

Appendix D – Window & external doors – Aluminium frames with Polyester powder coated paint finish

L20

Doors/ shutters/ hatches

General

110 Evidence of performance

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

112 Timber procurement

1. **Timber (including timber for wood-based products):** Obtain 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, or
 - 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:** In accordance with UK Government Timber procurement policy (UKTPP), i.e. FSC, GiB or PEFC
 - 3.1. **Other evidence:** None

150 Site dimensions

1. **Procedure:** Before starting work on designated items take site dimensions, record on shop drawings and use to ensure accurate fabrication.
2. **Designated items:** Doorsets & screens

170 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 manufacture of the remaining quantity.
2. **Designated items:** Internal doorset

Products

280 Doors

1. **Description:** EXTERNAL DOORS & DOOR WITH GLAZED SIDE SCREENS
ALUMINIUM
2. **Item: Contractor's Design Portion - Item.**
Principal contractor must submit a full set of workshop fabrication window drawings for C.A review and comment prior to fabrication.
3. **Manufacturer:** The contractors attention is drawn to the GCS Specification included within Document 1 Volume 3 of the Tender Documentation. All works must be in accordance with this performance specification and as per the schedules and drawings contained there in. Compliance

with the Kendal Kingscott Drawings must also be achieved. All works form the Contractors Design Package.

- 3.1. **Product reference:** Contractor's choice to satisfy the requirements of the GCS Glazing Performance specification.
4. **Finish as delivered:** Polyester powder coated to BS EN 12206-1, colour ???
5. **Glazing/ infill details:** Clear double glazing in accordance with GCS Glazing Performance specification.
 - 5.1. **Manifestation:** Supply and fitting applied etched/sandblasted effect film to provide manifestation at two levels in alternating colour tones.
Size: 50mm diameter circles at the levels indicated on the internal door & window schedules. Drawing No. 200900-5006 & GCS Drawings and specification.
 - 5.2. **Beading:** Internal - GCS Glazing Performance specification.
6. **Fire performance**
 - 6.1. **Fire resistance:** Not required
 - 6.2. **Smoke leakage:** Not required
 - 6.3. **Reaction to fire:** To BS EN 13501-1, Class B or better
7. **Ironmongery:** As GCS Glazing Performance specification
8. **Thermal performance (U-value maximum):** 1.0 W/m²K
9. **Other requirements:** Glass: Thermal, solar control and safety requirements and performance in strict accordance with GCS Glazing Performance specification

410 Wood doorsets FD30 & Non-Fire Rated Single Doorsets & glazed side screens

1. **Description:** INTERNAL - SINGLE DOOR
INTERNAL - SINGLE DOOR WITH GLAZED SIDE SCREEN
30-MINUTE FIRE-RESISTING
NON-FIRE RATED
40DB SOUND-INSULATING
2. **Item:** Provide, install & commission new internal doorsets.
Provide, install & commission new internal doorsets with side screen.
Refer to Door Schedule for door and glazed side screen general arrangement & full performance requirements.
3. **Item:** Doorsets & ironmongery must be installed by BM TRADA certified installers for the requirements of building regulation compliance & approval.
It remains the responsibility of the principal contractor to obtain all required certification for door installation for the purposes of building control submission and approval.
4. **Manufacturer:** [Forza Doors Limited](#)
 - 4.1. **Contact details**
 - 4.1.1. **Address:** Unit 24a-24c
Star Road
Partridge Green, Horsham
RH13 8RA
 - 4.1.2. **Telephone:** +44 (0)1403 711126
 - 4.1.3. **Web:** www.forza-doors.com
 - 4.1.4. **Email:** info@forza-doors.com
 - 4.2. **Product reference:** [FD30 Single Door Flush Frame - Vision Panel 3](#)
Non-Fire Rated Door Flush Frame - Vision Panel 3
5. **Third party accreditation:** IFC Field of Application report PAR/10321/01 / FSC CU-COC-104313 / PEFC CU-PEFC-816129.

- 2.2. Calculations showing: Average daylight factor expressed as a percentage for each room/ area

155 View out

1. Windows/ opening sizes and position: Design to meet BREEAM 'View out' criteria for relevant building type.
2. Submit design plan and elevation drawings showing the following
 - 2.1. All BREEAM defined 'relevant areas' dependent on building type and room depths.
 - 2.2. Actual or notional workstation/ desk layouts.
 - 2.3. Window/ open areas.
3. Submit site plan showing: Building location and proximity to external obstructions.

