Tradical® **hemcrete**®
Better-than-zero carbon

Uniclass L3841:P91	EPIC C43:X82
CI/SfB (21.3) Ey	

Tradical® Hemcrete® is a revolutionary building material that actually locks away CO_2 within the wall construction to create better-than-zero carbon buildings that require minimal heating or cooling.

Tradical® Hemcrete® is a cost effective, mainstream green building product that can actually help to combat climate change. It does this in two ways:

Firstly, the exceptional thermal performance and airtightness of walls constructed using Tradical® Hemcrete® mean that buildings do not require additional insulating layers. This means buildings can run with minimal heating and avoid the need for air conditioning. Tradical Hemcrete has a high thermal inertia, so buildings constructed using Hemcrete® use less energy and are more comfortable than those built to the same U Value in lightweight building materials.

Secondly, because the primary component of Tradical® Hemcrete® is hemp – a renewable industrial crop that is grown and harvested in the UK – it captures and locks away CO_2 within the fabric of the building. This means that whilst a typical brick house can be responsible for around 50 tonnes of CO_2 emmissions in its construction, the same houe built using Tradical® Hemcrete® can be built for 30-40% less CO_2 emissions.

The UK Government requires that all housing should be zero carbon by 2016. Using Tradical® Hemcrete®, architects and developers can confidently create buildings that meet code levels 4, 5 and 6 of the Code for Sustainable Homes.

Who is it for?

Forward thinking architects, developers, builders and private individuals who want to combat climate change and are looking for a cost effective way of complying with tough new UK buildings legislation.

Where can it be used?

Tradical® Hemcrete® can be used with any timber, concrete or steel framed building – from large-scale, blue chip developments to more modest self-builds.

What are the benefits?

Tradical® Hemcrete® offers significant benefits over conventional building methods, including:

- **Very low energy costs in use**
- **Simple to achieve high code level homes within the Code for Sustainable Homes**
- **Simple to achieve high level of airtightness**
- **Recyclable and produced in the UK**
- **High performance fire resistance**

limetechnology
Sustainable building innovation

Lime Technology Limited
Unit 126, Milton Park
Abingdon
Oxfordshire OX14 4SA

T: 0845 603 1143
F: 0845 634 1560
E: info@limetechnology.co.uk
w: www.limetechnology.co.uk

BBA · UK Green Building Council Member · LABC New Home Warranty

Tradical® hemcrete®
Better-than-zero carbon

This is Ecobuilding

Tradical® Hemcrete® captures more carbon from the atmosphere than is created in its production and application. Approximately 110kg of CO_2 equivalent is captured in every cubic metre of Tradical® Hemcrete® wall mix. This means that building with these highly insulating products allow better than zero carbon buildings to be created. Building with Tradical® Hemcrete® really can help combat global climate change.

Clayfield, Elmswell, Suffolk
Architect: RHM Architects

Spray application of Tradical® Hemcrete® was specified for this 26 unit housing project with Orwell Housing Association. The Clayfield project is an exemplar for transferable ecological design in social housing, with extremely low embodied CO_2 in construction and low energy requirements in use. As well as having green credentials, it is cost effective to build and contemporary in design. This award winning scheme offers affordable housing with a strong environmental emphasis.

Crawford House, Aston Clinton, Aylesbury, Buckinghamshire
Designer: Simon Radcliffe

The curvature of the walls of this property were simply achieved through the lightweight shuttering and casting of Tradical® Hemcrete® onto a timber frame achieving an air permeability test of 1.5.

The lime render finish provides the ideal breathable surface for the high thermal performance of Tradical® Hemcrete®. This helps to provide a thermally efficient home from which to enjoy the open southern aspect of this site that provides stunning views through the high performance glazing units.

The Renewable House
Partners: The NNFCC, DECC, The Linford Group, Empyer Homes, Archial Architects and Benchmark Property.

The Renewable House, built at the BRE Innovation Park, is set to revolutionise the low cost housing sector. The project demonstrates that mainstream affordable homes can be constructed from renewable materials – meeting both housing demands and environmental targets.

A unique housing project, it is based around using renewable materials to deliver an affordable house that meets Level 4 of the Code for Sustainable Homes, with a build cost of £75,000, excluding groundworks. Whilst offering significantly minimised embodied CO_2, the design also enables the easy enhancement to meet Levels 5 and 6. The walls of the house have been built using Tradical® Hemcrete®.

Wine Society Climate Controlled Warehouse,
Stevenage, Hertfordshire
Architect: Vincent and Gorbing

Tradical® Hemcrete® was selected as the material of choice for this 3.6 million bottle capacity warehouse. The thermal efficiency of the Tradical® Hemcrete® infilled panels delivers a thermal and humidity buffering that reduces the energy demand of the warehouse whilst providing ideal storage conditions for wine.

The construction incorporated a primary steel frame with secondary framing, supporting offsite manufactured panels of Tradical® Hemcrete®. The fast construction process helped deliver the walls of this 21 metre high building within a tight construction programme.

Developed in Europe by Lhoist

Manufactured & Distributed in the UK by limetechnology
Sustainable building innovation

Lime Technology Limited
Unit 126, Milton Park
Abingdon
Oxfordshire OX14 4SA

T: 0845 603 1143
F: 0845 634 1560
E: info@limetechnology.co.uk
w: www.limetechnology.co.uk

BBA · UK Green Building Council Member · LABC New Home Warranty