



**Less insulation needed for the same effects > increased insulation value without increased wall thickness**

**U-Values of entire wall construction achieved with 140 mm stud (and 140 mm fibrous insulation)**

Membrane	Membrane	Standard Membrane	Tyvek® Reflex	Tyvek® Reflex + AirGuard® Reflective	Tyvek® Reflex + AirGuard® ReflectiveE
Mineral wool	0.040	0.32	0.29	0.25	0.25
	0.038	0.30	0.27	0.23	0.23
	0.035	0.29	0.27	0.23	0.23
	0.032	0.27	0.25	0.21	0.21
PIR	0.022	0.23	0.20	0.18	0.18
Phenolic	0.018	0.21	0.19	0.16	0.16

good      average      poor

**Timber frame wall**

Brick outer leaf, cavity, breather membrane, 140mm stud: full fill insulation (15% bridge), AVCL, 12.5mm plasterboard internal lining. DuPont™ Airguard® Reflective & Reflective E columns include a 25mm batten space

Membrane	Membrane	Standard Membrane	Tyvek® Reflex	Tyvek® Reflex + AirGuard® Reflective	Tyvek® Reflex + AirGuard® ReflectiveE
Mineral wool	0.040	0.32	0.26	0.22	0.22
	0.038	0.30	0.25	0.22	0.22
	0.035	0.29	0.24	0.21	0.21
	0.032	0.27	0.23	0.20	0.20
PIR	0.022	0.23	0.19	0.17	0.17
Phenolic	0.018	0.21	0.18	0.16	0.16