



HEMPBLOCK®

INTERNATIONAL

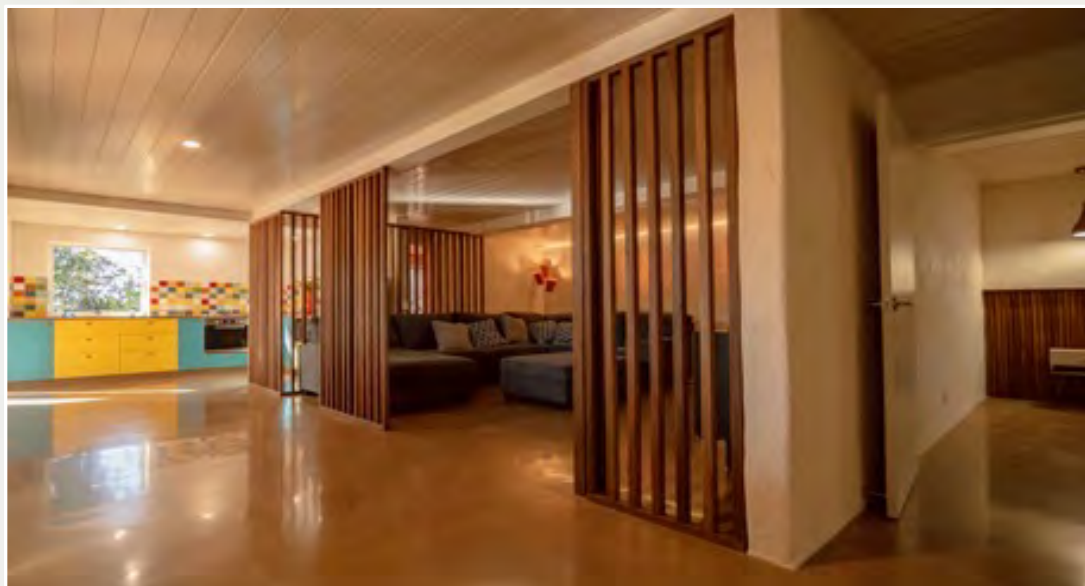
Transforming Construction,
Naturally...



OUR PROVEN SOLUTION: HEMPBLOCK BIO-BASED BUILDING SYSTEM



**OUR SYSTEM IS
UNMATCHED
BY ANY OTHER**



**All
Natural**



**Easy, Fast
Compliant**



**Load
Bearing**



**Excellent
Insulation**



**Absorbs
Sound**



**Fire
Resistant**



**Carbon
Negative**



**Mould
Resistant**



**Termite
Resistant**



FACTORY PRODUCED: QUICK AND EASY TO INSTALL

Factory produced HempBLOCKs arrive on-site ready to use just like any block or brick.

Interlocking HempBLOCKs:

Don't require mortar jointing,

Are installed up to 70% faster than other building materials and

Our proprietary load-bearing structure is incorporated into the HempBLOCK walling system during construction.

The building system is easily integrated into existing building practices as no additional skills or specialist equipment are required to assemble the HempBLOCK walls.

In fact, it requires more skills to build a brick, concrete block or a timber framed wall.



