



Beautiful Healthy Living.

Natural materials for the healthy home



RespiraBlock



Jeanius Denim Insulation



RespiraDrywall



Natural Finishes





RespiraBlocks

The **RespiraBlock** provides the highest thermal performance of any hempcrete block available on the market.

A specific and **unique** composition of hemp, dolomitic lime and probiotics provides an **unmatched** thermal **performance** with exceptionally easy and affordable installation.

Characteristics

- ✓ High thermal and acoustic comfort
- ✓ Vapour open
- ✓ Fire tested to AS 1530.3 and AS 1530.4
- ✓ Carbon negative and 100% natural ingredients
- ✓ No VOCs and no synthetic binders

Applications

- ✓ Construction of insulating and breathable masonry walls
- ✓ **External wall insulation system for existing buildings**
- ✓ Internal wall insulation system for existing buildings
- ✓ **Internal partitions with acoustic insulation**

Laying

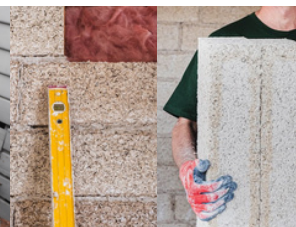
The blocks are laid in a thin bed of mortar composed of hemp and lime according to the proportions indicated in the installation manual.

A handsaw, reciprocating saw or alligator saw can be used to cut the blocks.

Internal surfaces and partition walls can be finished with a lime mortar, a lime wash or a clear coat. Please refer to our design Booklet for further finishing information.

External facing blockwork must be coated with a lime plaster or render.

NB. [height] +/- 1 cm	RP8	RP12	RP20	RP30
Sizes - Length, Height, Thickness - cm	50x20x8	50x20x12	50x25x20	50x20x30
Density - Kg/m3 dry	310	310	310	310
Conductivity - W/mk LAMBDA λ	0,048	0,048	0,048	0,048
R-Value	R-1.84	R-2.67	R-4.34	R-6.42
Total thermal resistance (Rt) - m ² K/W	1,84	2,67	4,34	6,42
Thermal offset without plaster	2h 49'	5h 24'	10h 44'	17h 22'
Specific heat capacity - J/KgK	1280	1280	1280	1280
Vapour permeability - μ	4,5	4,5	4,5	4,5
Sound absorption coefficient (aw)	1 - CLASSA	1 - CLASSA	1 - CLASSA	1 - CLASSA
Soundproofing index (Rw) - dB	-	-	-	-
Compressive strength - N/mm2	0,8	0,8	0,9	0,9
Shear traction with rawplug - kN	2,067	2,067	2,067	2,067
Orthogonal traction with rawplug - kN	2,734	2,734	2,734	2,734
Reaction to fire with plaster	B - s1, d0	B - s1, d0	B - s1, d0	B - s1, d0
Bushfire rating (BAL)	BAL-29	BAL-FZ	BAL-FZ	BAL-FZ



RespiraDrywall

RespiraDrywall® is an ecological, vapour-permeable drywall panel made from cleaned hemp hurds and a formaldehyde-free binder. Dimensionally stable, capillary-active, and designed for healthy indoor environments.

The **RespiraDrywall** can be applied as a wall lining or ceiling panel with good acoustic damping and moisture-regulating properties. A vapour-open, natural alternative to gypsum plasterboard, OSB, and particleboard.

Characteristics

- ✓ Good acoustic damping and thermal mass
- ✓ **Vapour-permeable and capillary-active**
- ✓ Dimensionally stable and ultralight
- ✓ **Low carbon and CO₂-sequestering**
- ✓ **Formaldehyde-free, no VOC, hypo-allergenic**

Applications

- ✓ Interior walls and ceiling linings
- ✓ Alternative to plasterboard, OSB and particleboard
- ✓ Attic and timber beam ceiling refurbishment
- ✓ **Render carrier board (clay or lime plaster)**
- ✓ **Moisture-sensitive interiors (not wet rooms)**



The board alone	18mm	30mm
Standard sheet - mm	800 x 1200	800 x 1200
Large format - mm	600 x 2400	600 x 2400
Edge	Square	T&G
Weight - kg/m ²	5.30	9.60
Conductivity λD - W/m·K	0.057	0.057
R-value, board alone	R 0.32	R 0.53
Vapour resistance - μ	5	5
Specific heat - J/(kg·K)	2100	2100

See every natural finish at respirabuilt.com.au/finishes





Jeanius Denim insulation

Jeanius Denim® is a natural insulation made from recycled denim fibres, offering excellent thermal and acoustic performance

Designed for walls, ceilings, and underfloor spaces, it traps air to moderate heat and dampen sound. Safe to handle with no itch factor or chemical irritants. **Jeanius Denim** helps create comfortable, energy-efficient buildings.

