Donald Insall Associates
Chartered Architects and Historic Building Consultants

Rochdale Town Hall HLF Stage 2

Specification - L10
RTH-DIA-XX-XX-SP-A-7000

Document Status: CR
Document Revision: C02

Document Control Sheet

Issued By:	Donald Insall Associates Bridgegate House 5 Bridge Place Chester CH1 1SA
Project Client:	Rochdale Borough Council
Project Title:	Rochdale Town Hall HLF Stage 2
Project Code:	RTH.03
Document Number:	RTH-DIA-XX-XX-SP-A-7000
Document Title:	Specification - L10
Document Status	CR
Document Revision	C02
Document Security:	N/A
Document Date	8 June 2022
Prepared By:	SEB
Approved By:	SM

Contact information
Simon Malam
simon.malam@insall-architects.co.uk
Tel: 01244 350 063

Chester Office
Donald Insall Associates
Bridgegate House, 5 Bridge Place, Chester, CH1 1SA
www.insall-architects.co.uk

This report and all intellectual property rights in it and arising from it are the property of or are under licence to Donald Insall Associates or the client. Neither the whole nor any part of this report, nor any drawing, plan, other document or any information contained within it may be reproduced in any form without the prior written consent of Donald Insall Associates or the client as appropriate. All material in which the intellectual property rights have been licensed to Donald Insall Associates or the client and such rights belong to third parties may not be published or reproduced at all in any form, and any request for consent to the use of such material for publication or reproduction should be made directly to the owner of the intellectual property rights therein.

Contents

Specification - Systems

L10 Windows/ rooflights/ screens/ louvres REVISED **1**

Clauses 1

General 1

Products 1

Execution 8

Deleted clauses 9

© Donald Insall Associates 2021

L10
Windows/ rooflights/ screens/ louvres REVISED

Clauses

2 To be read with preliminaries/ general conditions.

General

110 Evidence of performance

1. Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.

112 Warranty

1. Provide manufacturers warranties in relation to windows noted in clauses 305, 310A and 315A as follows:
   - 1.1. 10 year manufacturers warranty for window frame, covering steel frame and installation, galvanising and powder coating
   - 1.2. 10 year manufacturers warranty for double glazed unit
   - 1.3. 10 year manufacturers warranty for ironmongery

120 Preconstruction survey

1. Procedure: Before starting work on designated items take site dimensions, record on shop drawings and use to ensure accurate fabrication.
2. Designated items: Glass to Stone, Steel Windows and Rooflights
3. Primary support structure: Carry out survey sufficient to verify that required accuracy and security of erection can be achieved.
4. Timing: Before fabrication.

Products

305 Steel Casement Windows - Single Glazing REVISED

1. Single glazed - Window Types 2a, 2b and 2c - see drawing 3274 and window schedule: **programme** to allow for a review of ironmongery prior to placement of order.
   The following specification is based and developed from the trial window works:
2. Standard: Non-fire and/ or smoke rated window BS EN 14351-1 and BS 6510- 30 min fire rated windows required in selected locations - see clause L40-665 and schedule
3. Manufacturer: Touchstone Glazing Solutions Ltd
   - 3.1. Product reference: Steelyte Slim Opening Casement - Single Glazed
   - 3.2. Opening arrangements: Side Hung and Top Hung
4. Finish as delivered:
   - 4.1. Polyester powder-coated to BS6497 / BS EN 13438.

4.2. Semi Gloss

4.3. RAL Colour - 7022

5. Thermal performance : Manufacturer's Standard.
Framing system to incorporate thermal breaks. Air tight seal required as minimum.

