

Case Study

The Wedding Cake, Waddesdon Estate



Project: The Wedding Cake, Waddesdon Estate (Rothschild Foundation)

A first for liquid applied membranes, as WestWood Liquid Technologies delivers a matrimonious project to waterproof a structural piece of art designed by a world-renowned Portuguese artist.



Key Statistics



Client: Rothschild Foundation
Main contractor: Westgreen Construction
Specialist Roofing Contractor: EMC Roofing & Cladding Ltd
Project size: 100m²
Completion date: 21/07/2023
WestWood products: WestWood Wecryl System – WMP 174s, Wecryl 230thix, Wecryl 333, Wecryl 420, Wecryl 810, Wecryl 815



An Introduction

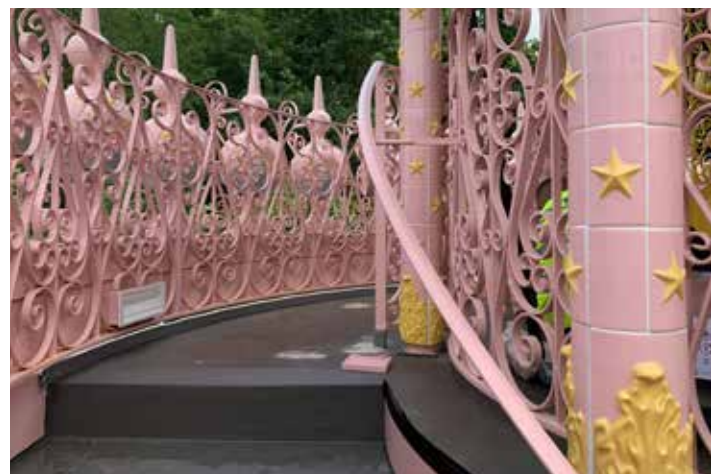
“Innovative products which exceeded our expectations ...”

Working closely with main contractors, Westgreen Construction, and installers, EMC Roofing & Cladding Ltd; WestWood Liquid Technologies was approached to deliver a waterproofing membrane for an impressive structural piece of art named ‘The Wedding Cake’.

For this project, it was paramount for the waterproofing solution to deliver a robust, durable structure as well as outstanding aesthetics to meet the requirements of the artists’ design.

Located within the grounds of Waddesdon Estate near Oxford, the art was designed by renowned Portuguese artist, Joana Vasconcelos, and shipped to the UK as a steel modular structure which was subsequently constructed by Westgreen contractors.

The Wedding Cake is a 12-metre-tall ceramic sculptural pavilion inspired by Baroque architecture and traditional ceramic traditions of Lisbon. It features thousands of ceramic tiles glazed in delicate shades of pink, green, and blue, reminiscent of icing on a cake.



Adorned with sculptural ornamentation and incorporating the sounds of trickling water, the pavilion was commissioned by the Rothschild Foundation as a celebration of love, festivity, and joy, fittingly situated within a grove of trees at Waddesdon beside the 19th-century Dairy.

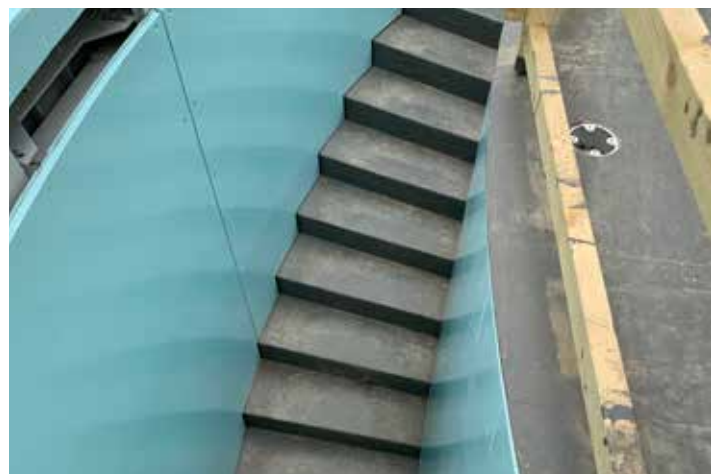
Scope of Works



The project saw WestWood Liquid Technologies create a waterproofing solution and a non-slip surface for this monumental ceramic sculptural pavilion, involving the waterproofing of each stairway on the three levels, as well as the walkways and terrace areas around the 'cake'.

Firstly, WestWood provided its PMMA-based (polymethyl methacrylate) Wecryl System waterproofing layer – which has high levels of flexibility and crack-bridging properties, even at sub-zero temperatures. As a cold-applied liquid waterproofing membrane with cure times of up to 30 minutes, this was a perfect solution to cover the multi seams and joints across the structure. The fully-cured bond prevents flow paths of water appearing under the membrane, and is a solvent-free solution with a guarantee of 10 years.

The comprehensive waterproofing solution also included a customised colour-matched **Wecryl 420 non-slip wearing course**. This ensured each level of the cake-shaped pavilion was watertight, including step access, flat areas, and gullies for rainwater drainage.



Project Challenges



Technical expertise was vital on this project as the structure was not a traditional roof or flooring project, but a piece of art that required a deep understanding of aesthetics, materials, and engineering. WestWood excels in this area of the market as a true leader in PMMA manufacturing for both durable systems and outstanding aesthetics. Thanks to our highly experienced and knowledgeable team, we were able to deliver to an extremely high standard.

Westwood's Wecryl 420, which is also a PMMA coating, offers excellent abrasion-resistance and non-skid properties, and has been developed specifically for heavily trafficked areas. The skilled team at WestWood were able to colour match perfectly to the yellow, pink, green, and blue pastel colours required.

Achieving a precise colour match for the specialised waterproofing and non-slip solution with the delicate porcelain tiles was challenging but crucial to maintaining the artistic integrity of the piece. **Wecryl 420** is a two-component, fast reactive PMMA-based coating, making sure the structure wasn't just functional but also aesthetically aligned with the artist's vision.



Another challenge was the cross-border collaboration with the artist's team in Portugal and the installation team in the UK, which required navigating the language-barrier, as well as logistical differences.

The project was also significantly impacted by cold weather conditions during the installation phase, which demanded on-the-spot problem-solving and adaptability.

A match made in heaven

“We could deliver an accurate colour match, achieving the artists’ vision ...”

The successful completion of the Wedding Cake project marked a significant achievement for all stakeholders involved. The installation showcased the ability to seamlessly integrate art and practicality, transforming a unique concept into a functional and visually stunning public attraction. WestWood’s waterproofing and non-slip solution played a pivotal role in ensuring the pavilion’s longevity and safety.

Speaking of the project, Oliver Ray, owner of EMC Roofing & Cladding Ltd, said: “This was the first time we had worked with WestWood Liquid Technologies. As the project was so niche, we needed a specialised team involved.

“From day one, the team at Westwood were fantastic – transparent communication, regular technical support and contractor training, not to mention its innovative products which exceeded our expectations and meant we could deliver an accurate colour match, achieving the artists’ vision, while also meeting the safety and durability requirements for this structure.”



Through innovative waterproofing solutions, meticulous colour matching, and a deep appreciation for the artistry involved, the project successfully brought to life an extraordinary sculptural pavilion that will stand as a symbol of love, festivity, and joy within the historic Waddesdon Estate. The Wedding Cake not only showcased the technical expertise of WestWood but also exemplified the fusion of art and engineering in a truly remarkable way.