Characteristics

- ✓ No fibre-itch, no chemical irritants
 - ✓ Soft to touch and safe to handle
 - ✓ High thermal and acoustic comfort
 - ✓ Made from recycled denim fibres
 - ✓ Easy, manual installation
 - ✓ Free from added harmful chemicals
- ✓ Acoustic: ISO 354 tested, NRC 0.85-1
 - ✓ Thermal: R-values to AS/NZS 4859.1
 - ✓ Fire: tested to AS/NZS 1530.3
 - ✓ Australian made by Planet Protector

Specification	Dimensions (L × W mm)	Application	Density (kg/m³)	Fire test	Acoustic (NRC)
R2.5 – 90mm	1160 × 430/580	Wall	26	AS/NZS 1530.3	0.85-1
R4.0 – 140mm	1160 × 430/580	Wall	26	AS/NZS 1530.3	0.85-1
R4.0 – 200mm	1160 × 430/580	Ceiling	26	AS/NZS 1530.3	0.85-1
R6.0 – 240mm	1160 × 430/580	Ceiling	26	AS/NZS 1530.3	0.85-1
R3.0 – 160mm	8000 × 450	Underfloor	26	AS/NZS 1530.3	0.85-1

Install in dry conditions and keep the batts dry. Fill cavities fully without squashing the batts, as compressing them lowers their R-value. Planet Protector recommends gloves, safety glasses and a dust mask when cutting indoors. Data: Planet Protector product data sheet, November 2025.



RESPIRABUILT

Natural wall finishes

Every finish here is lime or clay, vapour open, and goes straight onto hempcrete or RespiraDrywall. No sealer, no plastic, nothing between you and the material.



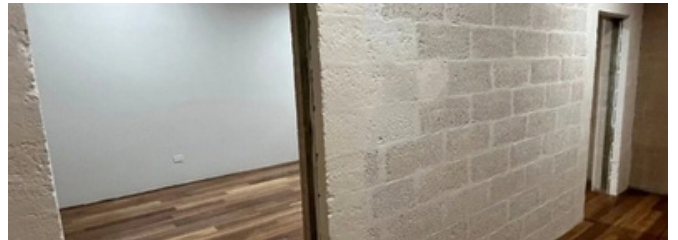
Venezia

Our signature finish. Hemp shiv through lime putty, left exposed or trowelled smooth.



Canaposo

Venezia's finer sibling. Smooth, warm, softly speckled.



Malta Fine

A smooth, steel-trowelled finish over a Venezia base. Flatter and finer than the textured coats.



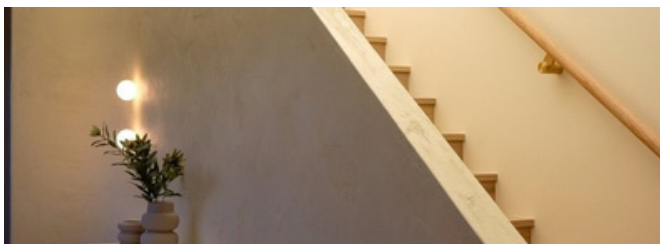
Lime Wash

Traditional brushed lime that ages into a patina.



Lime Plaster

Smooth, flat mineral surface, hand-trowelled.



Marrakesh

Stone-like tadelakt, lime and marble, hand-worked depth.

Otsumigaki

Silky clay and lime, burnished to a near-glass lustre.

Board and finish together

Take a finish with the DryWall and the pair comes down ten per cent on every finished m².

See every finish at
respirabuilt.com.au/finishes



Scan for Venezia



Samuel Nolan

Will's guidance has been instrumental in my journey toward incorporating hempcrete into my home.



Thomas E Dodd

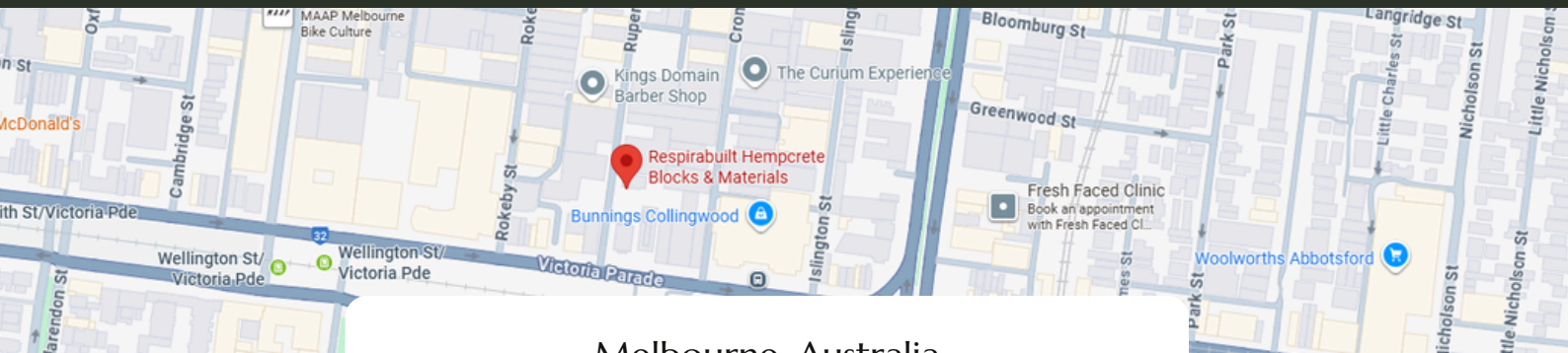
Fantastic group! Excellent sustainable material. We used Will and his team and their hempcrete product on a job.



Yanis Petros

We were so impressed with both the product and their quality workmanship. I can't recommend Will and the team at Respira highly enough!

Check all reviews in our Google Page



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