



WALLTITE®

The airtight insulation solution

Floating offices, Penryn

Best Practice Case Study

 **BASF**

We create chemistry

Floating offices, Penryn

Best Practice Case Study



Project data

Project: Office barge, Cornwall

Client: Robotmother

Spray Foam contractor: Cosy Home UK

Scope of project:

Conversion of concrete barge into office space

Year completed: 2014

Products Used: WALLTITE® CL100

Project description

Where most people saw a derelict WW II concrete barge, Robotmother, developers of the unique Jubilee Wharf community project in Penryn, saw the opportunity to design a unique space that could accommodate every element of its Jubilee Wharf business – from maintenance rooms to bunking space for visiting bands and a mezzanine level office space.

Robotmother engaged Märraum to design the structure to build on the concrete base: the objective was to design a contemporary and flexible space that will stand the test of time and the worst impacts of the testing marine environment.

Completed last year and taking three years in total, the contemporary, bold office space combines practicality and maritime chic. It's no surprise that the barge has become a local landmark within the Penryn community.

The Challenge

The structure, based around a steel frame, needed to be lightweight and very well insulated. The design has to follow the irregular shape of the original barge, while the contemporary aesthetic includes further geometric shapes in the roofline.

Flexibility was the main factor for the design process, always keeping in mind that the client wished to have a high quality office environment. The layout comprises a library and meeting space, reception, work areas, kitchenette, workshop and the very important compost toilet! The choice of materials was paramount to this project as the overall construction weight could not exceed 50 tonnes. The unique nature of the project necessitated some in-depth research by the architects to find the best solutions.

The Solution

Originally, rigid PIR foam insulation was specified to provide the high quality thermal insulation required for this exposed location. At the application stage it soon became apparent that this option would not entertain the roof's jagged roof line and walls of varying depths.

The result would have been gaps in the shell structure causing a serious condensation problem. Michael Hormann from Märraum recognised this and switched the specification to WALLTITE® at a thickness of 160mm.

WALLTITE® was sprayed directly onto the fibre glass surface following the contours of the walls, ceilings and some of the floor forming the basis of these stunning offices. Chosen for its ability to accommodate even the trickiest shapes and surfaces, WALLTITE® helps this project achieve an impressive U-value of 0.12W/m²K.

Specifier quote

Michael Hormann of Märraum explains: "WALLTITE® was the perfect solution for such a tricky shape and the aggressive marine environment demands a seamless airtight solution. As boats are prone to dampness many are now opting to insulate using this innovative material.

"In terms of the practicality of application, this took just a couple of days which meant we were able to make fast progress therefore reducing construction time and cost. It was also good for filling voids and tying the structure together."

