



# Base Habitation® Technical Comparison 2026

# How does a Base home compare?

ITEMS	CONVENTIONAL	BASE HABITATION
<b>Plans &amp; support</b> What's included.	Plans only	Base System Plans + specs + coordination
<b>Foundation</b> Approach, concrete, and cost relative to terrain.	Standard Potential blasting \$25K–\$50K+	Monolithic slab on bedrock ~35% less concrete No blasting
<b>Materials &amp; Insulation</b> Building envelope materials.	Fibreglass / polystyrene	Wood fibre + hemp bio-sourced
<b>R-Value</b> Thermal resistance of the envelope.	Walls: R-24 Roof: R-41	Walls: R-30 Roof: R-46
<b>Thermal lag – walls &amp; roof</b> Time it takes for heat to move through the building shell.	Walls: ~4 hours Roof: ~5–7 hours	Walls: 11 hours Roof: 17.2 hours
<b>Airtightness</b> Measure of air leakage – lower is better.	~3.0 ACH @ 50Pa	0.25 ACH @ 50Pa (~10x more airtight)
<b>Moisture management</b> Protection against condensation in the walls.	Standard polyethylene vapour barrier	Pro Clima intelligent membranes (Intello X + Mento)
<b>Windows</b> Glazing type and thermal performance.	Double-glazed Standard casement windows	Triple-glazed U-0.8 W/m <sup>2</sup> K Oversized sliding door
<b>Heating</b> Integration.	Standard electric baseboards	Integrated directly into the monolithic slab
<b>Carbon footprint</b> Net emissions from material production.	Positive (emits CO <sub>2</sub> )	Carbon-negative (avg. -42 kg CO <sub>2</sub> /m <sup>2</sup> walls and roof)

## ENERGY

Less heating, less cooling.

Our walls slow heat transfer in both directions: cool in summer, warm in winter. That means lower bills.

## CARBON FOOTPRINT

**-38**                      **-47**

kg CO<sub>2</sub>/m<sup>2</sup> : walls                      kg CO<sub>2</sub>/m<sup>2</sup> : roof

Wood fibre and hemp are bio-sourced materials that store carbon.

## AIRTIGHTNESS & PERMEABILITY

Tight. Breathable. No compromise.

Our Pro Clima membranes block air leaks while letting walls breathe – moisture escapes, heat and cold stay out.



# Let's build something together.

Get in touch to start your project or learn more about our products.

By email:  
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On our website:  
[www.basehabitation.com](http://www.basehabitation.com)