Dry Stacked Mortar-Less Blocks

Solid

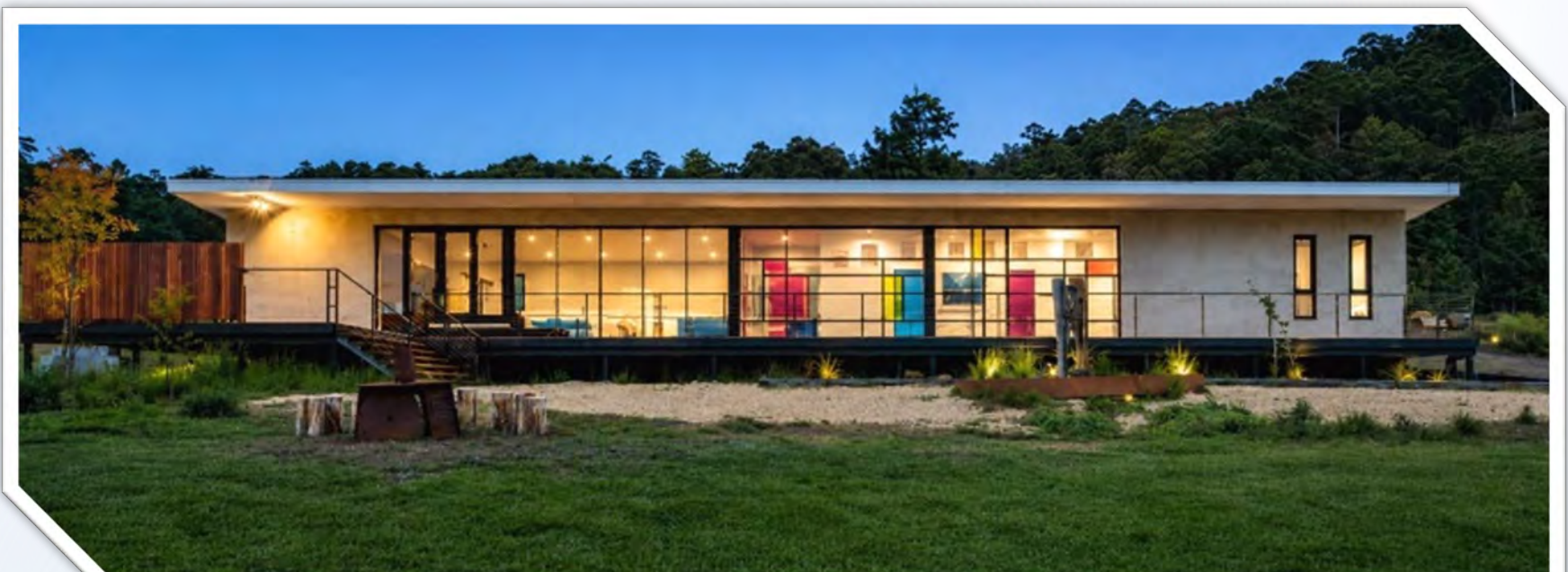
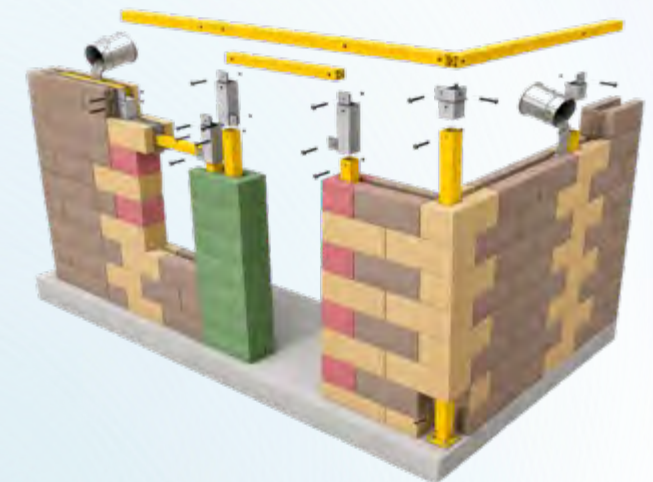


