

Built-Up Roofing

British Library, Boston Spa, West Yorkshire



Background

While the British Library at St. Pancras, London is the main site, much of the vast collection of library documents is stored across a number of sites in London and at the Library's document delivery operation at Boston Spa, near Wetherby in West Yorkshire. The Boston Spa site houses the national document supply centre, and contains about 8.5 million books and serials, and is the home of the Northern Reading Room, Northern Listening Service and Document Supply Collection.

Challenge

The waterproofing system to the existing roof was a two-layer composite/modified bitumen coating covered with chippings which apart from having poor falls in some areas appeared to be in reasonable condition. That was until a crack right through it revealed the insulation was saturated with water. A further visit to take core samples revealed that up to 60% of the roof could have some form of water penetration.

Solution

It took Tucker & Tunstalls Limited just three winter months to refurbish the 4,500m² roof that they knew contained valuable property as well as library personnel who continued to occupy and work throughout the project.

The existing waterproofing and saturated insulation was stripped off down to the vapour control layer, in order to maintain a level of waterproofing while works were carried out.

The Profiles Vapour Vent-XL vapour control layer was applied over the existing with the new system including Icopal's tapered Thermazone Torch-on Insulation with an increase in thickness to meet current building regulation requirements. The waterproofing system utilised the Profiles Vent XL underlay and the FireSmart Profiles blue-grey capsheet which is specially formulated to reduce the risk of fire spread and penetration into the roof. New Roofgard drainage outlets were installed to all the existing outlets to ensure a complete seal to the rainwater system. An additional layer of Profiles XL brown mineral surface membrane was used to delineate and to reinforce walkways which were also lined with Icopal's KwikGard freestanding roof safety system to complement the KwikGard parapet system and ManGard anchor and fall arrest systems around the perimeters.

Project: <i>British Library (Block 6), Boston Spa</i>
Area: <i>4,500 m²</i>
Completion Date: <i>2007</i>
System: <i>Profiles System</i>
Client: <i>British Library</i>
Contractor: <i>Tucker & Tunstalls Ltd, Leeds</i>