

Window Replacement Specifications

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Work Package No. GWMF-21_A0203S07_Enabling/Temp Works Designer - Enabling/Temp Works Designer n7

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C01	Mayuko Shimamura	John Senior	Andrew Bacon		12/09/2023	First Issue

STAKEHOLDER REVIEW REQUIRED (SRR)

- COUNTY/DISTRICT/LONDON BOROUGH COUNCIL
- LOV
- LUL
- NRL
- TFL
- UTILITIES COMPANY
- OTHER

PURPOSE OF SRR

- ACCEPTANCE
- APPROVAL
- NO OBJECTION
- CONSENT

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1 Appendix

1.1 Window Replacement Specifications

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L10

Windows/ rooflights/ screens/ louvres

General

110 Evidence of performance

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

115 Timber procurement

1. **Timber (including timber for wood-based products):** Obtained from well managed forests and/ or plantations in accordance with:
 - 1.1. The laws governing forest management in the producer country or countries.
 - 1.2. International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).
2. **Documentation:** Provide either in accordance with chain of custody certification scheme requirements:
 - 2.1. Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied.
 - 2.2. Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood-based products.
3. **Chain of custody certification scheme:** Forest Stewardship Council (FSC), Grown in Britain (GiB) or Programme for the Endorsement of Forest Certification (PEFC)
 - 3.1. **Other evidence:** UK Government Timber Procurement Policy Category B

120 Pre-construction 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:** All windows
3. **Primary support structure:** Carry out survey sufficient to verify that required accuracy and security of erection can be achieved.
4. **Timing:** Before fabrication.

140 Control samples

1. **Procedure**
 - 1.1. Finalize component details.
 - 1.2. Fabricate one of each of the following designated items as part of the quantity required for the project.
 - 1.3. Obtain approval of appearance and quality before proceeding with manufacturer of the remaining quantity.
2. **Designated items:** Standard sash window and standard casement window. To be fully double glazed. Finished dimension for test window 1200 x 1200mm. Windows to display exact profile of finished mouldings to match existing window pattern. For inspection by Conservation Officer.

160 Potential for natural ventilation

1. **Submit design plan and elevation drawings, and calculations confirming the following:** Types of windows/ ventilators and total openable areas

Products

205 Window materials specification

1. Minimum BRE 'Green Guide to Specification Online' rating: Submit proposals in accordance with BREEAM requirements.

250 Wood windows

1. Standard: Non-fire-rated window to BS EN 14351-1 and BS 644
2. Exposure category to BS 6375-1/ design wind load: Submit proposals
3. Operation and strength characteristics: To BS 6375-2.
4. Timber: Generally to BS EN 942.
 - 4.1. Species: Submit proposals
5. Moisture content on delivery: 12-19%.
6. Preservative treatment: Manufacturer's standard
7. Finish as delivered: Primer and undercoat
8. Thermal performance (U-value maximum): 1.6
9. Acoustic performance rating: Submit proposals
10. Fire performance
 - 10.1. Fire resistance: Submit proposals
 - 10.2. Reaction to fire: Submit proposals
11. Glazing details:

Timber sash and casement windows
12. Beading: Internal
13. Ironmongery/ accessories:

Submit proposals
14. Fixing: Submit proposals

690 Security

1. Description: Window locks and stays
2. Type: Submit proposals
3. Accessories/ special features: Submit proposals
4. Fixing: Submit proposals

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.

730 Priming/ sealing

1. Wood surfaces inaccessible after installation: Prime or seal as specified before fixing components.

760 Replacement window installation

1. Standard: In accordance with BS 8213-4.

765 Window installation generally

1. Installation: Into prepared openings.
2. Gap between frame edge and surrounding construction
 - 2.1. Minimum: 5mm
 - 2.2. Maximum: 15mm
3. Distortion: Install windows without twist or diagonal racking.

