

This table provides a more detailed description of the specifications of the three renovation scenarios applied in this study.

Specifications of renovation scenarios

		Current	Alternative
Alternative 1:	Window	U-Value: 3.3	U-Value: 0.9
Alternative 2:	External wall	Layer 1	M28_Plaster_03 (30mm 0.4):
			Thickness: 0.03
			Thermal conductivity: 0.0588466
			Thickness: 0.03
			Thermal conductivity:
			0.0588466
		Layer 2	M36_Polystyrene_12 (120mm):
			Thickness: 0.12
			Thermal conductivity: 1.5
			Thermal conductivity:
			0.032
		Layer 3	M04_Brick_Common_38
			(380mm):
			Thickness: 0.38
			Thermal conductivity: 0.8
			Thermal conductivity: 0.703704
		Layer 4	M31_Plaster_03 (30mm 0.6):
			Thickness: 0.03
			Thermal conductivity: 0.0588466
			Thickness: 0.03
			Thermal conductivity:
			0.0588466

Alternative 3: Roof	Layer 1	M37_Roofing_EPDM_Membrane	Bitumen membrane:
		(10mm 0.6):	Thickness: 0.01
		Thickness: 0.01	Thermal conductivity:
		Thermal conductivity: 0.0724638	0.180
	Layer 2	M16_Concrete_Sand_cement_scr	EPS 032:
		(100mm):	Thickness: 0.20
		Thickness: 0.1	Thermal conductivity:
		Thermal conductivity: 0.478469	0.032
	Layer 3	M38_Roofing_EPDM_Membrane	Bitumen membrane:
		(10mm):	Thickness: 0.01
		Thickness: 0.01	Thermal conductivity:
		Thermal conductivity: 0.0724638	0.180
	Layer 4	M12_Concrete_masonry_unit_27	DMS ceiling:
		(270mm):	Thickness: 0.27
		Thickness: 0.27	Thermal conductivity:
		Thermal conductivity: 0.207692	1.080
	Layer 5	M29_Plaster_01 (10mm 0.6):	Plaster:
		Thickness: 0.01	Thickness: 0.01
		Thermal conductivity: 0.0196155	Thermal conductivity: 0.80