Double Columns



Single Column

Lintel





WHY OUR HEMPBLOCK BUILD SYSTEM IS BETTER

THE MATHS IS SIMPLE: **LESS MATERIALS** + **LESS LABOUR** = **SUPERIOR OUTCOMES..!**

HEMPBLOCK® SYSTEM

3 LAYERS



- 1 HEMPBLOCKS
- 2 LIME RENDER or DRY WALL
- 3 LIME RENDER

CONCRETE BLOCK SYSTEM

6 LAYERS



- 1 CONCRETE BLOCKS
- 2 DRY WALL
- 3 BATTENS
- 4 INSULATION
- 5 MOISTURE BARRIER
- 6 CEMENT RENDER

TIMBER FRAME SYSTEM

6 LAYERS



- 1 TIMBER FRAMING
- 2 BATTENS
- 3 INSULATION
- 4 SHEATHING
- 5 MOISTURE BARRIER
- 6 CLADDING



- ✓ Simple build system
- ✓ Low in embodied energy
- ✓ Natural, breathable & sustainable
- ✓ Excellent thermal & acoustic insulation
- ✓ **3 hour fire resistance**



- ✓ Complex build system
- ✓ High in embodied energy
- ✓ Requires water & vapour barrier
- ✓ More labour & materials
- ✓ 1 hour fire resistance



- ✓ Complex build system
- ✓ Takes time to build
- ✓ Requires water & vapour barrier
- ✓ More labour & materials
- ✓ 1 hour fire resistance

NO NEED FOR ADDITIONAL:

Wall Insulation - Sound Dampening - Heating and Cooling - Pest or Mould Control - Fire Protection



CERTIFICATIONS & INTERNATIONAL RECOGNITIONS

The **European Product Certification** Equivalents are recognised through **IAF & ILAC** International **Multilateral Recognition Agreements**. France, UK, Canada, USA, South Africa also are **Full Members of these International Bodies**.

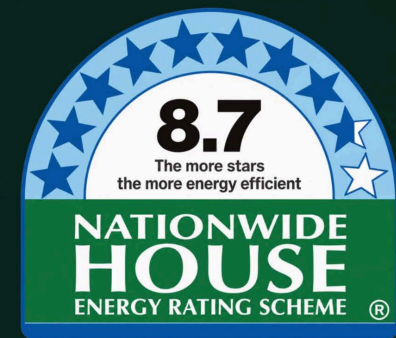
HempBLOCKs are included in the
ICC Residential Code USA
and
Certified as Conforming with the
Australian Building Code



APPENDIX BL HEMP LIME
HEMPCRETE CONSTRUCTION - 2024
INTERNATIONAL RESIDENTIAL CODE
(IRC)
[codes iccsafe.org](https://codes.iccsafe.org)



KEY DOCUMENTS - HEMPBLOCK AUSTRALIA



Annual Heating & Cooling

Load: 19.7 MJ/m²

Heating: 8.2 MJ/m²

Cooling: 11.5 MJ/m²

Climate Zone: Sub-Tropical

70% More Thermally Efficient



FACT: HEMPBLOCK Construction combined with passive design, delivers outstanding thermal performance, low energy use & year-round comfort during hot summer and cool winter temperatures using minimal climate control.

PROJECT SUMMARY



Location

Conondale, Queensland - Australia



Building type

Single-storey residential house



Gross Floor Area (GFA)

201 m² (internal)
+ 42 m² deck



Construction

HEMPBLOCK walls with lime plaster external and internal (unpainted). Incorporated into a post and beam load-bearing structure.



Roof

Colourbond sheeting
R3 wool insulation batts



Floor

Slab on ground



Window frames

Aluminium



Air-conditioning

9 kW total installed capacity
(44.8 W/m² of GFA)



Climate

Australian sub-tropical climate



SUMMER PERFORMANCE

1 December to 28 February (2,160 recorded hours)

2.18% Air Conditioning Hours (47 hours)



46%-51%

Average daytime temperature damping (reduction of external heat gain to indoor temperature).