6. Acoustic performance rating: Manufacturer's Standard.
Airtight seal required as minimum.

7. Weatherproofing:

7.1. Opening casement to be EDPM weatherstripped (colour black) adhered securely to frame.

7.2. Specification and fixing method to be approved by CA prior to installation.

7.3. Must not fall off or be able to be manually picked off upon completion.

8. Fire resistance: 30 min Fire Rated windows required in selected locations - see clause L40-665 and schedule

9. Glazing details:

- Glass: as Clause L40-665
- Fixing: as Clause L40-210

10. Ironmongery/ Accessories : By Touchstone Glazing Solutions

10.1. Side Hung Outward Opening Casement: All ironmongery to be approved by CA prior to order

- Casement Hinges: Finish - powder coated to match frame - no. to suit window height and in accordance with manufacturers recommendations.
- Window Handle Type: Hammer handle with Backplate No. 1 design. Finish - living (forged) to match trial window. No. to suit window height and in accordance with manufacturers recommendations.
- Windows greater than 1000mm in height to have multi-point locking system operated by connecting rod with low level Hammer handle with Backplate No. 1 design - easily reachable by person standing adjacent. Finish - living (forged) to match trial window. Contractors Design Portion - Touchstone Glazing Solution developing prototype for approval.
- Window Stay Type: 1no peg stay as trial window. Length of stay to suit opening window width. Finish - living (forged) to match trial window.
- Window Restrictor Type: 1 no concealed top restrictor as trial window. Location to allow:
  - restricted opening no greater than 100mm when engaged
  - greater than 30 degree opening angle for purge ventilation when manually disconnected (re-engages once window has been closed)

10.2. Top Hung Outward Opening Casement: All ironmongery to be approved by CA prior to order

- Casement Hinges: Finish - powder coated to match frame - no. to suit window width and in accordance with manufacturers recommendations.

- Quadilent stay: Large format to allow greater than 30 degree opening angle for purge ventilation. Contractors Design Portion - Touchstone Glazing Solution developing prototype based on their standard quadilent stay for approval. Finish - powder coated black - sample for approval.
- 3 no unlaquered polished brass pole hook and associated 25mm diameter timber pole, lengths to reach quadilent stay.

11. Window installation:
    - 11.1. Installation generally - See Clause 765A.
    - 11.2. Screwed into masonry joints with stainless steel fixings approved by manufacturer.
    - 11.3. External Perimeter Joint - See Clause Z21-105.
    - 11.4. Internal Perimeter Joint - See Clause L10-810.
12. Other Requirement:
    - Minimal sight lines of window framing is an important specification requirement.
    - Ground Floor Cafe Windows: selected bespoke specials required - single side window to full shaped arch opening light.
    - Allow for fitting fly screens to selected windows as clause L10-590 and Schedule.
    - Window privacy film to selected windows as clause L40-610A and Schedule.

310A Steel Casement Windows - Double Glazing REVISED

1. Double glazed - Window Types 1a and 1b - see drawing 3274 and window schedule: **programme** to allow for a review of ironmongery prior to placement of order.
   The following specification is based and developed from the trial window works:
2. Standard: Non-fire and/ or smoke rated window BS EN 14351-1 and BS 6510- 30 min fire rated windows required in selected locations - see clause L40-655 and schedule
3. Manufacturer: Touchstone Glazing Solutions Ltd
    - 3.1. Product reference: Steelyte Slim Opening Casement - Slimlite Glazed
    - 3.2. Opening arrangements: Side Hung and Top Hung
4. Finish as delivered: Polyester powder-coated to BS6497 / BS EN 13438. Matt finish
    - 4.1. Polyester powder-coated to BS6497 / BS EN 13438. Matt finish
    - 4.2. Semi Gloss
    - 4.3. RAL Colour - 7022
5. Thermal performance: Manufacturer's Standard.
   Framing system to incorporate thermal breaks. Air tight seal required as minimum.
6. Acoustic performance rating: Submit proposals to CA for approval. Airtight seal required as minimum
7. Weatherproofing:
    - 7.1. Opening casement to be EDPM weatherstripped (colour black) adhered securely to frame.
    - 7.2. Specification and fixing method to be approved by CA prior to installation.
    - 7.3. Must not fall off or be able to be manually picked off upon completion.

