

Project : Neville House, Corby
Ref : 1232
Client : Corby Borough Council
Date : 23 May 2018
Issue : TENDER 01

To be read in conjunction with tender drawings
and all other specification and tender documents.

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Architectural Specification

To be read in conjunction with tender drawings and all
other specification and tender documents.

G10 Structural steel framing

- 20 STEEL FRAMING SYSTEM to external wall infill to form rainscreen facade
Manufacturer: Metsec, or equal approved
- System reference: SFS.
Installation shall resist the design wind loads, dead loads and design live loads, and
accommodate deflections and movements without damage.
Design wind pressure: Calculated in accordance with BS 6399-2: 1997 by a chartered
engineer. The system shall accommodate the specified structural deflections and
applied environmental loads with no deformation or damage.
Wind loading assessments and/or formal calculations by a chartered engineer will be
provided for CA inspection.

H92 Rainscreen cladding

- 10 INFORMATION TO BE PROVIDED WITH TENDER
Submit the following cladding particulars:
Typical plan, section and elevation drawings at suitable scales.
Typical detailed drawings at large scales .
Technical information and certification demonstrating compliance with specification of
proposed incorporated products and finishes, including [BBA Certificate, CWCT
compliance, manufacturing in accordance with relevant BS or equivalent European
standards] .
Certification, reports and calculations demonstrating compliance with specification of
proposed cladding.
Proposals for connections to and support from the primary support structure.
Proposals for primary support structure additional to that shown on preliminary design
drawings.
Schedule of builder's work, special provisions and special attendance by others.
Examples of standard documentation from which project quality plan will be prepared.
Preliminary fabrication and installation method statements and programme.
Proposals for replacing damaged or failed products.
- 120 RAINSCREEN CLADDING
Detailed design by contractor. Warranties to be supplied on the system and on
installation. Drawing reference(s): 2000, 2001, 4000

Primary Support structure: Steel Framing System
Overall build up to achieve maximum u-value of 0.28 W/m²K
Sheathing Board fixed to Primary Support structure: Manufacturer:RCM Ltd, or equal approved

Product reference: Y-Wall

Thickness: 12 mm (31 dB sound insulation)

Fixings: 4.8 x 38 mm wing tip self-drilling fixing.

Rainscreen Cladding Panel System: Ventilated

Product reference: Meteon FR Grade (fire resistant)

Fire classification: European Classification of B-s1, d0 or better.

Manufacturer: Trespa International B.V.

Thickness: 10mm

Board Finish: Metallics Satin Finish

Colours: Copper Yellow, Copper Red and Deep Copper. Arranged as elevation drawings approved by planning permission ref 17/00645/REG3, approved drawings 1232-AP111 revA, 1232-AP112 revA,

Fixings TS200 invisible (concealed) fixing with brackets on aluminium sub-frame comprising rails and hanging brackets fixed with inserts to the back of the panel

Please consult Trespa International BV for wind loading calculations as Panels are above 9 metres

Joints:

Type/treatment: Blackout tape to be applied to prevent light reflection from aluminium supports.

Distance between boards: 10mm

Air gap: Minimum 25mm

Secondary support system/framing system: Manufacturer:

Contractor's proposal to meet design and loading requirements.

Thermal Insulation: As design requirements to achieve u-value of 0.28 W/m²K, or better.

Vapour Control Layer: As design requirements

Breather membrane: As design requirements

Accessories: Ventilated profiles:

Bottom vent strip and Bottom Drips:

External window cills - aluminium profile colour coded to match windows.

Fire stops as required by fire strategy to ensure all openings are correctly fire stopped all round and the rainscreen is correctly fire stopped at perimeter edges.

GENERAL REQUIREMENT

380 GENERAL MOVEMENT

Requirement: Rainscreen cladding must accommodate anticipated building movements

730 MECHANICAL FIXINGS – MECHANICAL REQUIREMENTS

Stainless steel: To BS EN ISO 3506 grade A2 generally

Carbon steel: To BS4190 and suitable for galvanizing or other protective coating.

Aluminium: To BS EN 755

775 THERMAL INSULATION

Material: Rockwool Rainscreen DuoSlab non-combustible thermal insulation (Euroclass classification A1) fixed within the primary SFS system and around brackets over sheathing board to achieve the required thermal performance

Fixing: Attached to the outer face or supported within the SFS wall so as not to bulge, sag, de-laminate or detach during installation or in situ during the life of the rainscreen cladding.

