



Tradical® Hemcrete® Walling Method Sheet

Tradical® Hemcrete® is a blend of a special lime based binder (Tradical® HB) and specially prepared hemp shiv (Tradical® HF). Together these materials form a bio-composite building material that can be used for walls, floors and roof insulation.

Tradical® Hemcrete® for Wall Construction

Tradical® Hemcrete® provides the filling, racking strength and the insulation for timber-framed walls.

As well as being ideal for new construction, Tradical® Hemcrete® is well suited for the renovation and repair of old timber-framed buildings as a viable and sympathetic replacement for the original wall in-fill.

Construction Methods

Tradical® Hemcrete® is not a load bearing material. It is normally cast around a frame and relies on the frame to carry the vertical loads of the roof and upper floors down to the ground. Tradical® Hemcrete® does however provide some racking strength for the frame and therefore means the frame may not need additional bracing.

The timber frame usually sits in the centre of the Tradical® Hemcrete® wall with Tradical® Hemcrete® passing by on either side of the timbers. Tradical® Hemcrete® provides an ideal treatment for the protection of timbers and there is no need for additional chemical treatments*. Where the timber frame will be used to fix permanent shuttering or other finishes it may be necessary to move the timber frame to the edge of the wall thickness.

Tradical® Hemcrete® is mixed on site by blending the Tradical® hemp filler with the Tradical® hemp binder in the ratio shown below. It is important to achieve efficient mixing. This is best done with a pan mixer or machine mounted mixing bucket, adding water as required.

The Tradical® Hemcrete® mix can then be poured into temporary (or permanent) shuttering and lightly tamped into place. It is normal to tamp the material every 300mm. Alternatively the Tradical® Hemcrete® can be sprayed (using a special dry spray concrete system) against single sided shuttering (temporary or permanent) and then ruled flat. It is normal to leave the shuttering in place for 24 hours before removing it.



Construction with Traditional[®] Hemcrete[®] is not recommended when temperatures are below 5° centigrade. Traditional[®] Hemcrete[®] needs to be protected from extremes of weather while it is setting.

Traditional[®] Hemcrete[®] needs to be protected from rising dampness by sitting on a masonry plinth containing a damp proof course and protected from falling rain by having an adequate roof over-hang at the top of the wall.

External finish of Traditional[®] Hemcrete[®] can be one of the following:

- Limetec render
- Timber cladding
- Tile or shingle hanging
- Brick or stone facing

* Subject to using proper detailing, vapour permeable surface finishes and having a minimum of 100mm cover of Traditional[®] Hemcrete[®] on the weather side of the timber.

Only the use of Traditional[®] HF mixed with the specific Traditional[®] HB or Traditional[®] special hemp binders guarantees quality results.

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Hemcrete is a registered trademark of Lime Technology Ltd.

To make 1m³ of Traditional[®] Hemcrete[®]

Traditional[®] HB	220kg/m ³
Traditional[®] HF	110kg/m ³

Typical construction details

Density	330kg/m ³
Thermal conductivity	λ= 0.07W/m.k
Strength after 90 days	0.9Mpa

