

## CASE STUDY

# Great Eastern Quays



**“We were only able to use cranes to bring the build up to a certain height before switching to hoists because of flight path restrictions. The airport is a noisy affair and the team has had to look at various ways of improving the acoustic performance, which lead to an improvement in the thermal performance. The client was delighted with the sustainability and efficiency of the final solution.”**

Bradleigh Coker, Galliford Try

### RADMAT PRODUCTS:

PermaQuik PQ6100  
ProTherm G Insulation  
Texsa Protection sheet  
ProTherm MK Filter Sheet  
G11 Filter Sheet  
MedO D25 Drainage Boards

**ARCHITECTS:** RM\_A Architects

**Radmat Building Products** and Approved Contractor **Sureweld Specialist Roofing Contractors**, worked closely to deliver the roofing systems on the Galliford Try Partnerships regeneration project at Royal Albert Wharf. With the project designed to inject new life into the area, the system provided had to achieve high performance and sustainable waterproofing. With its BBA Certified service life guarantee **PermaQuik 6100** was chosen for its durability and reliability.

- Challenging installation environment next to London City Airport
- Thermal requirements met by **ProTherm G XENERGY SLP**
- Watertight roofing materials ensure 9500m<sup>2</sup> roof is leak free.



Located at the Eastern end of the Royal Docks Complex, and forming part of the Albert Basin area, the Great Eastern Quays development will welcome 350 brand new 1-4 bedroom homes, 44% of which will be affordable housing. The project's ambition is to enhance the East Beckton community whilst its design preserves the Dock's heritage and protects historic features, such as the 100 year-old impounded pumping station, which will be preserved onsite. The £85 million structure features an inverted and flat variety of green and brown roofs. These features will not only enforce the high-quality aesthetic of the development, but will also contribute economically to the natural environment with recycled materials.



Being part of one of the largest urban regeneration projects in Europe was not without its problems.

There was high pressure regarding completing the first phase of the project within the deadline, this was because of the challenges construction faced due to height restrictions with the site located 500m from the runway at London City Airport. Access was also an issue because of its close proximity to the Thames, demolition and building had to be carefully managed. Hours of work were restricted to between 8pm and 6am only because floodlights could not be used in case they dazzled or confused pilots.

The structure could only be built to three quarters of its height before cranes had to be disbanded and the remaining construction completed with the use of a hoist system and pulleys to aid the transportation of tons of roofing material up on the roof.

To meet the demanding brief **PermaQuik PQ6100 Hot Melt Monolithic** waterproofing membrane was chosen to ensure the building was watertight to the highest standard with minimal runoff. **Texsa Protection Sheet, G11 Filter Sheet, MedO D25 Drainage Boards, growing medium and planting** completed the waterproofing solution for the green/brown roofs, balconies and screened winter garden.

Being next to the airport can be very noisy so the construction team had to look at ways of meeting the clients demands on sustainability and efficiency. **Radmat's ProTherm G XENERGY SLP Insulation** helped meet the thermal efficiency targets.

The re-development of the former Pharmaceuticals warehouse and offices site has produced a pleasing mix of new buildings and regeneration reflecting the heritage of the docks and transforming the riverfront into a thriving community to rival Shoreditch.