Products

330 Aluminium windows

1. Standard: Non-fire and/ or smoke-rated windows to BS EN 14351-1 and BS 4873
2. Item: **Contractor's Design Portion - Item.**
Principal contractor must submit a full set of workshop fabrication window drawings for C.A review and comment prior to fabrication.
The Contractors attention is drawn to the performance specification contained within Document 1 Volume 3 of the Tender Documentation and GCS Glazing Specification and Drawings. NOTE: Design and Installation thereof forms part of the Contractors Design Portion.
3. Manufacturer: In accordance with GCS Glazing Specification & Approved Glazing Subcontractors list.
 - 3.1. Product reference: In accordance with GCS Glazing Specification.
4. Finish as delivered: Manufacturer's standard Polyester powder coating
5. Thermal performance (U-value maximum): 1.4 W/m²K
6. Acoustic performance rating: Manufacturer's standard
7. Fire performance
 - 7.1. Fire resistance: Not required
 - 7.2. Reaction to fire: To BS EN 13501-1, Class B or better
 - 7.3. Fire egress: Not required
8. Glazing details: In accordance with GCS Glazing Specification:
Insulating Low E glass.
Solar control glass.
Safety glass.
9. Beading: Internal
10. Ironmongery/ accessories: Manufacturer's standard
Casement stay
Espagnolette lock
Extension sill
Locking handle
Restrictor - Folding bars and manual winding gear.
11. Fixing: Screwed to masonry reveal, allowing for additional reveal fixing straps.
12. Weather tightness: Allow for Compriband impregnated joint sealing tape, EPDM based membrane to provide air tightness and weather tightness between window frame and facade substrate and external silicon sealant.

460 Framed rooflights - Type 2 Flat roof

1. **Description::** Principal contractor to provide and install new flat roof fixed roof lights and associated Whitesales preformed insulated kerb up stands.
2. **Item:** Principal contractor to allow for all associated builder's work to include but not limited to trimming flat roof joists to form a structural opening to receive preformed kerb, and associated weather flashings and roofing felt detailing up-stands.
Preformed upstand kerbs, rooflight units and weathering flashings are to be install in strict accordance with manufactures recommendations & instructions.
3. **Manufacturer:** [Whitesales Rooflights](#)
 - 3.1. **Contact details**
 - 3.1.1. **Address:** Europa House
Alford Road
Cranleigh
Surrey
GU6 8NQ
 - 3.1.2. **Telephone:** [+44 \(0\)1483 917580](#)
 - 3.1.3. **Web:** [www.whitesales.co.uk](#)
 - 3.1.4. **Email:** [sales@whitesales.co.uk](#)
 - 3.2. **Product reference:** [em.dome® - Polycarbonate Rooflight \(Quad\)](#)
4. **Form:** Dome: Round.
5. **Size:** Circle Rooflights (C2) - 600mm radius.
6. **Preformed kerb::** Whitesales PVC 300mm Splayed em.curb
7. **Product performance**
 - 7.1. **Fire performance**
 - 7.1.1. **Fire resistance:** To BS 476:Part3 AA, Class 1. To 1991 Building Regulations.
 - 7.2. **Whole window U-value:** 0.85 W/m2K.
8. **Frame**
 - 8.1. **Material:** uPVC.
 - 8.2. **Finish**
 - 8.2.1. **Colour:** White, self finished.
9. **Glazing or infill**
 - 9.1. **Type:** Polycarbonate sheet.
 - 9.2. **Construction:** Quad skin.
 - 9.3. **Colour:** Clear.
 - 9.4. **Coating:** UV protected.
10. **Integral kerb:** PVC-U, 300 mm high, splayed, white.
11. **Accessories:** Vent Control Pack.
12. **Ventilation/ opening:** Controllable rotating, two sides.
13. **Third party certification::** CE Certified to EN 1873.
14. **Ventilation:** Em.domes with proprietary upstand.
15. **Other requirements:** All to provide and install plasterboard linings to internal light shaft through roof structure.

480 Roof window units - Type 1 Pitch roofs

1. **Item:** Provide, install and commission roof windows to pitch roofs.
Allow for all roof rafter structural trimming in accordance with roof specialist designers to form structural openings for roof windows.

