



CASE STUDY

Case Study:	Lightweight Panels, Holland and Philippines
Contracted by:	CemPro Ltd
Application:	Lightweight Ceiling and Wall Panels
Requirements:	Lightweight, Pre-Fabricated Cast Panels
Solution / Product:	LightCem® LITECRETE®™

THE PROBLEM

The Client specified a requirement for concrete wall and ceiling panels to provide thermal, acoustic and impact resistant material to be used for pre-fabricated sections for a new building.

One other Client specification was to reduce the weight of the pre-fabricated sections without reducing strength and toughness, as the sections needed to be transported a long way by road transport and man-handled during off-load and construction.

LightCem were asked to provide a solution and LightCem LITECRETE was the obvious start point. Configuration of the base materials in the LightCem LITECRETE cement mix and the use of locally sourced lightweight aggregates meant that an ideal solution was produced.

THE SOLUTION

The final product mix was tested in LightCem's labs to ensure that it met with, (and exceeded) the Client's specifications.

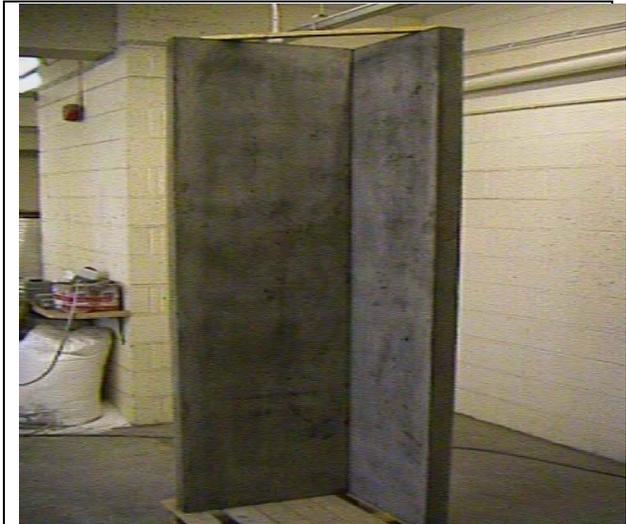
The panels and sections were fabricated off site, delivered and assembled in exactly the same way as conventional concrete panels would be, but without the enormous weight.

Using LITECRETE reduced the density of material used without reductions in strength, therefore less material used is less cost. Using LITECRETE will also significantly reduce the weight of concrete used by around 40% and thereby not overload the structure.

The results was a complete success. The finish was excellent, the building still weathers well and, most importantly, a 40% saving in weight gave significant savings in transport costs and ease of handling.



Pre-Fabricated Ceiling Panels Pre-Production tests of LightCem LITECRETE panels were carried out before full scale production and delivery.



Pre-Fabricated Wall Panels Pre-Assembly tests of LightCem LITECRETE panels were carried out before delivery and construction.



"LightCem LITECRETE is the ideal product for this work and is still functioning perfectly after 20 years.

Mr SK,
MD
CemPro