© Donald Insall Associates 2021

8. Fire resistance: 30 min Fire Rated windows required in selected locations - see clause L40-655 and schedule

9. Glazing details:
   - Glass: as Clause L40-655
   - Fixing: as Clause L40-210

10. Ironmongery/ Accessories: By Touchstone Glazing Solutions

    10.1. Side Hung Outward Opening Casement: All ironmongery to be approved by CA prior to order
    - Casement Hinges: Finish - powder coated to match frame - no. to suit window height and in accordance with manufacturers recommendations.
    - Window Handle Type: Hammer handle with Backplate No. 1 design. Finish - living (forged) to match trial window. No. to suit window height and in accordance with manufacturers recommendations.
    - Windows greater than 1000mm in height to have multi-point locking system operated by connecting rod with low level Hammer handle with Backplate No. 1 design - easily reachable by person standing adjacent. Finish - living (forged) to match trial window. Contractors Design Portion - Touchstone Glazing Solution developing prototype for approval.
    - Window Stay Type: 1no peg stay as trial window. Length of stay to suit opening window width. Finish - living (forged) to match trial window.
    - Window Restrictor Type: 1 no concealed top restrictor as trial window. Location to allow:
      - restricted opening no greater than 100mm when engaged
      - greater than 30 degree opening angle for purge ventilation when manually disconnected (re-engages once window has been closed)

    10.2. Top Hung Outward Opening Casement: All ironmongery to be approved by CA prior to order
    - Casement Hinges: Finish - powder coated to match frame - no. to suit window width and in accordance with manufacturers recommendations.
    - Quadilent stay: Large format to allow greater than 30 degree opening angle for purge ventilation. Contractors Design Portion - Touchstone Glazing Solution developing prototype based on their standard quadilent stay for approval. Finish - powder coated black - sample for approval.
    - 3 no unlaquered polished brass pole hook and associated 25mm diameter timber pole, lengths to reach quadilent stay.

11. Window installation:

    11.1. Installation generally - See Clause 765A.

    11.2. Screwed into masonry joints with stainless steel fixings approved by manufacturer

    11.3. External Perimeter Joint - See Clause Z21-105.

11.4. Internal Perimeter Joint - See Clause L10-810.

12. Other Requirement:
    - Minimal sight lines of window framing is an important specification requirement.
    - Window privacy film to selected windows as clause L40-610A and Schedule.

325 Steel windows - Ventilation Grilles REVISED

1. Ventilation grille - Window Type 2d (selected basement windows) - see drawing 3274 and window schedule: **programme** to allow for a review of ironmongery prior to placement of order.
   The following specification is based and developed from the trial window works:
2. Manufacturer: Touchstone Glazing Solutions Ltd
   2.1. Product reference: Steelyte Slim Fixed Casement - Vent Grille
3. Finish as delivered:
   3.1. Polyester powder-coated to BS6497 / BS EN 13438. Matt finish.
   3.2. Semi Gloss
   3.3. RAL Colour - 7022
4. Thermal performance (U-value maximum): NA
5. Acoustic performance rating: NA
6. Weatherproofing: NA
7. Fire resistance: Not required
8. Grille details: Double layer of mesh secured in a sqeezed aluminium frame set in steel window frame:
   8.1. Security: Large, Expanded Metal, Raised, Steel Mesh Ref Code: 2089
   8.2. Insect Screen: Fine, Expanded Metal, Raised, Aluminium Mesh Ref Code: 901A
   8.3. by Expanded Metal Company.
   8.4. Finish - powder coated to match frame.
9. Window installation:
   9.1. Installation generally - See Clause 765A.
   9.2. Screwed into masonry joints with stainless steel fixings approved by manufacturer.
   9.3. External Perimeter Joint - See Clause Z21-105.
   9.4. Internal Perimeter Joint - See Clause L10-810.
10. Other Requirement: Allow for forming framed service apertures within fixed lights in selected locations - see schedule.