Allow for manufactures associated roof window weathering flashing kits type for standing seam metal cladding roofs.
Allow for all associated power, controls and cabling to to electrically operated windows and shutters.

2. Manufacturer: [VELUX Company Ltd](#)

2.1. Contact details

- 2.1.1. Address: Woodside Way
Glenrothes
Fife
KY7 4ND
- 2.1.2. Telephone: [+44 \(0\)1592 778225](tel:+441592778225)
- 2.1.3. Web: www.velux.co.uk
- 2.1.4. Email: sales@velux.co.uk

2.2. Product reference: [GGL Electric/ Solar Centre-Pivot Roof Window](#)

3. Product performance

- 3.1. Whole window U-value: 1.0W/m²K.

4. Glazing or infill

- 4.1. Composition: Argon filled cavity, Krypton filled cavity depending on product option.

5. Hardware: Flashings are available in materials and finishes to match roof window cladding.

6. Operation

- 6.1. Type: Electrically operated.
- 6.2. Electrical supply: Pre-installed motor.

7. Accessories: None.

8. Execution: Fixing of wood frames.

9. Internal frame and sash: White painted.

10. External cladding: Titanium zinc.

11. Roof pitch: 45 degrees

12. Window code: GGL PK10.

13. Glazing: Code 6621U

14. Type: External shutter – Code SML.

15. Colour:

16. Energy efficiency installation collars: Underfelt Collar – Code BFX 1000.

17. Flashing: Code ZWC: Window profile set to be used in conjunction with on-site weathering for non-standard roofing materials.

Principal contractor to coordinate with roofing subcontractor roof window flashing kit to be used with metal sheet standing seam roof sheeting.

18. Other requirements:: All to provide and install plasterboard linings to internal light shaft through roof structure.

19. Accessories: VELUX INTEGRA: To operated window opening via electric motor and electrically operated external shutters.

485 Framed rooflights - Type 3 Flat roof

- 1. Description:: Principal contractor to provide and install new flat roof electric roof lights and associated Whitesales preformed insulated vertical kerb upstands.
Allow for all associated power, controls and cabling to to electrically operated windows.
- 2. Item: Principal contractor to allow for all associated builder's work to include but not limited to trimming flat roof joists to form a structural opening to receive preformed kerb, and associated weather flashings and roofing felt detailing up-stands.

Preformed upstand kerbs, rooflight units and associated electric actuators, switches & controllers etc are to be install in strict accordance with manufactures recommendations & instructions.

3. Manufacturer: [Whitesales Rooflights](#)

3.1. Contact details

3.1.1. Address: Europa House
Alford Road
Cranleigh
Surrey
GU6 8NQ

3.1.2. Telephone: +44 (0)1483 917580

3.1.3. Web: www.whitesales.co.uk

3.1.4. Email: sales@whitesales.co.uk

3.2. Product reference: [em.glaze™ Flat Glass Electric](#)

4. Form: Flat - Square & rectangle.

5. Size: 2x S13 - 1400mm x 1400mm.
1x R6m - 600mm x 2400mm.

6. Frame

6.1. Material: Aluminium.

6.2. Finish

6.2.1. Coating: Anthracite.

6.2.2. Colour: External: Anthracite grey, RAL 7016.
Internal: White, RAL 9016.

7. Glazing or infill

7.1. Type: Glass unit.

7.2. Construction: Double glazed.

7.3. Colour: Solar control tint.

8. Integral kerb: PVC-U, 150 mm high, vertical, white.

9. Operation

9.1. Type: Powered, electric.

9.2. Control: CCU3 Control Unit - Standard Comfort Controls.

10. Third party certification:: CWCT TN66/ 67 Class 1.

11. Other requirements: All to provide and install plasterboard linings to internal light shaft through roof structure.

650 Aluminium ventilation louvre panel units

1. Item: Provide & instal new wall mounted aluminium Louvre ventilation grills for all mechanical ventilation through wall terminals.
Refer to elevation drawings and M&E drawings and specification for quantity and location of grills.

2. Manufacturer: [Renson Fabrications Ltd](#)

2.1. Contact details

2.1.1. Address: Fairfax Units 1 - 5
Bircholt Road
Parkwood Industrial Estate
Maidstone
Kent
United Kingdom
ME15 9SF

2.1.2. Telephone: +44 (0)1622 754123

2.1.3. Web: www.rensonuk.net