



ARROWSMITH GROUP

Brunswick Mill – Roofing



Method Statements & Specifications – Roof Works (Trigger Item 14)

Project Details

- Site: Brunswick Mill Development, Phase 1
- Roofs Covered by This Submission:
 1. Main Roof
 2. Bradford Road Roof (drawing ref. attached)
 3. Waste House Roof (drawing ref. attached)
 4. Concierge Roof
 5. Engine House Roof
- Prepared By: Jason Dones
- Date: 12/11/25

General Statement on Roof Conditions

- The **Bradford Road Roof** and **Waste House Roof** were significantly deteriorated with collapsed areas and had to be removed on the advice of the Structural Engineer.
- The **Main Roof**, **Concierge Roof** and **Engine House Roof** have been retained; works will focus on salvaging and making good the existing fabric to maintain heritage character.

1. Main Roof

Scope Of Works:

- Stripping & removal of existing torch on felt repairs & liquid repairs to expose existing Asphalt, Asphalt to be utilised as substrate.
- Installation of new built up Bituminous IKO Waterproofing Specification Comprising; IKOpro Sprayfast MPP Primer, IKO Ultra Air & Vapour Control Layer (Torch On to non-combustible substrates only) (Self Adhesive to timber and other combustible substrates), IKO Enertherm Tapered PIR Insulation As Per Design Provided Fully Adhered With IKOpro Sprayfast IBA, IKO Ultra HA Underlay, IKO Ultra Gold Torch On Capsheet.
- Parapets to be encapsulated within waterproofing system, coping stones to be re-bedded once encapsulation is complete. All as per detail mark ups provided.
- Further detailing works as per mark up provided.
- Installation of New AOV Units; Specification to be confirmed.

Specification:

- Installation of new built up Bituminous IKO Waterproofing Specification Comprising; IKOpro Sprayfast MPP Primer, IKO Ultra Air & Vapour Control Layer (Torch On to non-combustible substrates only) (Self Adhesive to timber and other combustible substrates), IKO Enertherm Tapered PIR Insulation As Per Design Provided Fully Adhered With IKOpro Sprayfast IBA, IKO Ultra HA Underlay, IKO Ultra Gold Torch On Capsheet.
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- Further detailing works as per mark up provided.

2. Bradford Road Roof

Scope of Works:

- Install new composite metal deck roof using TATA Comflor 60 system.
- Provide 130mm lightweight concrete deck with A193 mesh at the bottom.
- Install 200mm wide x 12mm thick plates to all existing members for Comflor bearing with 6mm continuous fillet weld (CFW) to existing steel.
- Provide 19x95mm shear studs centred on existing beams (1 per trough).
- Decking: TATA Comflor 60 steel composite deck, minimum thickness 1.0mm, galvanised to BS EN 10346.
- Concrete: 130mm lightweight concrete with density $\leq 1900 \text{ kg/m}^3$, 30N/mm^2 strength, reinforced with A193 steel mesh at the bottom.
- Plates: 200mm wide x 12mm thick mild steel bearing plates welded to existing beams.
- Shear Studs: 19x95mm headed studs, one per trough.
- Installation of new built up Bituminous IKO Waterproofing Specification Comprising; IKOpro Sprayfast MPP Primer, IKO Ultra Air & Vapour Control Layer (Torch On to non-combustible substrates only) (Self Adhesive to timber and other combustible substrates), IKO Enertherm Tapered PIR Insulation As Per Design Provided Fully Adhered With IKOpro Sprayfast IBA, IKO Ultra HA Underlay, IKO Ultra Gold Torch On Capsheet.
- Parapets to be encapsulated with waterproofing system, coping stones to be re-bedded once encapsulation is complete. All as per detail mark ups provided.
- Further detailing works as per mark up provided.
- Rooflights to be removed and replaced with the following specification; Lonsdale Thermagard ALM100/2 Series Aluminium Sections, Complete With Thermal Barrier Inserts, Top SG Draught Fillets & Bottom DG Draught Fillets For Stepped Edge Double Glazed Units. Each Area In 3 No. Equal Panes At 572mm Bar Centres x 1492mm Overall Glazing Bars. Finish: All Aluminium Polyester Powder Coated To 40 Microns – Standard Colour RAL Matt, TBC. Glass: 28.8mm Thick Silicone Sealed Double Glazed Units Comprising; 6mm Clear Toughened Outer/14mm Argon Gas Filled Cavity With Black Warm Edge Spacer / 8.8mm Soft Coat 1.1 Laminated Inner. Flashings: 2mm Pressed Aluminium To Sides & Top. Finishes and infill between rooflights to architect's details on roofing system.

