U-value calculation
by BRE U-value Calculator version 2.04d
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Filename: 225mm Standard U Value SWIP IWI System.uva (File saved: 28 Mar 2019 15:24)

Element type: Wall - Masonry solid wall with internal insulation
Calculation Method: BS EN ISO 6946

Example Wall System

Layer	d (mm)	λ layer	λ bridge	Fraction	Density	Sp. heat	R layer	R bridge	Description
							0.130		Rsi
1	12.5	0.210			700	1000	0.060		Plasterboard (standard wallboard)
2									Vapour control layer
3	15	0.032	0.130	0.125			0.469	0.115	SWIP(95mm)/15mm OSB(on SWIP)
4	80	0.032	0.033	0.125			2.500	2.424	SWIP(95mm)/SWIP
5	13	0.570			1300	1000	0.023		Gypsum plaster (1300 kg/m³)
6	500	2.300	0.880	0.0300	2600	1000	0.217	0.568	Stone
							0.040		Rse
	621 mm (total wall thickness)						3.438		

Total resistance: Upper limit: 3.388 Lower limit: 3.303 Ratio: 1.026 Average: 3.345 m²K/W

U-value (uncorrected) 0.299

U-value corrections
Air gaps in layer 3 ΔU = 0.000 (Level 0)
No fixings in layer 3

Total ΔU 0.000

U-value (corrected) 0.299
U-value (rounded) 0.30 W/m²K

Heat capacity per m² (κ) 8.8 kJ/m²K

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