HEMPCRETE FACTSHEET

Hempcrete is a combination of chopped hemp shiv and binder comprising of natural hydraulic lime and a small amount of cement. It is firm and self insulating. Hempcrete is suitable for uses such as timber frame infill,
insulation and, with the addition of aggregate, floor slabs. Hemp is a renewable biomaterial and lime is an abundant quarried material.

Hempcrete regulates the temperature and humidity of a building; in some cases completely eliminating the need for heating and cooling systems, resulting in huge energy savings. Hempcrete is carbon negative and the obvious choice for buildings aiming to achieve a low carbon footprint and the highest sustainable building code levels.

Hemp has been grown in East Anglia for hundreds of years. The carbon trapped in the hemp offsets the carbon not only of the hemp production but also the residual carbon from the lime production after re-absorption of carbon as the lime cures.

Being breathable, hempcrete is ideal for use in historic buildings and modern buildings using natural materials. Breathable buildings bring benefits for the health and comfort of the occupants.

Our team regularly batch and place 20m^3 of hempcrete in a day. Our specialist reusable plastic shuttering can be stripped from walls the following day to allow the hempcrete to dry and cure. In fair weather conditions we apply lime based render after 4 weeks and top coat 2 weeks later.

FACTS AND FIGURES

Density	275kg/m^3
Flexural Strength	0.3-0.4 N/mm^2
Thermal conductivity	λ=0.06W/m.K
Heat Capacity	1500-1700 J/kg
Mean Acoustic Absorption Coefficient	0.69 NRC
Air Permeability	0.75 gm/m2/mm hg
Vapour permeability	24.2 gm/m2/mm hg
μ Vapour Diffusion Resistance	4.84
Fire Rating	1 hr BS EN 1365-1:1999
Carbon capture	130kg CO_2/m^3
Airtightness	<2m^3/m^2.hr@50pa

APPLICATIONS

- Walls – Timber frame infill
- Insulation – Retrofit against existing walls
- Floor slab