

PROJECT REFERENCE

WATERPROOFING

Plumb's Chambers, Warwick, QLD

WATERPROOFING A STATE HERITAGE LISTED HISTORIC BUILDING

Plumb's Chambers is a historic building registered as a 'Place of Cultural Significance', located in Warwick, Queensland. The building dates to 1874-75 and was structurally compromised with substantial rising damp issues.

Overview

Property Type: Heritage Listed Building

Project Type: Restoration

Scope: Termite-damaged woodwork - Extensive rising damp

Contractor: Wetlock Waterproofing

Area m²: 800

Category: Waterproofing

Products Used

Newton System 800 Damp Proofing Products

Project Details

Plumb's Chambers dates to 1874-1875. Built of timber, brick and sandstone, the building was structurally degraded by compromised footings and subsequent movement, termite-damaged structural woodwork, and substantial rising damp issues. With the \$1 million+ restoration works to be undertaken by the McConaghy Group with guidance by Andrew Watson of Watson Architects, an internationally trained and experienced building conservation architect; the restoration scope was to preserve as much of the original building as possible, whilst making it a fully functioning office or retail space that meets 21st century standards. McConaghy Group's principal Mr. Robert McConaghy's direction was "I want this done right, don't cut any corners. Do it properly."



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Methodology

The integrity of the restoration process was not to be influenced by the achievement of a completion deadline. After careful consideration and collaboration between the McConaghy Group, Watson Architects, Newton Waterproofing Systems UK and their Australian distributor Bayset Trade Supplies, and Wetlock Industries (the authorised Newton System Contractor), Newton System 800 was specified. It was selected for its successful performance on similar properties in the UK; its ability to allow the building to breathe yet still control moisture vapour transmission; compatibility with new termite barriers and subsequent wall and floor coverings; speed of installation as no curing periods. The system is also reversible (so can be removed without altering the integrity of the building).

Result & Testimonial

Newton System 800 was specified for application to all in-ground and externally exposed fascia walls, and under all bearer and joist floors. This specification required careful detailing as the Newton 803 membrane transitioned between levels, including behind and around existing bearers, joists and wall-plates, full wraps around door and window openings and the decommissioned fireplace. Works required coordination with carpenters, plasterers, pest control (termite barriers), electricians, plumbers and air-conditioning contractors to ensure all design requirements were met without compromise to the Newton Damp Proofing System.

Once the existing wall coverings and cement render coatings were removed, the extent of rising damp could be clearly seen with the naked eye, and the walls and footings felt cold and damp to the touch. The job was inspected 2-weeks after membrane installation was completed, and condensation of the rising damp was clearly evident behind the membrane, in many areas to a height of approximately 2.2m. McConaghy's project manager was very surprised to see just how much moisture the system contained, and this was a clear illustration that the Newton System 800 was performing effectively and as intended. It was also clear that the originally specified render and chemical barriers systems would have likely struggled to achieve the same control of moisture vapour transmission.

In summary, Newton System 800 was successfully installed by Wetlock on time and on budget, and the client is very happy with its performance. Wetlock are very happy with the results and look forward to the opportunity of working on heritage restoration projects in future.