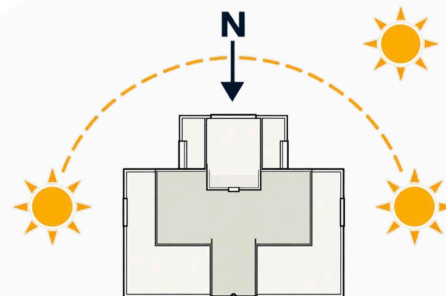
WINTER PERFORMANCE

1 June to 31 August (2,208 recorded hours)



60%-62%

Average daytime temperature damping (reduction of external cold to indoor temperature). Stable, comfortable indoor temperatures with minimal reliance on active heating.



Approximately 1m overhanging eaves provide effective shading of the north-facing glazing during summer while allowing lower winter sun to enter.

PASSIVE DESIGN FEATURES

Principal living areas open to the north, maximising winter solar gain while minimising summer gain with deep eaves.

GLAZING

- 35 m² of glazing on north-facing façade (serving main living areas)
- Reduced east & west glazing to limit low-angle summer sun exposure
- Selected low-E glazing (S HGC0.41 on north-facing doors)





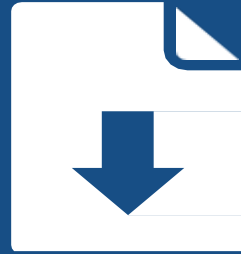
KEY DOCUMENTS - HEMPBLOCK



[CLICK HERE](#)

Full Lifecycle Analysis

Environmental Product Declaration



[CLICK HERE](#)

International Residential Code

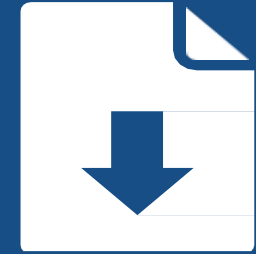
2024 Appendix BL - Hempcrete Construction



[CLICK HERE](#)

Key Performance Data

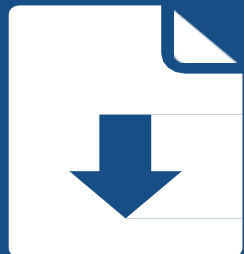
Overview, Key Performance Data



[CLICK HERE](#)

Cost and CO₂ Comparisons

HempBLOCK Walling System Compared to Concrete Block Walling



[CLICK HERE](#)

Fiber Reinforced Polymers

Composite Fiber Technology for Structural Posts and Beams



[CLICK HERE](#)

Installation Manual (LB300)

Comprehensive Documentation of 3 Different HempBLOCK Walling Methods (metric)



[CLICK HERE](#)

Installation Manual (Solid)

Comprehensive Documentation Using Solid HempBLOCKs for Interior Walling (Metric)



[CLICK HERE](#)

Project Examples

Commercial and Residential Building Projects and On-Site Master Builder Training



Websites: hempblockinternational.com & hempblockhomes.com

Social Media:





INFORMATIVE VIDEOS - HEMPBLOCK INTERNATIONAL



My 10 Good Reasons



Client Answers Questions



Tested & Certified

Building with HempBLOCKs



On-Site Training



Fast & Easy to Install





Our Services



Architectural Design

Our designated team provides an integrated & comprehensive design service.



Engineering Services

Structural engineering design and certification as required.



Builder Training

Training of builders nationally to ensure product & construction integrity.

[Click here to visit to: HempBLOCK International](#)



Websites: hempblockinternational.com & hempblockhomes.com

Social Media:





HEMPBLOCK[®]
HOMES *Modern Living Redefined*

Discover the unmatched benefits of HempBLOCK homes

Designed to create spaces that are safer, healthier, and more sustainable. With innovative materials and modern designs, we deliver homes that prioritise your comfort and well-being while supporting a sustainable future.

Whether you're building your forever home or seeking a design that reflects your values, **HempBLOCK Homes is here to help you bring your vision to life.**



Build with HempBLOCK Homes Today

Contact us to learn more about our designs or start planning your custom-built HempBLOCK Home.

Together, let's redefine modern living with homes that care for you and the planet.

Your Healthy, Sustainable Future Awaits...

[HempBLOCK homes](#)