



Calci-action® Case study

Adnams Brewery Warehouse and Distribution Centre Hemp Lime insulation walling for 4,400 m² distribution centre

Client:

Adnams Brewery

Architect:

Aukett Fitzroy Robinson

Specialist Engineer:

Lister Beare

Principal Contractor:

Haymills

Location:

Southwold, Suffolk, UK

Project Value:

£5.8 million

Completion date:

September 2006

Key Stats:

100,000 compressed (high density) Tradical® lime hemp blocks

1,000 cubic metres of low density Tradical® Hemcrete®

The client decided from the outset that the distribution centre, located in a disused quarry, would be built with a focus on environmental responsibility. This led to the selection of Tradical® hemp lime as the material of choice for the walls of both the 4,400 m² distribution centre and the associated commercial vehicle maintenance facility.

Lime Technology, now partners with Lhoist UK, was involved in developing the technology of the wall construction over an eighteen month period. The final construction form was of a diaphragm wall with high density Tradical® lime hemp blocks, with an infill of low density Tradical® Hemcrete®. The high density, compressed blocks were made of a combination of quarry waste, Tradical® hydrated lime and hemp.

Thermal performance of the walls incorporating over 100,000 blocks and 1,000 cubic metres of Hemcrete® was a key focus because of the need to keep the stored drinks at a cool 12 to 14°C during their time in the distribution centre. The success of the hemp lime design meant that, during the design period, it was decided to delete the air-cooling system from the project making a saving of £400,000 on the original costs.

The environmental benefit of using Tradical® Hemp Lime in the construction means that more than 500 tonnes of CO₂ emissions were saved during the building process, as Hemcrete® captures carbon from the atmosphere and locks it up into the fabric of the building.

Tom Woolley, Professor of Architecture at Queens University Belfast, Chair of the Hemp Lime Construction Products Association and author of 'Natural Building' stated: "... the Adnams hemp walled warehouse catapults this environmentally friendly technology into main stream commercial building."



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