



**american
limetechnology**
sustainable building innovation



Hembuild® & Hemclad® Pre-cast Wall Systems



Hemclad[®] Pre-cast Wall Systems

Hemclad[®] Systems

Combining Tradical[®] Hemcrete[®] and a timber cassette, Hemclad[®] provides a sustainable off-site produced thermal cladding system for commercial and industrial buildings. Hemclad[®] utilises the environmental credentials of Tradical[®] Hemcrete[®] to provide a cost-effective and sustainable cladding panel system. It can hang on a steel, glulam or concrete structural frame, and has been designed to take wind loading and a number of external cladding finishes as required.

Hemclad[®] offers a number of advantages over traditional composite panels:

- Reduced carbon emissions
- Stable internal temperatures
- Made from highly sustainable material
- Tradical[®] Hemcrete[®]

Recent studies have shown that up to 60% of whole life carbon in commercial buildings is actually embodied carbon within the fabric of the building. Simply by using Hemclad[®], this is massively reduced, compared to that of conventional construction, as its production process – using hemp shiv gives the product negative embodied carbon.

Tradical[®] Hemcrete[®] helps to reduce the atmospheric concentration of CO₂ by locking up harmful CO₂ emissions within the material and in turn the wall construction. Hemp captures carbon dioxide during its rapid growth and releases oxygen back out to the atmosphere for superior environmental performance.

By incorporating Tradical[®] Hemcrete[®], the Hemclad[®] system also delivers a more stable and comfortable internal environment. For applications where a stable temperature is important, using Hemclad[®] can reduce energy load or even eliminate the need for an M & E system, removing its capital and operational costs. Offering superb insulation performance, Hemclad[®] can be supplied in a range of U-values from 0.10 to 0.25 W/m²K to help provide a thermally efficient building envelope. Its unique combination of thermal inertia and insulation buffers changes in temperature to create a stable environment and greatly reduce energy usage.

Supplied to site in cassettes to fit the size of the building, Hemclad[®] provides a green, hassle free cladding system, finished with either eco-friendly lime renders or rain-screen cladding



Hembuild® Pre-cast Wall Systems

Hembuild® Systems

Hembuild®, the factory produced, off-site system incorporating the structural frame into the timber cassette, creating a building envelope solution for 1 – 3 storey buildings.

Lime Technology can supply and install factory made (pre-dried) Hembuild® panels to site to offer the following options:-

- Panel supply and erection together with the upper floors and roof.
- Whole envelope solution that includes the render, doors and windows to leave a fully tested airtight shell, ready for services and second fix.

By using Hembuild® customers get a quick build and a predictable programme at all times of the year giving the thermal advantages of solid wall construction in a programme time of lightweight timber frame.

Like Hemclad®, Hembuild® can be supplied in a range of U-values from 0.10 to 0.22 W/m²K to provide a thermally

efficient building envelope. Its unique combination of thermal inertia and insulation buffers changes in temperature to create a stable environment and greatly reduce energy usage.

The system can be used to meet high levels of the code for sustainable homes and for BREEAM excellent buildings such as schools and commercial buildings.

Hembuild® is a registered Trademark of Lime Technology and has patents pending on the system.

System Support

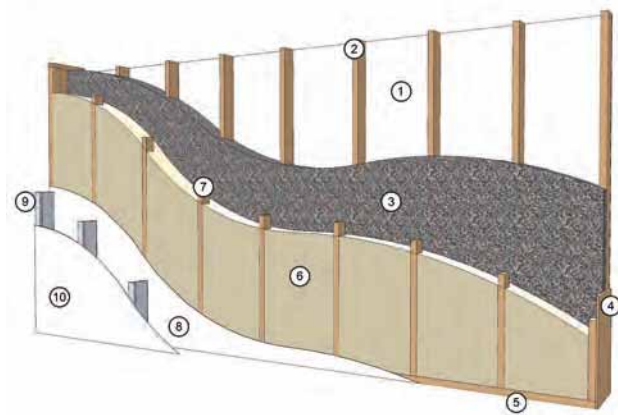
Specification

Lime Technology offers a comprehensive supply and specification package. Our technical department and partners can advise on all aspects of system selection, specification and product integration into any building design. Standard details for each system are available for modifying for use in your project.

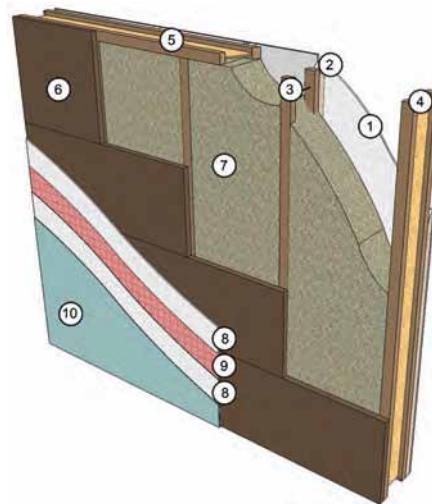
Lime Technology offers psi and U-value calculation services and can arrange a dew point analysis. Specific technical advice is also available through our technical sales team, site support technicians and our office based staff.

Warranty and guarantee

Please contact our sales team to discuss your building warranty requirements at an early stage.



1. Multipro XS LT Board
2. Internal timber frame
3. Tradical Hemcreté
4. Plywood side pieces
5. Glulam base and head member
6. Breathe Hemp fibre insulation
7. External timber frame
8. Building papers
9. Z rails
10. Limetec render carrier board



Precast Panel

1. Plasterboard
2. Battens to support plasterboard and form service cavity
3. Double stud timber frame
4. Composite A-symmetrical vertical timber joist
5. Composite A-symmetrical horizontal timber joist
6. Wood fibre board
7. Tradical Hemcreté
8. Render basecoat
9. Alkali resistant glass fibre mesh
10. Render topcoat



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