

# 177 BOTHWELL STREET

**WATERPROOFING:** Hydrotech

PROJECT SIZE: 2,435m<sup>2</sup>

**PROJECT LOCATION:** Glasgow



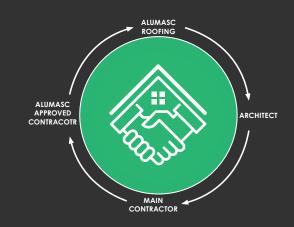


# **Project Information**

Architect: Sheppard Robson

Client: **HFD Group** 

Alumasc Registered Contractor: Topek Flat Roofing Ltd



## **Project Overview**

Bothwell Street in Glasgow is now home to an exceptionally progressive office space - making way for a new chapter in the rich history of the area. If there are any doubts about what Grade A office space really means, then think touchless entry, bike storerooms, lux changing facilities, an 8,000 sq. ft roof terrace, a 150-metre rooftop running track, 4 activity zones/terrace spaces and panoramic views.

The project complements the sustainable regeneration programme along the Clyde Waterfront also, home to the new financial Northern European hub, firmly cementing the business district at the heart of modern Glasgow.

#### Goals

The architects at Sheppard Robson have made sure sustainability and lifecycle credentials remain central to the design specification. Occupants' wellbeing has been carefully considered with a stunning panoramic rooftop and 150m running track and general outdoor employee wellness facilities.

A roofing solution was required to support the lifecycle of the building along with an excellent product reputation for this distinguished office space. Given the quality, longevity and environmental considerations required from the roofing design, the insulation properties and warranty performance were extremely important from the outset.

# Challenges

Our Technical department assisted the architectural and construction teams to resolve numerous complex design elements across the varied roof zones including running track, ballast walkways, green zones, and pedestal zones, to determine the best roofing solution.

Installation of the Davit Arm System for a building of this scale was especially important so personnel can be safely suspended whilst working at height. This presented us with a unique challenge in providing a workable solution that aligned with the sequence of works, whilst facilitating future routine inspection of its base plates, and maintaining waterproof integrity without compression.

Careful planning and detailing were required around roof penetrations to minimise aesthetical impact, and roof equipment was safely installed above the roof assembly.

#### Solution

The construction comprises a composite concrete slab receiving our Hot Melt Hydrotech Waterproofing System. Offering a true lifecycle - Hydrotech high performance waterproofing, through its' unique characteristics and installation process, now forms part of the building fabric. The result offers complete watertightness for the lifetime of the building.

The building is also insulated to a high u-value target offering exceptional thermal performance and achieving a high kPa rating. This was essential to receive loadings from all components including overlying finishes, roof equipment and the end use for the building occupants.

Key fire performance standards were achieved throughout including the lift overrun and lower roof terrace areas where the preferred solution was switched to our Derbigum sustainable warm roof system to maintain project performance targets.

### **Lifecycle Management**

Designed with BREEAM credentials and an EPC rating coming in at below 10 the careful focus on lifecycle considerations and the choice of materials throughout the building envelope is exemplary.

Hydrotech hot melt is a high-performance solution containing 30% recycled content and zero product failures in over 50 years, offering lifetime peace of mind, designed for the service life of the roof.

#### Specified system

# Hydrotech

Hydrotech is a special formulation of refined asphalts and synthetic rubbers with 40% recycled content. It has an unbeatable track record of more than 50 years and is subject to the highest levels of certification and testing. Applied in a liquid state to the substrate the bond is 100% absolute and seamless.

Surface finishes of choice

LO-k Water Flow Reducing Layer (WFRL)

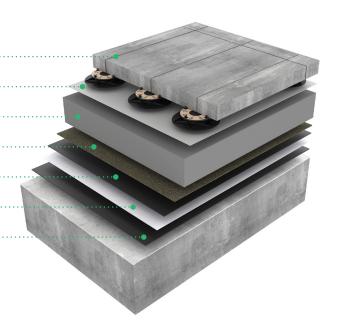
XPS Insulation or Class A fire rated alternative

Hydrogard Protection Sheet

Hydrotech MM6125

FlexFlash F (polyester reinforcement)

Hydrotech MM6125



#### Features & Benefits

- Completely monolithic, no seams
- Dynamic crack bridging certified
- Can be used to designed zero falls
- Facilitates phased construction
- Accommodates structural movement
- Durability service life of the building
- Fire classification Broof(t4)
- Warranty cover up to 40 years

#### **Approvals**

- BBA Certificate No. 90/2431
- ZETA Certificate No. 20/0907





