



## Coworth Spa, Ascot Lime Hemp Walling

 **VolkerLaser**





## Project Information

VolkerLaser constructed lime hemp walling at this new build eco-luxury spa on the Coworth Park Estate in Ascot. Working closely with architect, Purcell Miller Tritton and main contractor, Galliford Try, our team provided specialist advice for this exemplar sustainable building.

### Client

Coworth Park Estate

### Value

£80k

### Duration

5 months

This pioneering sustainable building sits in the beautiful landscape of Coworth Park Country House Hotel. It has been designed to meet two key aspirations: the building's volume and footprint to be kept to a minimum and the spa to be intimately related to its sensitive green belt setting.

Sustainability was a key driver, with a timber glulam monocoque frame and lime hemp walling contributing to the spa's carbon negative design. A biomass boiler and closed loop ground water heat transfer system meet around half of the its energy demands.

VolkerLaser's experts advised upon and carried out the construction of lime hemp walling to the new spa building. Hemcrete® was specified because of its carbon negative qualities and high thermal performance, as well as being a natural, sustainable material, consistent with the spa's ethos.

To achieve the required 300mm thickness, the lime hemp walling was cast in-situ against the gentle curve of the internal permanent shuttering board and temporarily shuttered on the external face.

Hemcrete® was applied by hand from the on-site pan mixer, trowelled and lightly tamped into place. The 300mm thick walls ensure 100mm cover to the 100 x 50mm

stud frame, for thermal performance, with a formulated lime render facing. Around the upright posts, where this thickness could not be maintained, two layers of 25mm Herekith BM board were used, faced with a mesh cloth bedded onto specialist adhesive.

The project attracted considerable attention, including a learning workshop hosted by VolkerLaser's team. A number of contractors attended the session to learn first-hand from our specialists during the casting of the lime hemp walling. As exponents of sustainable construction, we were able to demonstrate the flexibility of this 21st century building material as a mainstream option for affordable, high performance and environmentally sound construction.