



## Thermally Insulated Precast Wall Panels

Concrete,  
Climate,  
Comfort!



**MONARC**  
Creative Precast Panels

*Concrete can be beautiful!*

# Conforming Code Requirements

Thermally Insulated Precast Panels meet the New Zealand requirements of wall insulation R values for all of New Zealand's climate zones.

Current NZS4218:2009 Schedule Method minimum R-value Targets (non-solid construction) :

	Zone 1	Zone 2	Zone 3
Roof	R-2.9	R-2.9	R-3.3
Wall	R-1.9	R-1.9	R-2.0
Floor	R-1.3	R-1.3	R-1.3
Glazing (vertical)	R-0.26	R-0.26	R-0.26
Glazing (skylights)	R-0.26	R-0.26	R-0.31

Price indication : \$450.00 - \$650.00/m<sup>2</sup> +GST

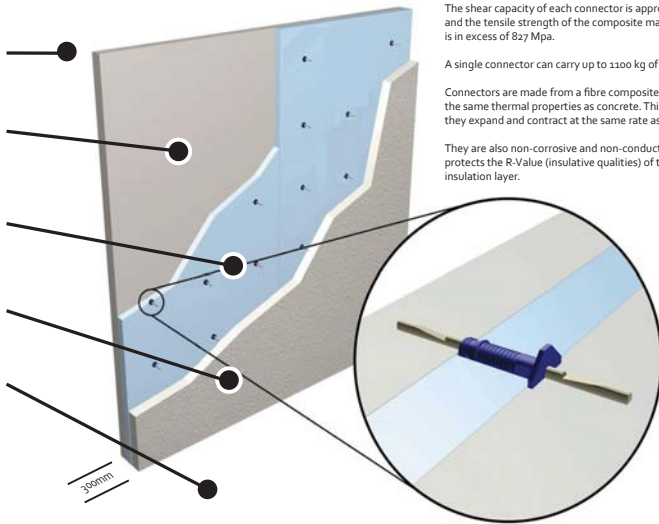
NB. Prices fluctuate based on selections and other factors.

Map of climate zones



## Composite Construction

- Internal Air Surface R 0.09
  - + 150mm Internal Precast Structural Concrete R 0.09
  - + 50mm Extruded XPS Gold Foam R 1.8
  - + 100mm External Precast Concrete R 0.06
  - + External Air Surface R 0.03
- = R 2.07**



## Connectors

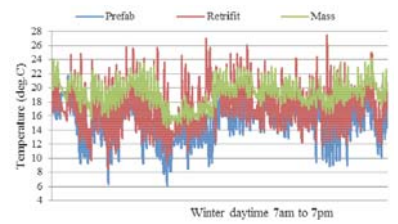
The shear capacity of each connector is approx 4kN and the tensile strength of the composite material is in excess of 827 Mpa.

A single connector can carry up to 1100 kg of concrete.

Connectors are made from a fibre composite that has the same thermal properties as concrete. This means they expand and contract at the same rate as concrete.

They are also non-corrosive and non-conductive which protects the R-Value (insulative qualities) of the insulation layer.

## Climate Comfort



- ✔ All in one product
- ✔ Full thermal barrier
- ✔ Excellent product R-values
- ✔ All zone - all year compliance
- ✔ Sustainable internal climate comfort
- ✔ Reduced heating / cooling energy
- ✔ Drier, healthier environment
- ✔ For the building's term of life
- ✔ Structural, functional & aesthetic excellence all together in 1 product

R-values source : <http://www.designnavigator.co.nz/CRC.php>



## Build your dream, build your castle and live in concrete comfort!

Educational Projects - Residential Projects - Commercial Projects  
Healthcare Projects - Religious Projects - Other Developments

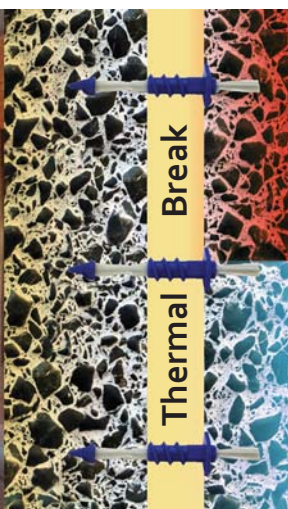


Discussing your building developments with Nauhria's technical support staff early in the design process enables you to make informed decisions with a sound understanding of the many optional product features and benefits. In house drafting support can also assist you by supplying technical drawing resources.



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Internal Comfort



Exterior Extremes