- 780 VAPOUR CONTROL LAYER
 Manufacturer: Dupont, or equal approved
 Product reference: Airguardor equal approved
 Continuity: No breaks and with the minimum of joints.
 Penetrations and abutments: Seal to vapour control layer. If necessary, prime substrates to achieve full bond.
 Sheet laps: not less than 150mm, seal with tape.
 Sheet tape: Double sided sealant with vapour resistivity not less than the vapour control sheet.
 Sheet repairs and punctures: Seal with lapped patch of vapour control membrane and continuous band of sealant tape along edges.
- 785 BREATHER MEMBRANE
 Manufacturer: Dupont or equal approved
 Product reference: Tyvek Supro or equal approved
 Continuity: No breaks. Minimize joints.
 Penetrations and abutments: Attach to breather membrane with tape. Achieve full bond.
 Laps: Not less than 150mm, bond with tape. Achieve full bond
 Tape: As recommended by breather membrane manufacturer
 Repairs: Lapped patch of breather membrane material secured with continuous band of tape on edges.
 Junctions at flashings, sills, gutters etc. Overlap and allow free drainage to exterior.
- 960 PRELIMINARY RAINSCREEN CLADDING INSTALLATION
 Requirement: Complete an area of cladding as set out below for inspection and approval of appearance.
- 970 RAINSCREEN CLADDING INSTALLATION
 Tightening mechanical fasteners: To manufacturer's recommended torque figures. Do not over tighten fasteners intended to permit differential movement.
 Protective coverings: remove only where necessary to facilitate installation and from surfaces which will be inaccessible on completion.
- 995 MAINTENANCE
 Maintenance manual: Incorporate details within the Building Manual in accordance with CWCT Standard for systemised Building envelopes clause 7.6.1
 Material certification and test reports to be included: The terms and conditions of any guarantee.
 Method statement for means of access for maintenance and for use of any permanent equipment.
 Method statement covering the procedures for replacement of parts that have a design life less than the design life of the rainscreen system
 Recommendations for routine maintenance and cleaning including suitable cleaning agents and lubrication/adjustments to working parts.
 Record book for listing defects, maintenance and repairs.
 List any supplementary contents in the clause.
 The maintenance manual should schedule inspection requirements.

J40 Single Ply Flexible sheet waterproofing

- 10 SINGLE LAYER POLYMERIC MEMBRANES TO FORM ROOF COVERING
 Warm insulated roof construction
- 20 Decking: Existing structural deck. System and build up to be compatible to the installation of photovoltaic panel support system.
- 30 Vapour control layer:
 Required, bonded to deck.

- 40 Thermal Insulation:
Rockwool HardRock Multi-Fix (DD) non-combustible thermal insulation to achieve u value of 0.18 W/m²K, or better.
- 50 Single layer polymeric membrane:
Sarnafil or equal approved.
- 60 Flashings:
As recommended by single ply manufacturer to abutments.
Single ply roof drainage outlets and flashing collars to roof penetrations required.7
- 70 PEDESTRIAN MAINTENANCE WALKWAYS
To be reinforced as recommended by single ply manufacturer.

K10 Plasterboard dry linings/ partitions/ ceilings

- 30 METAL STUD PARTITION SYSTEM INTERNAL PARTITIONS
System required to achieve Airborne sound insulation 40 dB Rw (Minimum value) in accordance with Building Regulations Approved Document Part E.
Typical construction in 2 locations (to be agreed with contract administrator) to be subject to pre-completion sound testing.
Manufacturer: British Gypsum
Product reference: GypWall Classic
Studs:
Type: 70 mm Gypframe 70 S 50 'C' studs.
Centres: 600 mm
Head condition:
Type: Gypframe 72 C 50 Floor and Ceiling Channels .
Deflection allowance: TBC.
Insulation:
Type: none.
Linings:
Type: 2 x 12.5 mm Gyproc SoundBloc to each side – tapered edge. Use MR rated board in bathrooms.
Edge: Tapered edge.
Finishing:
Type: Skim coat plaster finish.
Primer/ Sealer: 1 coat of Gyproc Drywall Prime.
Accessories: Rigid beads/ stops.
Other requirements:
Access panels as req'd.
Offset electrical boxes either side of partition.
Gyroc sealant to all gaps as manufacturer's recommendations.
Bathroom walls to be lined with 18mm WBP plywood to provide fixing for fixtures and fittings.
- 30A METAL STUD PARTITION SYSTEM INTERNAL PARTITIONS IN BATHROOMS
As K10/30
Bathroom stud walls to be lined with additional 18mm WBP plywood to provide fixing for fixtures and fittings.
- 30B METAL STUD PARTITION SYSTEM INTERNAL PARTITIONS WITH HIGH LEVEL FANLIGHT GLAZING
As K10/30. As shown on drawings 1232-2000 and 2001.
Fire rated glazing to maintain the overall fire rating of partition. Glazing to extend from level of door head to underside of ceiling. Glazing to Bathrooms to be obscure frosted.

