



WHITLEY BAY TRAIN STATION

WATERPROOFING: Caltech QC

PROJECT SIZE: 250lm

PROJECT LOCATION: Tyne & Wear

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SOLUTIONS

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 **ALUMASC**
ROOFING

WHITLEY BAY TRAIN STATION, TYNE AND WEAR

Project Overview

Whitley Bay Train Station, a historic and well-used transport hub, required essential refurbishment work to restore and enhance the performance of its guttering system. Water ingress issues were affecting the station's infrastructure, and a durable solution was needed to extend the lifespan of the gutters and improve drainage efficiency.

Alumasc Roofing supplied the Caltech QC liquid waterproofing system for the project, working alongside Orchard Roofing, who carried out the installation.

Existing Gutters

The gutters at Whitley Bay Train Station had suffered from long-term wear and tear, leading to poor water management and potential risks of leaks. Key issues included:

- Deterioration at Joints - Water ingress due to ageing and ineffective seals.
- Inadequate Falls - Limited drainage efficiency, leading to standing water and debris buildup.



Scope of Works

Gutter Survey & Assessment:

- Conducted a full assessment to evaluate existing damage and water flow issues.
- Identified areas requiring reinforcement and adjustments before coating application.

Gutter Refurbishment:

- Joint Preparation - Joints on braces were mastic-filled before Caltech QC installation to ensure a watertight seal.
- Cleaning & Priming - Gutters were thoroughly cleaned and primed to prepare the surface for application.

Application Process:

- A preparation layer was applied and sanded down where necessary to ensure a smooth, even surface.
- The first coat of Caltech QC, a rapid-curing liquid waterproofing system, was applied to form a seamless, reinforced membrane.
- A second coat was then applied for additional durability and long-term waterproofing protection.
- Drainage Improvement - New falls were created within the gutters before the coating was applied to enhance water flow and prevent future pooling.



Quality Assurance & Compliance:

- On-site inspections ensured correct preparation and application of the waterproofing system.
- Collaboration with Orchard Roofing ensured all detailing was completed to specification.
- Final checks confirmed that the system provided long-term protection against water ingress.

Challenges & Solutions

Intricate Joint Detailing

The complex design of the station's gutter system required careful detailing at all joins to ensure a fully watertight solution. The flexibility of Caltech QC allowed it to form a seamless, reinforced waterproof layer, overcoming this challenge.

Creating Effective Falls

Before applying the coating, the existing gutter structure had to be adjusted to create a sufficient fall for water drainage. Precision levelling techniques were used to ensure proper water flow, preventing future pooling issues.

Outcome

The project successfully delivered a fully refurbished gutter system, ensuring improved water management and long-term protection for Whitley Bay Train Station. The Caltech QC solution provided a durable, low-maintenance finish, while collaboration with Orchard Roofing ensured expert installation to the highest standards. Antoinette Stubbs, Orchard Roofing, said *"as a registered contractor for Alumasc, choosing their products was the only option. Their products never fail to deliver, and the support from the company is fantastic. The results speak for themselves."*



Specified system

Caltech QC

Caltech QC High Performance Roofing Systems comprise a rapid curing two-component, cold-applied, fully reinforced PMMA waterproofing solution, insulation boards and air and vapour control layers (AVCL). Caltech QC has a proven track record of more than 20 years and is subject to the highest levels of certification and testing. The wet-on-wet application with embedded polyester fleece forms a seamless, durable membrane that is rainproof in just 30 minutes.

Features & Benefits

- ✓ Cold applied, seamless
- ✓ Smooth finish, multiple options available
- ✓ Ability to form complex detailing with ease
- ✓ Life expectancy in excess of 25 years
- ✓ Warranty cover up to 25 years

Approvals

- ✓ BBA Certificate No. 17/5392
- ✓ Fire classification of **Broof(t4)** in accordance with BS EN 13501-5

