

CASE STUDY

Meta Offices, Canal Reach



RADMAT PRODUCTS USED:

- PermaQuik Hot-Melt Monolithic Membrane Waterproofing System
- ParaFlex Liquid Applied Waterproofing System
- EshaFlex Reinforced Bitumen Membranes
- ProTherm Insulation
- ProTherm RockFace A2 Non-combustible Upstand
- MedO Living Roof Systems

“With up to 450 people working on site at the height of the project, co-ordinated teamwork was vital. BAM, the client team and key contractors worked extremely closely together to plan and deliver the project. But its ultimate success was down to strong relationship building and focus on well-being and safety, as much as it was to meticulous organisation.”

BAM

ARCHITECTS:
Bennetts Associates

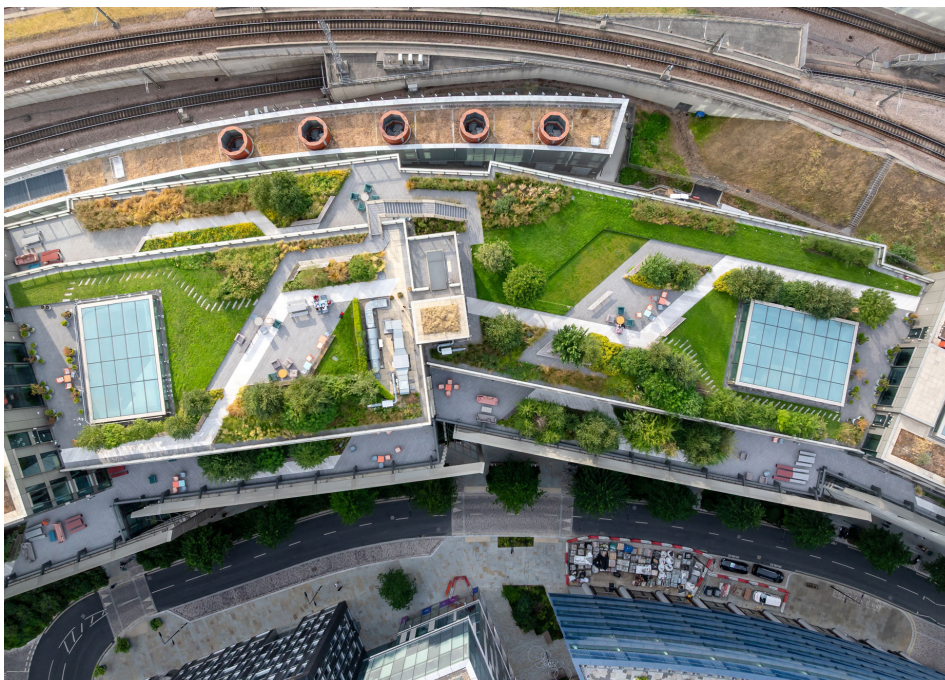
11-21 Canal Reach forms part of **Meta's** major London campus at King's Cross and is one of the largest office buildings on the estate. Designed by Bennetts Associates and delivered by BAM, the building provides around 39,500 square metres of workspace, with capacity for approximately 4,000 Meta employees. The development is 12 storeys high at its highest point, at the southern end of the site, stepping down to nine storeys towards the north.

Radmat were contracted to supply waterproofing and green roof systems to the 3,900 square metres of landscaped roof gardens and terraces. Utilising **PermaQuik Hot Melt Monolithic Membrane** and **Radmat's EshaFlex Reinforced Bitumen Membranes** to form a seamless bond, a robust and fully integrated waterproofing system was achieved. For the underground basements **ParaFlex Liquid Applied Waterproofing** system was installed in the harder to access areas.



A defining feature of the project is its roofscape. Rather than treating the roof as a purely functional zone for plant and services, the design utilises it as valuable external space. Across the building, around 3,900 square metres of landscaped roof gardens and terraces provide planted amenity areas for occupiers while supporting the wider ecological ambitions of the King's Cross masterplan.

This approach makes the roof a meaningful part of the building's sustainability strategy. The extensive planting helps soften the scale of the development, encourages local biodiversity and contributes to improved urban habitat. It also supports employee wellbeing by creating accessible outdoor spaces for rest, informal working and connection with nature within a dense city environment.



The roof design was made possible by locating major plant areas at lower levels, close to the district energy infrastructure, rather than filling the roof with mechanical equipment. This freed the upper levels for planted terraces and gardens, allowing the building to prioritise people, landscape, and environmental performance.

Radmat's **PermaQuik Hot Melt Monolithic Membrane** and **ParaFlex Liquid Applied Waterproofing** systems ensured these plant areas, plenums and basements remain watertight. These systems provided a seamless, fully bonded, and highly durable waterproofing solution.

The green roof areas also contribute to the building's passive environmental response. Planted roof build-ups can help moderate surface temperatures, reduce heat gain, slow rainwater run-off and improve the building's relationship with the surrounding microclimate. In a large commercial building of this scale, these details are important because they allow the roof to work harder than a conventional flat roof, delivering environmental value as well as visual and social benefit.

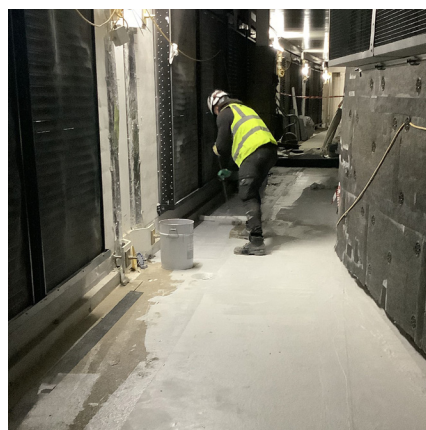
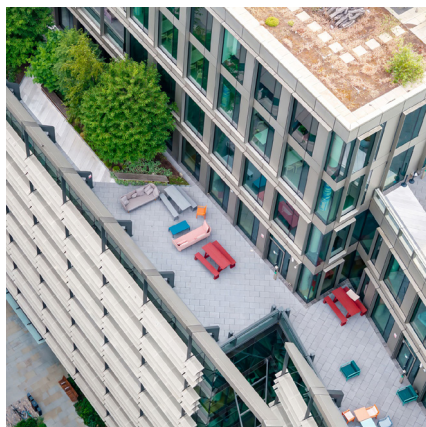
A combination of Radmat's **PermaQuik**, **EshaFlex** and **ProTherm Insulation** across multiple roof levels and terraces ensured the performance of the waterproofing system whilst maintaining thermal integrity, guaranteed for the lifetime of the building.

The **MedO Living Green Roof System** roof also maintains the water run-off and helps to keep the planted areas lush and verdant for the workforce and visitors to enjoy, whilst helping to increase biodiversity in the area.

The building is connected to the King's Cross District Energy Network, which provides zero-carbon heating, hot water and cooling from renewable energy sources. Combined with its roof gardens, low-impact material choices and efficient building fabric, 11-21 Canal Reach demonstrates how large workplace buildings can reduce their environmental impact while improving the experience of the people who use them.

Sustainability was considered from the earliest design stages. The building achieved one of the lowest embodied carbon ratings on the King's Cross estate, with a final embodied carbon figure of 705kg CO₂e/m². Material efficiency, reduced structural demand and the exposed concrete finish helped save around 10,000 tonnes of CO₂e against the Stage 2 baseline.

With the integration of Radmat's advanced waterproofing, insulation, and living roof systems at the core, the project successfully delivers long-term durability, exceptional thermal performance, and environmental resilience, helping to achieve a **BREEAM Outstanding** rating.



ParaFlex installation in basement areas



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