STORMCURE
LIQUID APPLIED MEMBRANES

BALCONY & DECKING

CASE STUDY

Project Size: 350ft²
Project Type: Refurbishment
Sector: Residential
Systems Installed: Protec FW-25 SlowCure
Technology: MPeC

A residential property in San Antonio required a complete refurbishment of its ageing modified bitumen deck after the existing timber structure had deteriorated and was no longer providing reliable weather protection. Stormcure Authorized Contractor, Will Roof It, was appointed to undertake the works and selected the Stormcure, MPeC-powered, Protec FW-25 liquid waterproofing system to deliver a durable, aesthetic solution that will last for years to come.

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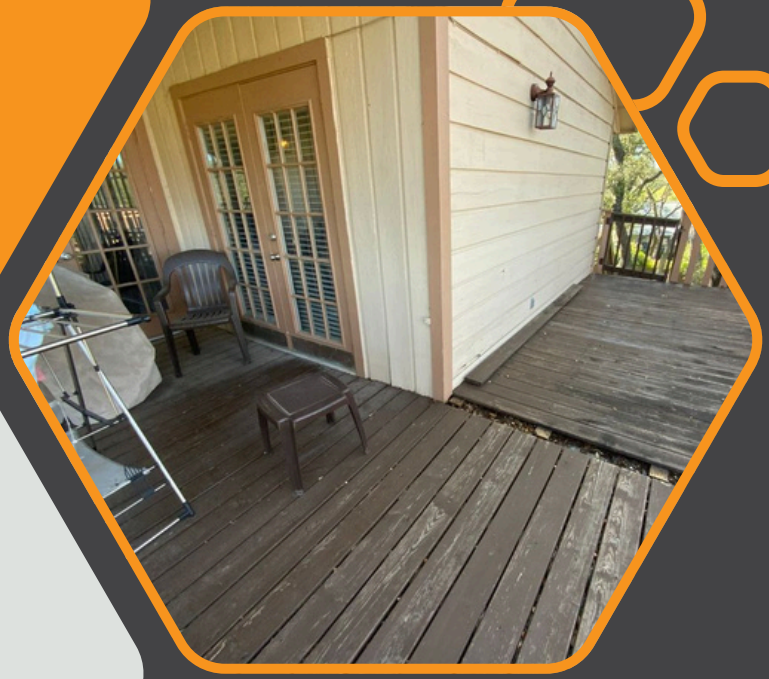

PROJECT CHALLENGES

The existing modified bitumen deck had reached the end of its serviceable life and required complete removal before any waterproofing works could commence. Establishing a new structurally sound substrate was essential to ensure the long-term performance of the waterproofing system.

The project also presented several technical challenges. Installation was undertaken during periods of high ambient temperatures typical of the Texas climate, requiring careful consideration of working times and curing characteristics. In addition, the property featured decorative stonework around the balcony perimeter that needed to be sympathetically incorporated into the waterproofing design without compromising aesthetics or weatherproofing integrity.

A further requirement from the client was the installation of a new timber decking system above the waterproofing membrane. This detail required a solution that would avoid mechanical penetrations through the finished waterproofing layer, ensuring the membrane remained completely watertight for the duration of its service life.

THE STORMCURE SOLUTION

The existing timber deck was stripped back in full and replaced with new tongue-and-groove plywood to create a strong and stable substrate suitable for the liquid-applied system. Due to the elevated installation temperatures, Stormcure Protec FW-25 SlowCure grade was specified to provide extended pot life and improved workability in hot conditions.

Once the new deck had been installed, the plywood was treated with Stormcure Uni Primer DP to seal the substrate's porosity and ensure optimum adhesion.

The Stormcure MPeC-powered Protec FW-25 system was then applied to the full balcony deck area, creating a seamless and durable membrane capable of accommodating structural movement while maintaining excellent strength.

Perimeter flashings and detailing works were completed first to establish complete waterproof continuity across all transitions and upstands. Particular care was taken around the home's existing stonework, which was sympathetically encapsulated within the waterproofing detail to create a clean and aesthetically pleasing finish while ensuring complete weather protection.

The Stormcure Protec FW-25 system was then applied across the full balcony deck area. The liquid resin was installed with full reinforcement to create a seamless, highly durable waterproof membrane capable of accommodating normal structural movement while maintaining excellent mechanical strength. As a cold-applied liquid system, Protec FW-25 eliminated the need for hot works and allowed intricate detailing to be completed quickly and efficiently.

Thanks to Stormcure's MPeC-powered composite membranes, the proprietary technology of Roberts Group, this membrane combines a modified polyester resin with CSM fibreglass reinforcement to create a highly durable, waterproof, and flexible membrane. The advanced MPeC technology enabled installation with unrivalled speed and in a wide range of temperatures, perfect for the hot summer heat in San Antonio.

To achieve the client's desired aesthetic, a new pine 2x6 wood deck was installed by another contractor, above the completed waterproofing system. Maintaining the integrity of the waterproof membrane was critical, therefore traditional mechanical fixings through the membrane were avoided entirely.

Instead, timber battens were securely bonded directly to the cured MPeC-powered Protec FW-25 membrane using a high-performance adhesive system. The timber decking boards were then mechanically fixed into the bonded battens only. This method created a completely watertight detail while providing a strong and secure substrate for the finished decking system.

The refurbishment transformed the ageing balcony into a durable, fully waterproof outdoor space finished to a high aesthetic standard. The seamless Protec FW-25 system provides long-term resistance to weathering, foot traffic, and structural movement, supported by Stormcure's proven performance and warranty options. The client was delighted with the finished result and the quality workmanship delivered by the Will Roof It team, achieving a balcony that combined long-term waterproof protection with aesthetic visual appeal.