

Premier Composite Technologies and Sicomin Collaborate on the Project of the Custodian of The Two Holy Mosques King Abdullah Bin Abd Al-Aziz for Mataf Extension

Project showcases the potential of composites to revolutionize architectural applications.

Sicomin, Marseille, France, 17 February 2025: Sicomin, a global leader in the production of epoxy resins, proudly announces its role in a collaboration with Premier Composite Technologies (PCT) for the Mataf extension at the Holy Mosque of Mecca, KSA. The project incorporates extensive uses of composite materials in architecture, with the Mataf Ceiling - a structure spanning 216,800 square metres - at its core.

Composite materials were the only viable solution capable of meeting the ambitious weight and performance demands of the ceiling installation, with Sicomin epoxy systems, quadraxial stitched glass fabric and carbon reinforcements being used to create lightweight and intricately decorated soffit panels that define the Mataf Ceiling.

Installed across four levels surrounding the Mataf walkway and the sacred Kaaba, the ceiling was designed, fabricated, and installed by PCT. Each individual panel, produced in Dubai and measuring up to 12 x 3 metres, showcases Arabic mashrabiya patterns crafted from ultra-high-performance concrete (UHPC) and engineered stone agglomerate inlays. These panels meet strict weight requirements of 67 kg/m² while incorporating critical functionalities such as acoustic insulation, fire protection, and integrated custom LED lighting.

To meet the project's rigorous technical requirements and ambitious timeline, Sicomin supplied its **SGi 128 Bio Gelcoat** and **SR 1122 Fire Retardant Epoxy**. Working closely with PCT, Sicomin developed a custom lower-viscosity version of the SR1122 resin, enhancing fibre wet-out and optimizing production efficiency. This development enabled PCT to achieve its output levels during peak production. Sicomin also supported extensive third-party fire testing, ensuring that the SR 1122 panels with SGi 128 Bio Gelcoat complied with the ASTM E84 Class A standard.

To meet the tight production schedule, Sicomin established a dedicated warehouse in Dubai, ensuring a flexible and reliable supply chain. This logistical capability supported PCT's average production rate of 6,000 square metres per month, while accommodating design approvals, installation constraints, and the complexities of mold fabrication.



The Shamia Expansion, initiated in 2014 and resumed in 2020 after a temporary pause, is set for completion in Q3 2025. This phase of the project represents a major milestone in the use of composites in architecture, with additional phases and further collaborations already in development.

“We are very proud to have expanded our UAE warehousing and production capacity in France to ensure a fast and secure supply chain for PCT,” comments Ken Marcovich, CEO, Sicomin. “Our goal is to enable our customers to achieve their ambitions. By delivering Fire Resistant, GreenPoxo and Architectural systems at an industrial scale, we ensure they never encounter supply limitations.”

Hannes Waimer, CEO, Premier Composite Technologies, added: “The Mataf Extension has been a landmark project for us. The complexity of the Mataf Ceiling required a unique combination of innovative materials, precise engineering, and flawless execution. Sicomin’s support, from custom resin development to reliable material supply, has been essential in helping us meet the project’s demanding specifications and timelines.”

A section of the Mataf Ceiling manufactured by PCT will be on display on the Sicomin stand at JEC World 2025, Paris.

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