



“To build the roof structure was a major challenge.

A key element in the successful delivery was getting the right contractors.

Partnership was crucial in ensuring a streamlined project management, since the interface between the membrane roof and timber construction was crucial.”

Andrew Unwin
Project Executive,
Canary Wharf

RADMAT PRODUCTS USED:

PermaQuik PQ6100
EshaFlex 370 WS Root Barrier
ProTherm/ProTherm S insulation

ARCHITECTS:

Foster + Partners

Radmat Building Products has supplied the waterproofing roofing system for the Crossrail Place shopping development and roof garden in Canary Wharf. The system provides high performance waterproofing and thermal insulation – guaranteed for the lifetime of the structure – and has enabled the construction of an extensively planted living roof.

- The 310m long roof arches 30m over the park and opens to allow natural irrigation
- Highly insulating roofing materials help create a microclimate for the gardens



Located in the waters of the north dock next to the HSBC tower and close to the residential neighbourhood of Poplar, Crossrail Place's four levels of retail, roof garden, pavilions and station entrances are unified by a complex timber roof, which wraps around the building like a shell. The roof's lattice opens in the centre to draw in light and rain for natural irrigation, and is open along the sides and at either end to allow views of the water and surrounding streets.



Radmat Approved Contractor Prater delivered a 9,300m² roofing solution using **PermaQuik PQ6100** Hot Melt Monolithic Waterproofing Membrane, **EshaFlex 370 WS Root Barrier** and **ProTherm** insulation.

Construction access to the complex inverted timber roof was challenging, so Radmat's products were chosen for their quick and flexible application and fast-sealing properties.

PermaQuik is widely used beneath green roof installations where long-term weather tightness is a necessity, and it was chosen to support the extensive and densely planted gardens, which are the main feature of the Crossrail Place roof terrace.

The PermaQuik membrane was followed by EshaFlex 370 WS Root Barrier, a reinforced bitumen membrane that is torch applied to the base sheet. It was selected because of its thermal efficiency and suitability for use with living roof systems. Partnered with ProTherm's excellent insulation, the complex timber roof now boasts a waterproof system that is BBA Certified to last the lifetime of the building.

The wooden structure evokes the ships that once sailed into West India Dock and provides a warm, natural counterpoint to the steel and glass towers of Canary Wharf. And with Radmat's high performance products and lifetime guarantee, the green roof terrace at Crossrail Place will be a living oasis in the heart of London's financial district for years to come.