



SYSTEM	PRO-BW®PLUS PROTEUS PRO-THERM
PROJECT TYPE	NEW BUILD
INDUSTRY	RAIL INFRASTRUCTURE
APPLICATION	FLAT ROOF WALKWAYS

KEY CHALLENGES

Rooftop obstructions and plant

The roof design incorporated multiple plant items and service penetrations, leaving little clear space for the insulation and waterproofing to work around. The cut to falls scheme was designed around each obstruction, keeping the roof falls continuous whilst accommodating the plant locations — reducing the need for on-site alterations and keeping the layout true to the design.

CONCLUSION

Rather than relying on standard insulation boards or forming falls on site, Proteus Waterproofing supplied a fully coordinated insulation package alongside the Pro-BW® Plus waterproofing system, with the coloured walkways providing defined routes for future maintenance whilst protecting the membrane from foot traffic. Pro-BW® Plus is a cold applied, fully reinforced liquid system, BBA certified and UK manufactured — supporting the issue of a guarantee.

PROJECT OVERVIEW

Proteus Waterproofing provided a roofing solution for a new build extension at Bletchley Rail Depot, requiring an insulation scheme to create the roof falls whilst delivering the thermal performance required. Cut to falls Proteus Pro-Therm PIR was waterproofed with Pro-BW® Plus and finished with coloured walkways.

Interface details

Numerous interfaces occurred where the roofing system met parapet walls, upstands and penetrations. Proteus Waterproofing provided a full specification detailing each one to maintain waterproofing continuity and thermal performance.

Drainage, falls and ponding

The scheme was designed around the roof's geometry, obstructions and outlet positions, creating pre-designed falls that direct rainwater to the outlets and minimise standing water. Manufacturing off-site kept the falls accurate.