

Kemper's Seed-Based Membrane Keeps Rain Out at Kew

Wakehurst, West Sussex



The Royal Botanic Gardens, Kew's Millennium Seed Bank can look forward to a drier future thanks to Kemperol 2K-PUR, a cold liquid-applied waterproofing system from Kemper System made from.... the seeds of the Ricinus communis plant!

Opened in 2000 as a seed archive and research facility that stores millions of seeds gathered from plants at threat of extinction from around the world, Kew's Millennium Seed Bank at Wakehurst Place is a globally renowned facility. Ricinus Communis, more commonly known as the castor oil plant is amongst the collections at Kew's Millennium Seed Bank and is a sustainable crop used as the basis for Kemper System's ground-breaking solvent-free and odourless waterproofing membrane.

Standing water in the distinctive sectioned roof's back gutters had caused the welded joints to degrade, resulting in leaks to the roof that had to be addressed.

Explains roofing contractor, Mark Draper from Draper Construction Ltd: "The joints between the stainless steel rolled roof and the stainless steel lined gutters were designed to enable movement but, where the welded connection had begun to degrade, leaks had started to occur. In response to this, Kew's Millennium Seed Bank needed a solution that would be both watertight and flexible and Kemper System's range of cold liquid-applied membranes was the ideal answer."

Kemper System advised Kew's Millennium Seed Bank to select Kemperol 2K-PUR for the project as the sustainably sourced and solvent-free resin and flexible reinforcement fleece, manufactured using a recycled plastic bottle content, delivered on the Royal Botanic Gardens, Kew's environmental commitment. Moreover, as the solvent-free membrane is also odour free, it enabled the building to remain fully operational throughout the project, despite the close proximity of the air vents to the back gutters on the roof.

Draper Construction primed the gutters with Kempertec Primer before applying the Kemperol 2K-PUR resin. The resin saturates a polyester reinforcement fleece, which is immensely strong, flexible and tear resistant, and cures to form a seamless, homogenous membrane that cannot delaminate.