



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 woll | 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

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|--------------|----------|-------------------|---------------|--------------------------------------|---------------------------------------|
| Mineral woll | 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 |