



SYSTEM	PRO- FELT®ULTIMA PLUS PRO-THERM
PROJECT TYPE	REFURBISHMENT
INDUSTRY	HEALTHCARE
APPLICATION	FLAT ROOF

PROJECT OVERVIEW

Proteus Waterproofing was approached to provide a roofing solution for Blackburn Ambulance Station, where the existing roof had reached the end of its service life. The client required a system that would also upgrade the roof's thermal performance in line with current Building Regulations. The roof was stripped back to the structural deck and rebuilt as a warm roof.

KEY CHALLENGES

Previous repairs and inconsistent build ups

The existing roof had been subject to numerous repairs over the years, resulting in inconsistent build ups and varying substrate conditions across the roof area — variations with the potential to affect the installation and performance of the new system. By stripping the roof back to the structural deck, the inconsistencies were removed and a clean, uniform base created, allowing a consistent layer of Proteus Pro-Therm PIR insulation and the Pro-Felt® Ultima Plus system to be installed above it.

Interface details

The roof incorporated parapet walls, upstands, penetrations and perimeter details. Proteus Waterproofing provided a fully detailed specification, designed to the NFRC's Safe2Torch guidelines, setting out how each was formed and sealed.

Removing the existing waterproofing

Stripping back to the deck meant defects in the existing construction could be identified and rectified, rather than trapping moisture beneath the new roof.

CONCLUSION

By stripping back to the structural deck rather than working over the existing roof, the project delivered a consistent new build up, upgraded the insulation in line with current Building Regulations, and extended the roof's expected service life. Pro-Felt® Ultima Plus is BBA accredited and certified for up to 30 years as a standalone product. Manufactured with distilled bitumen and elasto-plastomeric polymers (APP), it achieves Broof T4 fire safety — supporting a guarantee for the station's roof.