



Built-Up Roofing

Howard School & Rainham School for Girls / MITIE Tilley Roofing Ltd,



Background

The Howard School, a Specialist Sports College and boys' school with 1,500 pupils, shares the same site and sports facilities as the Rainham School for Girls, a separate institution and technology college, also with 1,500 pupils.

Challenge

IMA Contractor MITIE Tilley Roofing Ltd was tasked with completely refurbishing the roofs of the sports hall, changing rooms and corridor over a period of 20 weeks, including both holidays and term time. The existing roof comprised a multi-layer build up of felt and insulation on the original chipboard timber decking, with a number of glazed mono-pitch Georgian wired cast glass rooflights set in glazing bars. Structural analysis found the steel frame supporting the roof structure to be very 'slender' and so additional 'top hat' steel supports were installed on the flat roof sections, and the specification for the mono-pitch rooflights changed to a lighter, composite panel construction.

Solution

The sports hall was closed while the work was carried out, with safety netting used internally and scaffolding externally. As the client's budget did not allow for a temporary scaffold roof enclosure, the existing decking and glazing had to be stripped with even greater care than usual, and the process was dependent on good winter weather.

The decking was replaced with 19mm plywood, and then Icopal's self-adhesive vapour control layer was used, with a tapered insulation scheme used on the central roof areas to redirect water to a new external guttering system. Waterproofing comprised Icopal's Total Torch Dispersion Layer and Olympic Thermaweld blue-grey mineral capsheet.

The contract was completed on time and within budget, and resulted in MITIE gaining a further four roof refurbishment projects at the site, totalling an additional 42 weeks of work and using a further 3,250m² of Icopal materials.

Project:

Howard School & Rainham School for Girls, Kent

Area:

1,800m²

Completion Date:

January 2010

System:

Total Torch and Olympic Thermaweld

Client:

Medway Council

IMA Contractor:

MITIE Tilley Roofing Ltd, Sevenoaks