

Fitzwarren Court, Salford, Greater Manchester, UK

The Problem

Fitzwarren Court is a large panel high rise construction. Over its life it had suffered from the ingress of water which not only caused the normal structural damage and inconveniences, but also led to the deterioration of the panel fastenings.

The Solution

Engineers Wright Mottershaw had experience with this type of structure elsewhere in the UK, and proposed the Cintec System as being the most appropriate to fasten the external and inner skin to the hollow floor beams. The design required a working load per anchor of 8900 lbs. (40kN) and 16, 741 lbs. (75kN) ultimate in tension.

During installation, tests showed that the anchors exceeded the required parameters. The high tensile stainless steel studding anchor was more than capable of carrying the load. The anchors were designed to inflate within the void of the floor beam and were inserted in the outer and inner skins and in the end of the void.

The Cintec system was chosen because of its engineering benefits, but also because it did not require occupants to vacate the block, as all the work could be done from the outside. The project finished ahead of schedule.



Diamond core drilling.



Injecting grout into anchor.