



CORNISH CONCRETE PRODUCTS LTD

## TORQUAY COMMUNITY COLLEGE

A brand new school to replace the old existing one with state of the art facilities and thermowall panels to form the external facade.

Designed to be thermally efficient and to take advantage of the benefits of the inherent thermal mass of concrete.



The sandwich panels are manufactured with CCP's environmentally friendly 'ecocrete' concrete to improve BREEAM ratings and achieve a 'U' value of 0.14 w/m<sup>2</sup>K with virtually zero cold bridging through 160mm of PE-PIR insulation. In addition, they achieve an excellent level of air tightness. The outer skin is supported from the structural inner skin by conventional thermomass connectors as well as thermomass 'C' connectors which stiffen the connection between the two skins of concrete.

This project was designed, manufactured and installed by CCP. Manufacture took place in CCP's state of the art carousel plant. Utilizing the flat precision engineered pallets, the robotic plotter for the setting out of the CAD drawings, magnetic backed shutters for speed, simplicity and reducing expensive and wasteful falsework, the pouring and vibration stations as well as the tilting station. Pallets are then cleaned and ready for circulation around the computer controlled plant once more.

CCP thermowall panels were chosen for this project because of their effect on programme times and certainty, their thermal mass coupled with exceptionally low 'U' values as well as their aesthetic flexibility.

Panels were originally to have two finishes in grey and white ceramitz with a third contrasting finish in zinc cladding.

In conjunction with the main contractor, CCP proposed precast ribbed panels with a 'radiator' effect and an applied metallic finish on top of the ribs.

The overall effect is quite stunning and delivers the building of a school for the future in terms of programme, cost certainty, thermal performance, BREEAM rating and of course, aesthetics.



(Status: ISO 9001: 2000)

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