



PROJECT CASE STUDY

National Trust Visitor Centre, Dunham Massey

- Architect: Brownhill Hayward Brown
- Structural Engineer: Hancock Wheeldon & Ascough
- Main Contractor: William Anelay
- Sub-Contractor: PM Structure



The 1,350m² visitor centre at Dunham Massey (one of the National Trust's most popular beauty spots in Cheshire) is a significant project from Brownhill Hayward Brown.

The Challenge

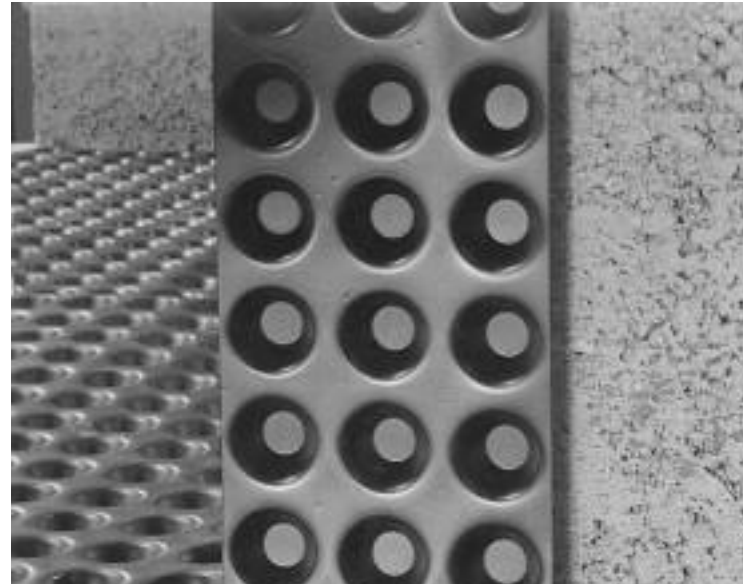
The new building is set on the slope of a wooded valley, arranged around a terrace. Site conditions and construction methods are varied, especially around the perimeters, with a completely dry environment (Grade 3 of BS: 8102) required throughout most of the building. It was likely that a multi-product/application system would be required to address the differing challenges.

The Solution

Following discussions with the structural engineer a decision was taken to install the waterproofing system internally to the majority of the building. This internal system allowed us to avoid some tricky interfaces and potentially unbuildable details, plus making it easier to maintain waterproofing continuity.

RIW Sheetseal 226 was used as a robust DPM over the largely un-interrupted floor slab. The product was loaded with a screed to resist potential hydrostatic pressure due to varying site levels. Around the varying perimeters a mixture of RIW Flexiseal and RIW Toughseal were used to complete the waterproofing to DPC and threshold details, including large glazed units to the viewing area. These two liquid membranes were ideally suited to some of these irregular profiles, with Flexiseal being able to cope with any differential movement, and Toughseal for heavy loadings and fixings. Compatibility of all three products allowed for simple detailing.

External application was to a retaining wall to the under-croft which was to be used for storage. Tanking was required to prevent moisture ingress and a partially suspended slab posed the question of potential ground settlement. Due to this risk, RIW



Structureseal was used under the slab, with RIW Cavity Drain R7 providing protection for the walls.

Featured Products

RIW Sheetseal 226

A cold applied, high density polyethylene film, coated with a bitumen/rubber self adhesive layer with a removable reinforced silicone paper. Particularly used where large unobstructed areas are to be waterproofed.

RIW Cavity Drain R7

An internal tanking cavity drainage membrane system comprised of high density polyethylene drain board with 7mm studs, used where site conditions or structural design make it difficult to use traditional tanking methods.

RIW Toughseal

A liquid applied coating, RIW Toughseal is solvent free, polymer modified, colour coded and based on epoxy resins. Typically used in areas that require excellent tensile adhesion, chemical resistance and abrasion resistance such as plant rooms and under raised access floors.

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