Specification:

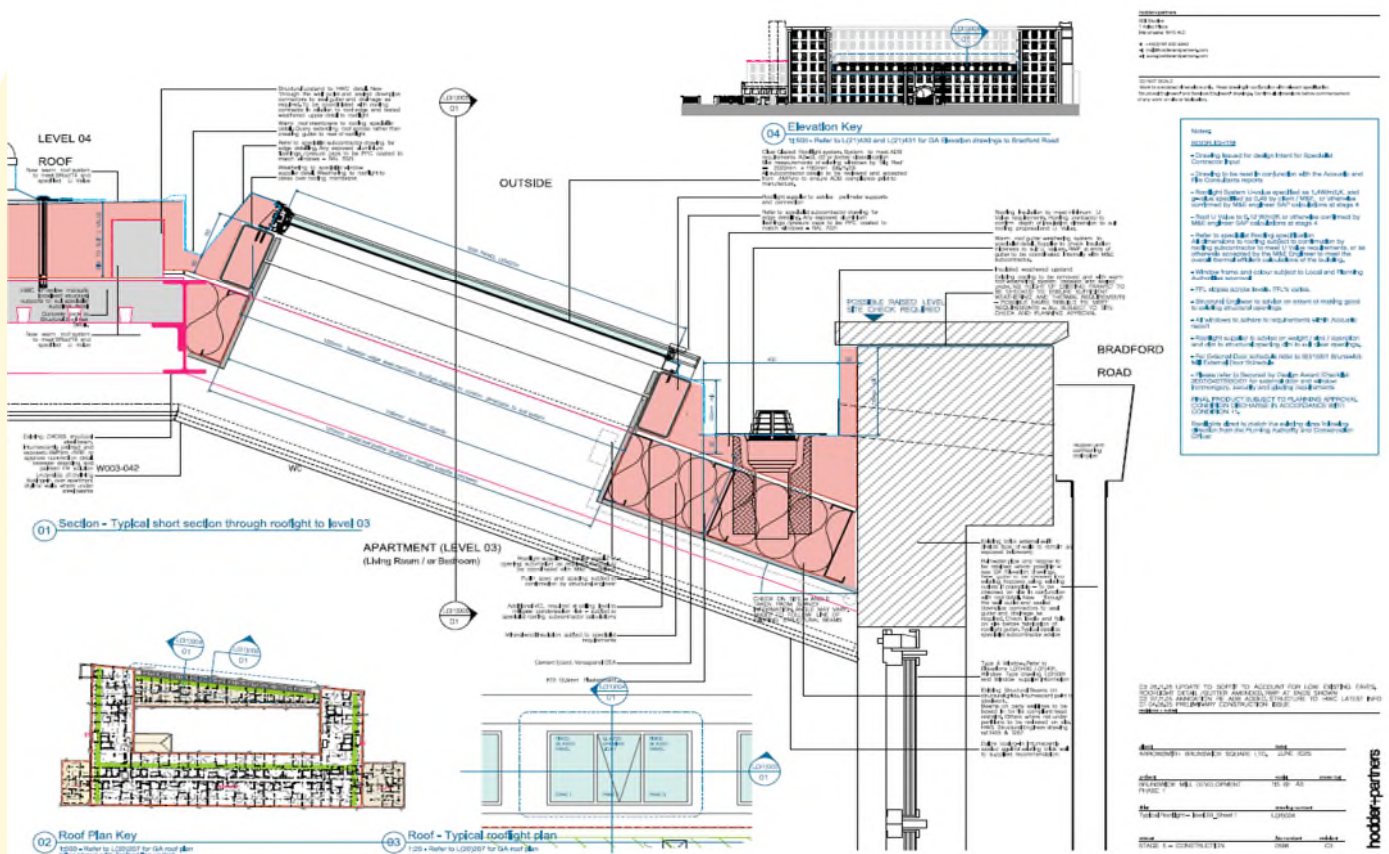
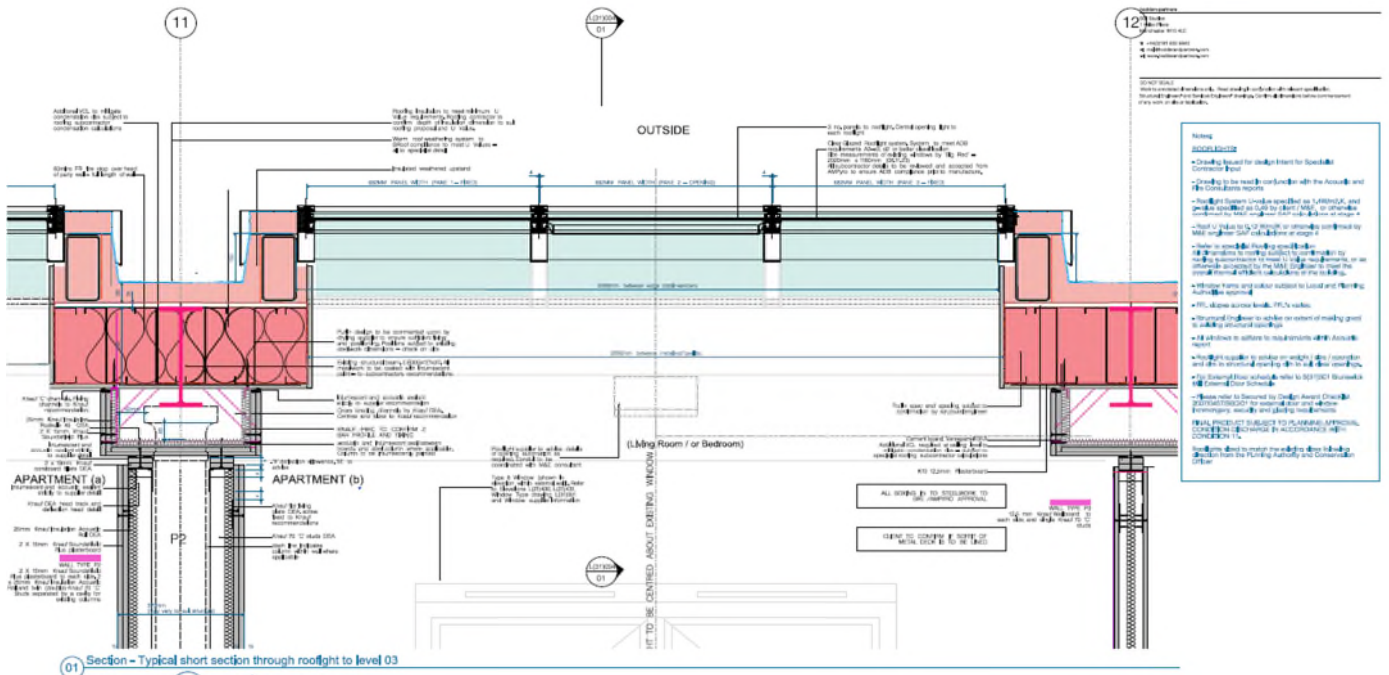
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- Parapets to be encapsulated with waterproofing system, coping stones to be re-bedded once encapsulation is complete. All as per detail mark ups provided.

- [illegible]

This technical drawing is a cross-section of a building. It features a large central hall with a staircase. The hall is surrounded by various rooms, including what appears to be a kitchen or service area on the left and a room with a desk or counter on the right. The drawing uses various line styles and colors (red, green, blue) to delineate different structural elements and spaces.