- 35 WALL LINING ON METAL FRAMING TO INTERNAL SVP AND RWP PIPES
 Manufacturer: British Gypsum.
 Product reference: GypLyner UNIVERSAL
 Framing centres: 600 mm
 Bracket centres (maximum): 800 mm
 Insulation: wrap 25mm unfaced mineral fibre around pipes.
 Linings: 2 x 12.5 mm Gyproc SoundBloc or Fireline (staggered joints) .
 Access units: Gyproc Profilex access panels, as required for maintenance access.
 Finishing:
 Type: Skim coat plaster finish.
 Primer/ Sealer: 1 coat of Gyproc Drywall Primer.
 Accessories: Rigid beads/ stops.
- 40 WALL LINING ON EXISTING SEPARATING MASONRY WALLS BETWEEN FLATS
 Walls to be assessed and improved if necessary to achieve Airborne sound insulation of no less than 43 dB DnT,w + Ctr (Minimum value)
 Typical construction in 2 locations (to be agreed with contract administrator) to be subject to pre-completion sound testing.
- 45 WALL LINING ON RETAINED EXTERNAL MASONRY WALLS
 Overall build up to achieve maximum u-value of 0.28 W/m²K
 Manufacturer: British Gypsum
 Product reference: DriLyner TL
 Parge coat: Not required.
 Adhesive method: Mechanical fix as manufacturer's recommendations.
 Linings: Gyproc ThermaLine SUPER.
 Finishing:
 Type: Skim coat plaster finish.
 Primer/ Sealer: 1 coat of Gyproc Drywall Primer.
 Accessories: Gyproc nailable plugs. Rigid beads and stops.
- 50 CEILING ON METAL FRAMING WITHIN FLATS
 Manufacturer: British Gypsum
 Product reference: GypLyner Universal ceiling lining system
 Primary/Secondary grid centres: as manufacturers recommendations
 Hanger centres: as manufacturers recommendations
 Linings: 12.5 mm Gyproc WallBoard.
 Access Units: Gyproc Profilex access panels as req'd by M&E services installations .
 Finishing: Skim coat plaster finish.
 Primer/ Sealer:
 Type: 1 coat of Gyproc Drywall Primer.
- 60 CEILING ON METAL FRAMING WITHIN COMMUNAL CORRIDOR ON LEVEL 03
 Allow for investigation of existing profiled sheet to confirm fire classification of Class 0 or Euro class B-S3, d2. Otherwise allow for removal of existing lining and replace with a ceiling system to provide a Class C sound absorber to the same area as the floor area of the corridor, to meet Building Regulations AD Part E, Section 7.
 Manufacturer: British Gypsum
 Product reference: Casoline MF ceiling system
 Primary/Secondary grid centres: as manufacturers recommendations
 Hanger centres: as manufacturers recommendations
 Linings: Gyptone acoustic ceiling boards
 Finishing: Paint finish
- 65 SKIM COAT PLASTER FINISH
 Plaster type: As recommended by board manufacturer.
 - Thickness: 2-3 mm.

Joints: Fill and tape except where coincident with metal beads.

Finish: Tight, matt, smooth surface with no hollows, abrupt changes of level or trowel marks.

70 INSTALLING BEADS/ STOPS

Cutting: Neatly using mitres at return angles.

Fixing: Securely using longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with substrate.

Finishing: After joint compounds/ plasters have been applied, remove surplus material while still wet from surfaces of beads exposed to view.