770 Damp-proof courses in prepared openings

1. Location: Ensure correct positioning in relation to window frames. Do not displace during fixing operations.

780 Fixing of wood frames

1. Standard: BS 8213-4
2. Fasteners: Submit proposals
 - 2.1. Spacing: When not pre-drilled or specified otherwise, position fasteners not more than 150 mm from ends of each jamb, adjacent to each hanging point of opening lights, and at maximum 450 mm centres.

810 Sealant joints

1. Sealant
 - 1.1. Manufacturer: Submit proposals
 - 1.2. Colour: To match windows

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.

Ω End of Section

L40 General glazing

General requirements

150 Workmanship and positioning generally

1. **Glazing generally:** In accordance with BS 6262 series.
2. **Integrity:** Glazing must be wind and watertight under all conditions with full allowance made for deflections and other movements.
3. **Dimensional tolerances:** Panes/ sheets to be within ± 2 mm of specified dimensions.
4. **Materials**
 - 4.1. **Compatibility:** Glass/ plastics, surround materials, sealers, primers and paints/ clear finishes to be used together to be compatible. Avoid contact between glazing panes/ units and alkaline materials such as cement and lime.
 - 4.2. **Protection:** Keep materials dry until fixed. Protect insulating glass units and plastics glazing sheets from the sun and other heat sources.

152 Preparation

1. **Surrounds, rebates, grooves and beads:** Clean and prepare before installing glazing; ensure compliance with any certified installation requirements.

155 Glass generally

1. **Standards:** To BS 952 and relevant parts of:
 - 1.1. BS EN 572 for basic soda lime silicate glass.
 - 1.2. BS EN 1748-1-1 for borosilicate glass.
 - 1.3. BS EN 1748-2-1 for ceramic glass.
 - 1.4. BS EN 1863 for heat-strengthened soda lime silicate glass.
 - 1.5. BS EN 12150 for thermally toughened soda lime silicate safety glass.
 - 1.6. BS EN 12337 for chemically strengthened soda lime silicate glass.
 - 1.7. BS EN 13024 for thermally toughened borosilicate safety glass.
 - 1.8. BS EN ISO 12543 for laminated glass and laminated safety glass.
2. **Panes/ sheets:** Clean and free from obvious scratches, bubbles, cracks, rippling, dimples and other defects.
 - 2.1. **Edges:** Generally undamaged. Shells and chips not more than 2 mm deep and extending not more than 5 mm across the surface are acceptable if ground out.

165 Heat-soaking of thermally toughened glass

1. **Standard:** To BS EN 14179-1 and -2.
 - 1.1. **Holding period (minimum):** two hours
2. **Certified evidence of treatment:** Submit.
3. **Designated locations:** Refer to schedule

180 Bead-fixing with pins

1. **Pin spacing:** Regular at maximum 150 mm centres, and within 50 mm of each corner.
2. **Exposed pin heads:** Punched just below wood surface.

181 Bead-fixing with screws

1. Screw spacing: Regular at maximum 225 mm centres, and within 75 mm of each corner.

Types of glazing

370 Bead-fixed insulating glass units

1. Surround/ bead: To match frame
 - 1.1. Preparation: Paint primer
 - 1.2. Bead location: Inside
 - 1.3. Bead-fixing: Submit proposals
2. Glazing system: Preformed gasket sections supplied by window manufacturer
3. Thermal performance (U-value maximum): 1.6
4. Glazing installation
 - 4.1. Insulating unit: Located centrally in surround using setting and location blocks.
 - 4.2. Gaskets and beads: Installed as recommended by frame manufacturer.
 - 4.2.1. Gasket fit at corners: Tight, without gaps.
 - 4.3. Drainage and ventilation holes: Unobstructed.

520 Fire rating

1. Assessment of capability: Submit proposed construction details of designated items to a UKAS/ EA accredited laboratory or other approved authority for assessment of capability of achieving specified fire ratings.
 - 1.1. Test standard: To BS EN 1364-1
2. Assessment/ test results and reports: Submit immediately they are available, and before installing glazing.
3. Designated items: Refer to schedule

Ω End of Section