The diagram illustrates a conveyor system layout. It features a long horizontal conveyor section labeled 'CONVEYOR' in the center. To the left, a vertical section is labeled 'COURTESY'. To the right, a vertical section is labeled 'BEACHFORD'. Two loading stations, each labeled 'LOTTION 01' in a circle, are positioned above the conveyor. The area between the conveyor and the loading stations is labeled 'APARTMENT'. The entire system is enclosed in a dashed rectangular boundary.

03 Roof Section - Through level 03 /04



3. Waste House Roof

Scope of Works:

- Install new composite metal deck roof using TATA Comflor 60 system.
- Provide 130mm lightweight concrete deck with A193 mesh at the bottom.
- Install 200mm wide x 12mm thick plates to all existing members for Comflor bearing with 6mm CFW to existing steel.
- Provide 19x95mm shear studs centred on existing beams (1 per trough).
- Installation of new built up Bituminous IKO Waterproofing Specification Comprising; IKOpro Sprayfast MPP Primer, IKO Ultra Air & Vapour Control Layer (Torch On to non-combustible substrates only) (Self Adhesive to timber and other combustible substrates), IKO Enertherm Tapered PIR Insulation As Per Design Provided Fully Adhered With IKOpro Sprayfast IBA, IKO Ultra HA Underlay, IKO Ultra Gold Torch On Capsheet.
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- Further detailing works as per mark up provided.

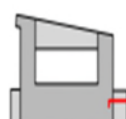
Specification:

- Decking: TATA Comflor 60 steel composite deck, minimum thickness 1.0mm, galvanised to BS EN 10346.
 - Concrete: 130mm lightweight concrete with density $\leq 1900 \text{ kg/m}^3$, 30N/mm^2 strength, reinforced with A193 steel mesh at the bottom.
 - Plates: 200mm wide x 12mm thick mild steel bearing plates welded to existing beams.
 - Shear Studs: 19x95mm headed studs, one per trough.
 - Protection: All adjacent heritage masonry, parapets, and internal finishes protected using plywood hoardings and sheeting during works.
 - Installation of new built up Bituminous IKO Waterproofing Specification Comprising; IKOpro Sprayfast MPP Primer, IKO Ultra Air & Vapour Control Layer (Torch On to non-combustible substrates only) (Self Adhesive to timber and other combustible substrates), IKO Enertherm Tapered PIR Insulation As Per Design Provided Fully Adhered With IKOpro Sprayfast IBA, IKO Ultra HA Underlay, IKO Ultra Gold Torch On Capsheet.
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Section - Typical Waste House roof parapet / RWP outlet junction

Section - Typical Waste House roof steel work detail

02 Section - Typical roof upstand detail at existing wall



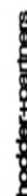
4. Engine House Roof

Scope of Works:

- Existing roof and masonry to be salvaged and made good wherever possible.
- Stripping & removal of existing torch on felt repairs & liquid repairs to expose existing Asphalt, Asphalt to be utilised as substrate.
- Installation of new built up Bituminous IKO Waterproofing Specification Comprising; IKOpro Sprayfast MPP Primer, IKO Ultra Air & Vapour Control Layer (Torch On to non-combustible substrates only) (Self Adhesive to timber and other combustible substrates), IKO Enertherm Tapered PIR Insulation As Per Design Provided Fully Adhered With IKOpro Sprayfast IBA, IKO Ultra HA Underlay, IKO Ultra Gold Torch On Capsheet.
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- Further detailing works as per mark up provided.

Specification:

- Structure: Retain existing roof structure and masonry; make good joints and fixings to minimise intervention.
 - Installation of new built up Bituminous IKO Waterproofing Specification Comprising; IKOpro Sprayfast MPP Primer, IKO Ultra Air & Vapour Control Layer (Torch On to non-combustible substrates only) (Self Adhesive to timber and other combustible substrates), IKO Enertherm Tapered PIR Insulation As Per Design Provided Fully Adhered With IKOpro Sprayfast IBA, IKO Ultra HA Underlay, IKO Ultra Gold Torch On Capsheet.
 - Parapets to be encapsulated with waterproofing system, coping stones to be re-bedded once encapsulation is complete. All as per detail mark ups provided.
 - Further detailing works as per mark up provided.
 - Protection: All heritage masonry, fixings and features to be carefully protected and isolated from construction activities using sheeting and hoardings. No new fixings into historic fabric without prior approval.
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4. Concierge Roof

