

CASE STUDY

BRUNEL UNIVERSITY, UXBRIDGE

Saltash Halls of Residence receive state-of-the-art fire safe roofing



The complex roof of Saltash Halls of Residence at Brunel University had been experiencing leaks for many years and the waterproofing system had deteriorated significantly, requiring complete replacement. Over 24 roof areas needed refurbishment, including flat and sloping areas.

The client's criteria stipulated a waterproofing system approved by the Loss Prevention Certification Board (LCPB) and based on testing carried out by the Warrington Fire Research Centre. Permanite Engineered Roofing Systems was selected on the basis of the quality of its materials and its one point insurance-backed guarantee.

An initial survey was carried out to establish the nature of the repair work needed, which was followed by a detailed report considering all aspects of the roof, including the brickwork and the detailing around windows and doors.

The complex nature of the roof, and the strict performance requirements of the client called for innovation, both in terms of the products used and the installation techniques employed. Two innovative waterproofing products were used, Permanite Ultra prevENT roofing membrane and Permanite Permaphalt Mastic Asphalt.

By incorporating graphite technology, Ultra prevENT membranes provide excellent fire protection performance without affecting the primary waterproofing function and in the event of a fire afford a

Project Sector: Education

System: Built-up system

Products Used: Ultra prevENT, Mastic Asphalt

Contractor: Ifield & Barrett

Started: June 2006

Completed: September 2006

Size: 1200m²

Contact: Terry Davis

rate of heat release half that of standard polyester. PrevENT graphite technology is also environmentally friendly and has the highest performance ratings in all sections of European fire tests EN 1187 Parts 1, 2, 3 and 4 (BS 476 part 3: 2004). Permaphalt is a polymer modified mastic asphalt roofing consisting of polymer modified bitumen and graded limestone aggregate. It is covered by BBA Certificate No 89/2299 and by LCPB approval 666a/01.

Permanite Engineered Roofing Systems monitored the work throughout the Brunel University project and produced a full log book and photographic record.

Within two weeks of the project's completion, Permanite Engineered Roofing Systems carried out a full thermographic survey of the roof using an infrared camera to verify to the client that continuity of the insulation layer had been achieved and to illustrate the performance of the installed membrane.

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