

Thermal Bridging

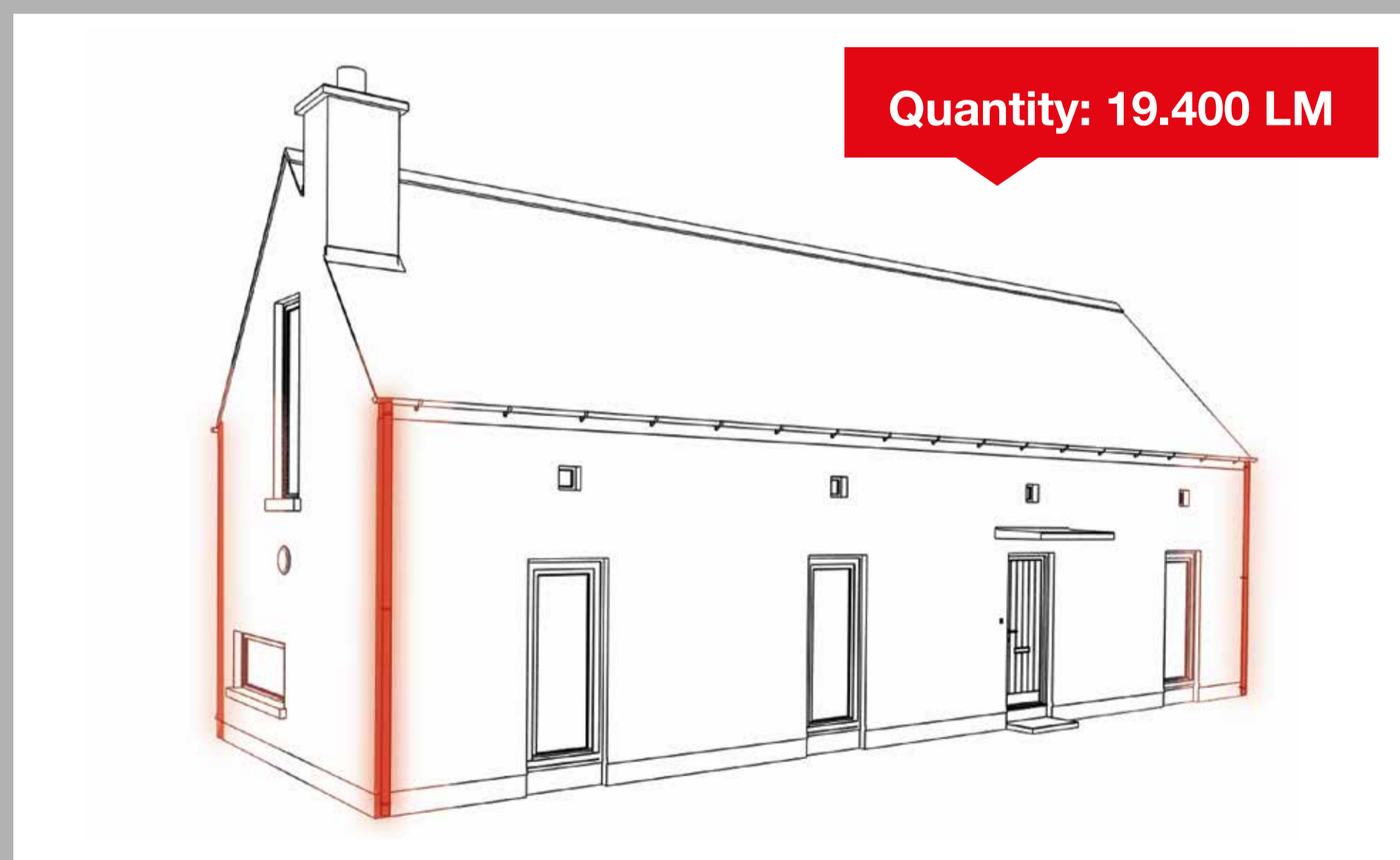
# External Corner