Scope of Works:

- Existing roof structure to be retained.
- Roof to be stripped and existing slate to be set aside for re-use, any shortfall of slate is to be made up with a reclaimed closest possible match. Slate to be the same in size, colour and thickness.
- Installation of new breathable membrane underlay and new battens gauged as per slate size requirements.
- Existing ridge and hip tiles to be stripped and set aside for re-use. Making up any shortfall with a reclaimed closest possible match.
- Leadwork; New Code 5 lead box gutter & flashings all to LSA Guidance.

Specification:

- Slate: Existing & Reclaimed heritage slate to match existing size, colour and thickness.
 - Fixings: Non-ferrous nails to prevent corrosion.
 - Leadwork: New Code 5 BS EN 12588 lead flashings and soakers.
 - Protection: All heritage fabric around the roof, including cornices and masonry, to be physically protected during works.
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3. References

- 23178-HW-23-03-DR-S-1310 – *Front Block Roof Remedial Works – P03*
 - L(20)1071 – Level Roof A – Detailed Plan
 - L(20)1072 – Level Roof B – Detailed Plan
 - L(20)1073 – Level Roof C – Detailed Plan
 - L(31)004 & L(31)005 – Typical Rooflight Details
 - L(20)207_Roof_Mill Building_Plan PROPOSED – Crescent Detail Plan
 - Iko Standard Details Comprising: Change In level, Formed Gutter, Parapet Detail Concrete Coping, Perimetre Kerb, Pipe Penetration, Refurbishment Parapet Outlet, Rooflight AOV & Access hatch, Upstand Cover Flashing Detail.
 - Tapered Insulation Design, Rev B
 - Iko Specification.
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4. Materials & Specification

The works shall use the following materials, in line with the issued drawings and manufacturer's guidance:

- Insulated waterproofing system as specified within IKO specification.
 - Slate: Existing & Reclaimed heritage slate to match existing size, colour and thickness.
 - Fixings: Non-ferrous nails to prevent corrosion.
 - Leadwork: New Code 5 BS EN 12588 lead flashings and soakers.
 - Timber/steel substructure remedial works where identified.
 - All fixings and sealants to be approved and compatible with the roofing system.
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5. Methodology

5.1 Preliminaries

- Review all drawings and specifications prior to starting.
- Toolbox talks to be delivered daily.
- Safe access scaffold and edge protection installed by competent contractors.
- Permit to work and sign-off from site management before commencement.

5.2 Removal Works

- Strip defective roof coverings to Main Roof, Engine House Roof & Concierge Roof in a controlled manner and as described above.
- Segregate waste and transfer to skips at ground level using chute/hoist.

5.3 Roof Remedial Installation

- Install vapour control layer, insulation, and roof membrane build-up in line with manufacturer's specification provided.
- Form abutments, junctions, and perimeter details to match drawing 23178-HW-23-03-DR-S-1310.
- Fit rooflights and trims per details L(31)004–005. Rooflight specification provided above.
- Ensure continuity of waterproofing and airtightness at all junctions.

5.4 Completion

- Carry out final inspections and quality checks.
 - Remove temporary access once signed off.
 - Handover with as-built drawings and warranties.
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6. Plant & Equipment

- Mobile tower scaffolds
 - Safety harnesses and fall arrest equipment
 - Hoists/chutes for waste removal
 - Hand tools and battery tools for fixing
 - Hot air welders / sealing equipment (if membrane-based)
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7. Labour Requirements

- Site Manager / Supervisor
 - Roofing Operatives (CSCS, trained in system installation)
 - General Labourers for waste handling
 - Banksman / Hoist Operator
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Health & Safety

- Works under CDM Regulations.
- All operatives trained in handling heritage fabric and working on listed buildings.

Signed: Jason Dones

Name: Jason Dones

Position: Project Director

Date: 26/11/2025