461 Egress rooflights

1. Roof r15c
2. Manufacturer: The Rooflight Company 01903 833108
   2.1. Product reference: E1LG Conservation Egress Rooflight to suit between the rafter insulation
3. Type: Rectangular
4. Frame: 3mm mild steel - integral with roof light

4.1. Finish: Polyester powder coated

4.2. Colour: Standard dark grey BS 00A13

5. Kerb: No kerb as such - timber packings and linings by main contractor
6. Thermal performance (U-value maximum): 1.2w/(m2)k
7. Fire performance (minimum): class 1
8. Glazing details: Double skin, 4mm SGG Planilux toughened outer; 16mm Argon filled cavity; 4mm SGG Planitherm Total plus low e toughened inner
9. Other requirements: Lockable handle and standard stay to allow window to held securely in open position; glazing bar.
10. Fixing: As manufacturer's instructions for on the rafter cold roof

462 Rooflights

1. ROOF R2c; REFS: RI2.1; rl2.2; rl2.3; rl2.4
2. Manufacturer: The Rooflight Company 01903 833108

   2.1. Product reference: 1 x SD37 Studio Designer 2 x CR15 - 3 Conservation windows, 2 glazing bars in each casement. Each casement finished internal viewable (w) 821mm (l) 1435mm. Each external casement/glass (w) 943mm (l) 1557mm. To fit clear structural opening on the rafters (w) 1976mm (l) 1635mm
3. Type: Rectangular
4. Frame: 3mm mild steel - integral with roof light

   4.1. Finish: Polyester powder coated

   4.2. Colour: Standard dark grey BS 00A13
5. Kerb: No kerb as such - timber packings and linings by main contractor
6. Thermal performance (U-value maximum): 1.2w/(m2)k
7. Fire performance (minimum): class 1
8. Glazing details: Double skin, 4mm SGG Planilux toughened outer; 16mm Argon filled cavity; 4mm SGG Palanitherm Total plus low e toughened inner, or as recomemnded by manufacturer
9. Other requirements: Both lights to be top hung opening with remote electrical operation. Allow for manufacturer's mullion to centre of roof light
10. Fixing: As manufacturer's instructions for on the rafter warm roof
11. Allow to infill existing structural opening width to each side.

463 Rooflights

1. ROOF R2d. REFS: RI2.5; rl2.7; rl2.8; rl2.9.
2. Manufacturer: The Rooflight Company 01903 833108

   2.1. Product reference: 1 x SD37 Studio Designer 2 x CR15 - 3 Conservation windows, 2 glazing bars in each casement. Each casement finished internal viewable (w) 821mm (l) 1435mm. Each external casement/glass (w) 943mm (l) 1557mm. To fit clear structural opening on the rafters (w) 1976mm (l) 1635mm
3. Type: Rectangular
4. Frame: 3mm mild steel - integral with roof light

   4.1. Finish: Polyester powder coated

© Donald Insall Associates 2021

4.2. Colour: Standard dark grey BS 00A13

5. Kerb: No kerb as such - packingsd and linings by main contractor
6. Thermal performance (U-value maximum): 1.2w/(m2)k
7. Fire performance (minimum): class 1
8. Glazing details: Double skin, 4mm SGG Planilux toughened outer; 16mm Argon filled cavity; 4mm Planitherm Total plus low e toughened inner, or as recommended by manufacturer
9. Other requirements: All lights to be fixed. Allow for manufacturer's mullion to centre of roof light
10. Fixing: As manufacturer's instructions for on the rafter warm roof
11. Allow to infill existing structral opening width each side.

