

PROCOREA1

Thermal Performance of External Wall Cladding System

The table below shows the thermal performance of the **PROCOREA1** external wall cladding system for a variety of stud spacing and glass wool insulation type combinations. Refer to the building fabric parts of section J in the NCC Volume 1 for wall requirements of a specific building.

| Cladding panel | Tophat | Thermal break | Wall wrap | Steel stud | Glass wool insulation between studs | Stud spacing (mm) | | | | | | | | Internal lining |
|-------------------------------|----------------------------------|---|-------------------------|--------------|-------------------------------------|-------------------------------|--------|--------|--------|--------|--------|--------|--------|-------------------|
| | | | | | | 600 | | 450 | | 400 | | 300 | | |
| | | | | | | Total R (m ² .K/W) | | | | | | | | |
| | | | | | | Winter | Summer | Winter | Summer | Winter | Summer | Winter | Summer | |
| PROMINIUM panel with Z-angles | PROBOND 50x35x0.75BMT @ 600 cts. | R0.2 at each stud & tophat intersection | Enviroseal CW wall wrap | 89x0.55 BMT | None | 0.44 | 0.42 | | | | | | | 10mm plasterboard |
| | | | | | R1.5 | 1.68 | 1.54 | 1.65 | 1.52 | 1.48 | 1.37 | 1.95 | 1.80 | |
| | | | | | R2.0 | 1.98 | 1.83 | 1.85 | 1.71 | 1.79 | 1.66 | 1.64 | 1.52 | |
| | | | | | R2.2 | 2.09 | 1.94 | 1.94 | 1.80 | 1.88 | 1.74 | 1.70 | 1.59 | |
| | | | | | R2.5 | 2.24 | 2.09 | 2.06 | 1.93 | 1.99 | 1.86 | 1.79 | 1.68 | |
| | | | | 89x1.15 BMT | R2.7 | 2.33 | 2.19 | 2.14 | 2.01 | 2.06 | 1.93 | 1.84 | 1.73 | 10mm plasterboard |
| | | | | | None | 0.44 | 0.41 | | | | | | | |
| | | | | | R1.5 | 1.61 | 1.47 | 1.51 | 1.38 | 1.46 | 1.34 | 1.35 | 1.24 | |
| | | | | | R2.0 | 1.88 | 1.73 | 1.73 | 1.60 | 1.67 | 1.54 | 1.50 | 1.39 | |
| | | | | | R2.2 | 1.97 | 1.82 | 1.81 | 1.67 | 1.74 | 1.61 | 1.56 | 1.45 | |
| | | | | 150x1.15 BMT | R2.5 | 2.10 | 1.96 | 1.91 | 1.78 | 1.83 | 1.71 | 1.63 | 1.52 | 10mm plasterboard |
| | | | | | R2.7 | 2.18 | 2.04 | 1.98 | 1.85 | 1.89 | 1.76 | 1.67 | 1.56 | |
| | | | | | None | 0.44 | 0.41 | | | | | | | |
| | | | | | R1.5 | 1.59 | 1.57 | 1.51 | 1.49 | 1.47 | 1.45 | 1.37 | 1.34 | |
| | | | | | R2.0 | 1.94 | 1.80 | 1.81 | 1.68 | 1.75 | 1.62 | 1.59 | 1.48 | |
| | | | | | R2.2 | 2.06 | 1.89 | 1.90 | 1.76 | 1.83 | 1.69 | 1.66 | 1.54 | |
| | | | | | R2.5 | 2.21 | 2.03 | 2.03 | 1.87 | 1.95 | 1.79 | 1.74 | 1.61 | |
| | | | | | R2.7 | 2.31 | 2.12 | 2.10 | 1.94 | 2.02 | 1.86 | 1.80 | 1.66 | |
| R4.0 | 2.80 | 2.61 | 2.49 | | 2.32 | 2.36 | 2.20 | 2.05 | 1.91 | | | | | |
| | | | | | | | | | | | | | | |