ACD CODE 1.27.1

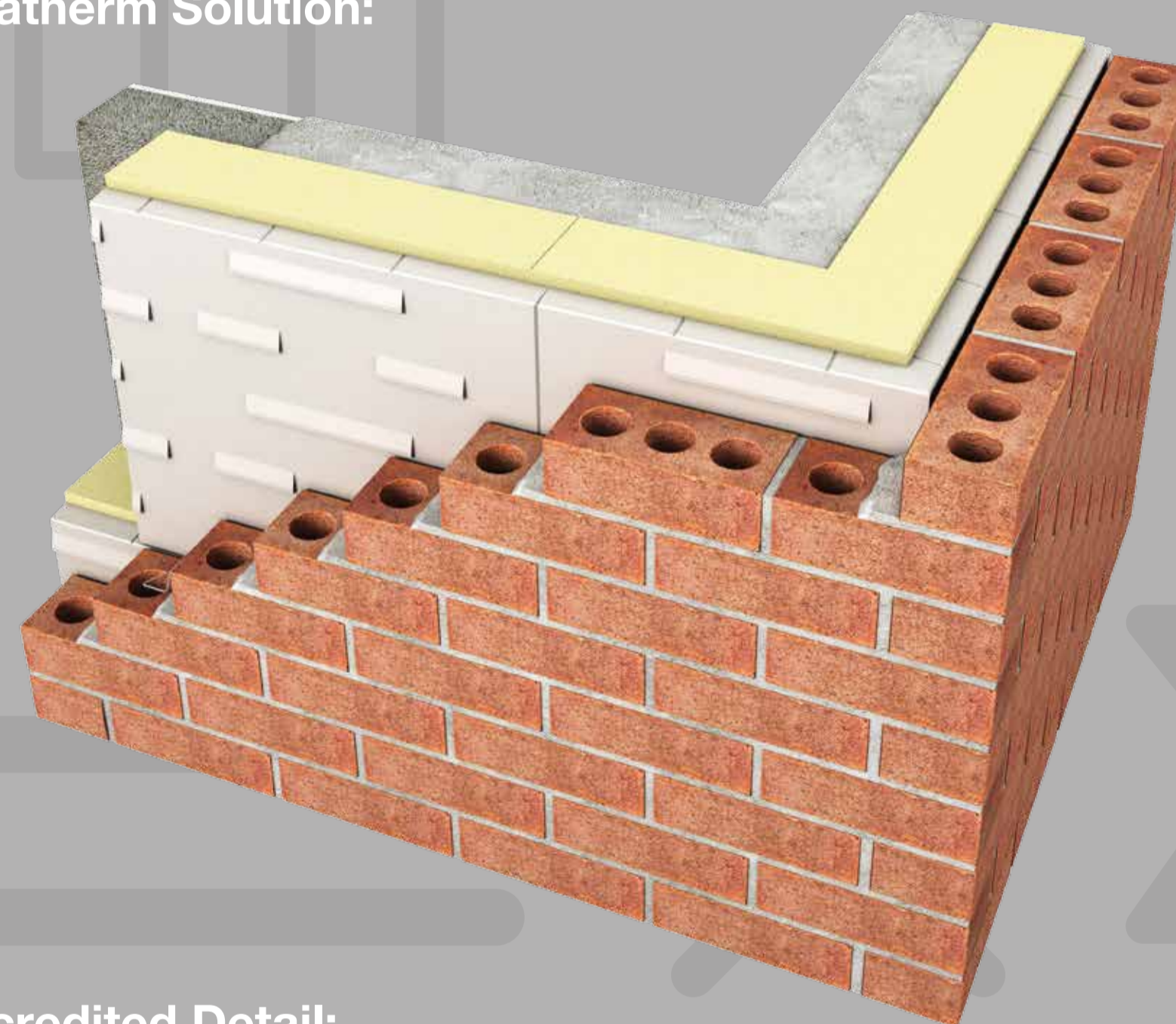
Example House:



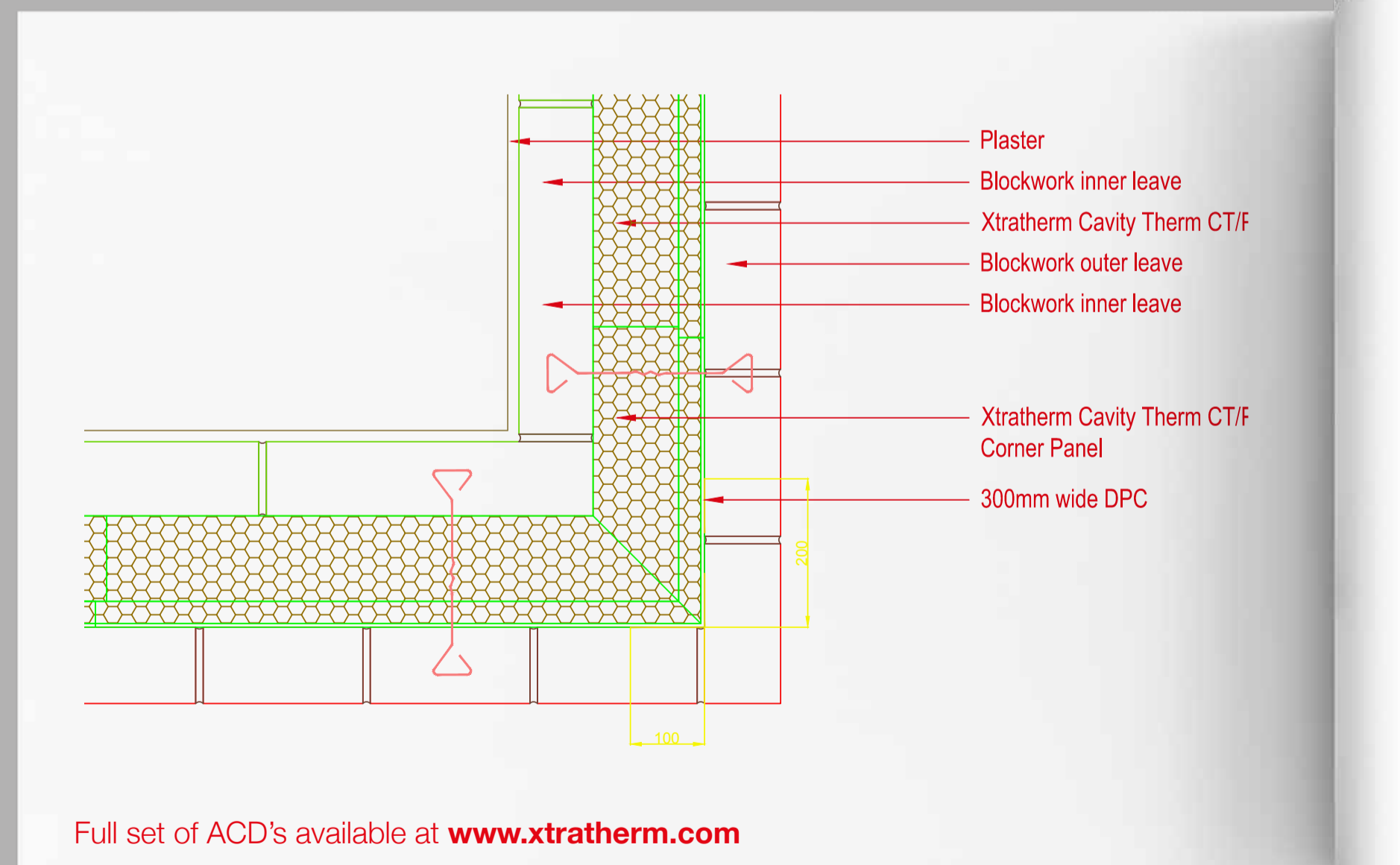
ACD Identified:



Xtratherm Solution:



Accredited Detail:



**Xtratherm PSI Values Using Accredited Details\***

CavityTherm CT/PIR	125mm	150mm
PSI Value $\Psi$ (W/mk)	0.048	0.043
Temperature Factor (f)	0.945	0.952
U-Value (W/m <sup>2</sup> k)	0.16	0.13

\*Using Dense blocks

**Checklist:**

**Thermal Performance -**

- Ensure continuity of insulation throughout junction.
- Ensure vertical DPC as per CT/PIR BBA cert
- Ensure CT/PIR is secured firmly against inner leaf of cavity wall.

**General Notes:**

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

**Y Value Calculation Table**

<b>Total Envelope Area</b>	<b>356.160</b>		
<b>Junction</b>	<b>L</b>	<b><math>\Psi</math></b>	<b>L x <math>\Psi</math></b>
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
<b>Corner (Normal)</b>	<b>19.400 x</b>	<b>0.035 =</b>	<b>0.68</b>
		<b>Total =</b>	<b>11.16</b>
	<b>L x <math>\Psi</math> / Total Area</b>	<b>=</b>	<b>0.0313</b>

