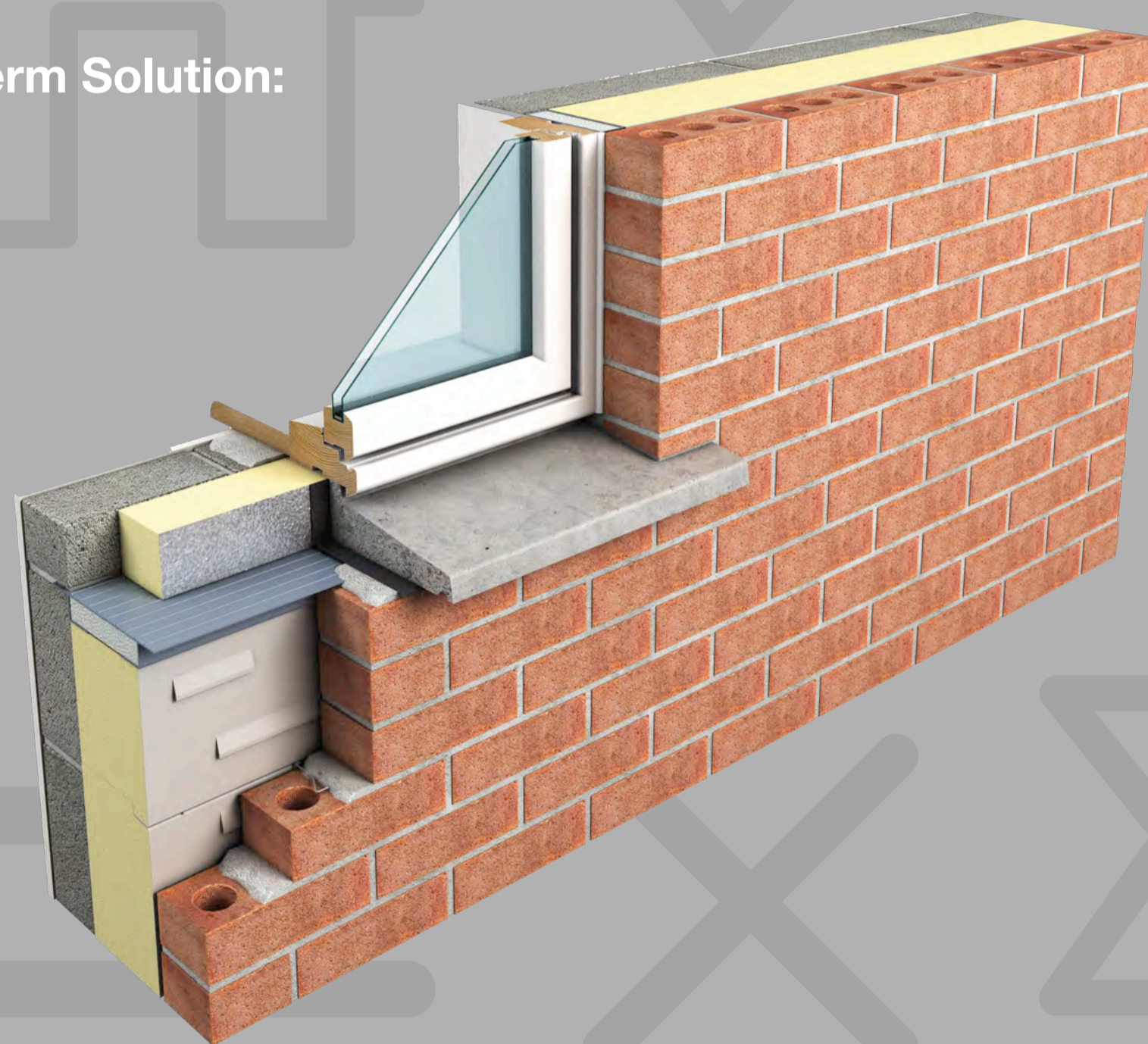
Example House:



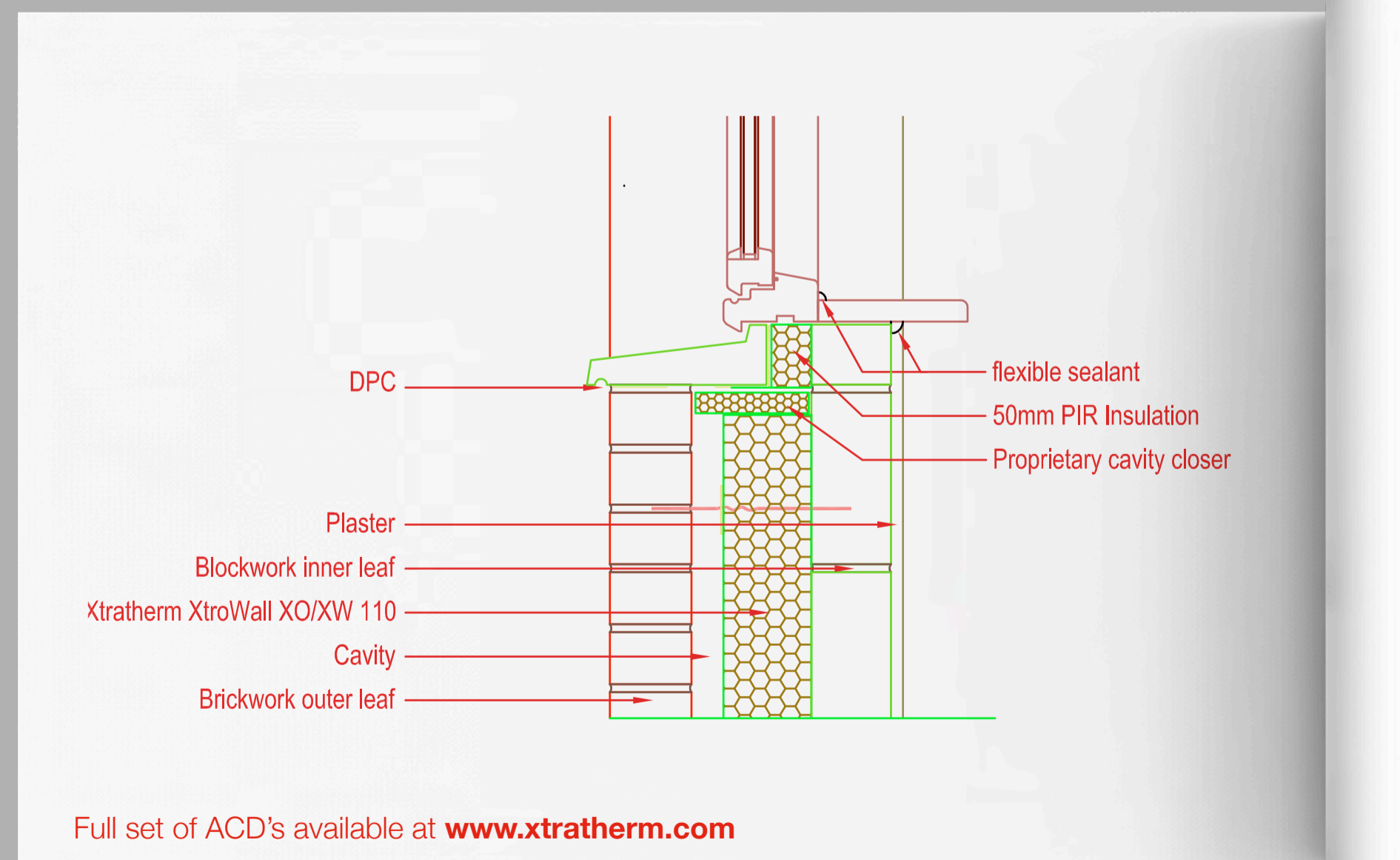
ACD Identified:



Xtratherm Solution:



Acceptable Detail:



Xtratherm PSI Values Using Acceptable Details*

Cavity Therm CT/PIR	125mm	150mm
PSI Value Ψ (W/mk)	0.036	0.028
Temperature Factor (f)	0.949	0.943
U-Value (W/m ² k)	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 spots and other debris during construction.

Y Value Calculation Table

Total Envelope Area	236.160		
Junction	L	Ψ	L x Ψ
Lintels	17.840	x 0.001	= 0.02
Sill	15.080	x 0.036	= 0.54
Jamb	48.370	x 0.001	= 0.05
Ground Floor	39.200	x 0.153	= 1.53
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	= 9.29
		L x Ψ / Total Area	= 0.0261