464A Rooflights

1. Roof r11 - refs rl11.1; rl11.2; rl11.3
2. Manufacturer: The Rooflight Company
   2.1. Product reference: Conservation Rooflight ref: CR09-2 (this rooflight to be confirmed on site once roof opened up
3. Type: Rectangular
4. Frame: 3mm mild steel - integral with roof light
   4.1. Finish: Polyester powder coated
   4.2. Colour: Standard dark grey BS 00A13
5. Kerb: No kerb as such - integral with roof light
6. Thermal performance (U-value maximum): 1..2w/(m2)k
7. Fire performance (minimum): Class 1
8. Glazing details: Double skin, 4mm SGG Planilux toughened outer; 16mm Argon filled cavity; 4mm Planitherm Total plus low e toughened inner
9. Other requirements: Electrical operation to RL11.1. Other rooflights manual operation with hand winder
10. Fixing: As manufacturers instructions for on the rafter warm roof

590 Fly screen

1. Kitchen g7, kitchen f6c, washroom f6d
2. Manufacturer: Premier Screens Ltd
   2.1. Product reference: Prem 40 Roller Cassette Fly Screen - Retractable Insect & Fly Screen
   2.2. Frame: Aluminium frame
   2.3. Frame Colour: White
   2.4. Mesh Type: Midge Mesh
   2.5. Mesh Colour: Black
   2.6. Fitting: Reveal - across full width and height of multiple light opening.
      2.6.1. Vertical uprights on line of mullion as recommended by manufacturer.
      2.6.2. Integral wind brush pile, internal side catches.

2.7. Fixing: Counter sunk stainless steel screws to manufacturers recommendations.

2.8. Operation: With brake system, pull cord and nickel pull weight.

Execution

710 Protection of components

1. General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry floored and covered storage.
2. Stored components: Stack vertical or near vertical on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.

765A Window installation generally REVISED

1. Installation: Into prepared existing stone openings with chamfered reveals, transoms and mullions.
2. Care is to be undertaken to avoid any damage to the stone during the fixing of the steel windows - see clause 781A and 800A.
3. Gap between frame edge and surrounding construction:
   - 3.1. Minimum: To manufacturers recommendations
   - 3.2. Maximum: To manufacturers recommendations but no greater than 5mm
4. Distortion: Install windows without twist or diagonal racking

766 Location of openable windows in naturally ventilated buildings

1. Location: Over 10 m from sources of external pollution.

781A Fixing of steel frames

1. Standard: As section Z20.
2. Fasteners: Stainless steel fixings as approved by manufacturer screwed into masonry joints
   - 2.1. Spacing: To be agreed on site with CA based on location of existing masonry joints and recommendations of installer.
     - 2.1.1. Preferably not less than 50 mm and not more than 190 mm from ends of each jamb, adjacent to each hanging point of
     - 2.1.2. opening lights and at maximum 900 mm centres.

800A Fitting steel frame sections REVISED

1. Stonework to be primed prior to installation using Arbo 2650, or similar porduct as proposed by window manufacturer and to approval of CA. Primer not to extend beyond frame line under any circumstances.
2. Frame bedded with universal bedding compound (or similar product) as proposed by window manufacturer and to approval of CA.
3. Frame sealed with sealant as proposed by window manufacturer and to approval of CA. Sealant to internal window perimeter to be overpainted as part of the decoration works package.

© Donald Insall Associates 2021

810 Sealant joints - internally REVISED

1. Sealant:
   - 1.1. Manufacturer: ARBO Sealants - As proposed by window manufacturer and to approval of CA
     - 1.1.1. Product reference: ARBO Polymer MP20 - As proposed and installed by window manufacturer
   - 1.2. Colour: Standard Grey
   - 1.3. Application: In accordance with manufacturers recommendations. Finish triangular fillets to a flat or slightly convex profile.
   - 1.4. Decoration: Overpainting to address visible modern mastic (ARBO Polymer MP20)
     internally will be picked up as part of decorations schedule.

820 Ironmongery

1. Fixing: In accordance with any third party certification conditions applicable. Assemble and fix carefully and accurately using fasteners with matching finish supplied by ironmongery manufacturer. Do not damage ironmongery and adjacent surfaces.
2. Checking/ Adjusting/ Lubricating: Carry out at completion and ensure correct functioning.

Deleted clauses

~~315A Steel windows~~ DELETED

Ω End of Section

© Donald Insall Associates 2021

Donald Insall Associates
Chartered Architects and Historic Building Consultants