L10 Windows/ Screens/ Louvres

GENERAL INFORMATION / REQUIREMENTS

EVIDENCE OF PERFORMANCE.

All relevant test data, technical information or other form of certification demonstrating compliance with specification will be provided upon request for CA approval.

DIMENSIONS

Construction drawings will be prepared in accordance with design team details and agreed dimensions for CA approval.

CONTROL SAMPLES

Section samples will be provided upon request. Any further project specific samples shall be identified and agreed for CA approval prior to instruction.

Components

TIMBER / ALUMINIUM COMPOSITE WINDOWS

Drawing References: 1232-4000, 4001

Manufacturer: VELFAC LTD, The Old Livery, Hildersham, Cambridge, CB21 6DR.

Telephone: 01223 897100 ned@velfac.co.uk / 07391 866914

or equal approved

Product reference: VELFAC 200 SERIES COMPOSITE WINDOWS or equal approved

Type: Windows and window walling are to be a unitised composite aluminium/wood system, with an independent thermally isolated aluminium sash. Aluminium sash profiles will be fully ventilated and drained through concealed drainage channels and incorporate an aluminium glazing rebate. The window system will have slim 54mm external profiles and all opening and fixed lights will have consistent sight lines.

Framing will facilitate the integration of concealed trickle ventilators and electrically controlled window actuators where required. All elements will be delivered fully finished with all ironmongery fitted and factory dry glazed with EPDM co-extruded single piece gaskets and internal glazing beads.

Manufacture: Window production facilities will operate an ISO 9001 quality control system. Each individual window will be permanently labelled with a unique production reference concealed in the rebate of the frame to aid replacement and/or conversion and/or repair. The identification label system will form part of the manufacturing quality control and associated audit tracing.

Warranty & design life: The window system will have an expected design life of at least 40 years and a schedule of maintenance will be provided. The complete window inclusive of framing, gaskets, ironmongery and glazing will be covered by a 12 year warranty from date of manufacture.

Environment: Independent assessment of life cycle analysis and design life using EDIP method will be provided for CA approval. Manufacturing facilities will operate an ISO 14001 environmental policy as will key suppliers. All timber will be supplied from

sustainable sources accredited under PEFC or FSC forestry management schemes and 85% of aluminium will be procured from hydro-electric sources with a recycled content of at least 50%.

- 210 Fixed window
Manufactured from profiles providing uniformity of sight lines across all functions. Sashes to be internally retained through concealed fixings. Fixed lights to be independently tested and certified to BS 7950 and licensed under the Secured by Design initiative
- 229 Reversible opening window
Manufactured from profiles providing uniformity of sight lines across all functions. Sashes mounted on aluminium guide rails with balance arms incorporating built in adjustable friction brake and opening safety restrictor. Window to be fully reversible to facilitate internal cleaning and include automatic engagement of safety catch when placed into the cleaning position.
- 230 Automatic Opening Vents (AOV)
Actuators fitted as required to windows shown on elevation and plan drawings. To provide free opening area as required by Building Regulations and the Fire Strategy for the building. AOV's to be linked to the fire detection system as required by the approved fire strategy.

MATERIALS

Internal framing:

North European Pine (*Pinus Sylvestris*), density 500kg/m³ measured at 12% moisture content. Permissible moisture content between 9% and 15%, typically 84% of material will have a moisture content of 12% +/- 2% measured in accordance with BS EN 14220: 2006. Growth rate will not exceed 4mm when determined in accordance with BS EN 1310: 1997

Timber quality:

Timber will be graded according to INSTA 142 and meet the requirements of category T3 in accordance with BS EN 14081: 2005, and strength class C30 in accordance with BS EN 1912: 2004. An auditable quality control system should be in place to ensure material consistency.

Timber sections will be independently tested and assessed in accordance with EN 384 to identify characteristic bending strength and mean E values. Frame joint arrangements will be independently tested and assessed in accordance with EN 380 to identify loading capacities

Design of the structural timber framing will be in accordance with BS 5268: 2002.

VISION GLAZING

General: Windows will be delivered to site pre-glazed with insulating glass units conforming to:

BS 952: 1995: Glass for Glazing – Part 1: Classification

BS EN 572: 2004: Glass in building – Basic soda lime silicate glass products – Part 2: Float glass

BS EN 12150: 2000: Glass in building – Thermally toughened soda lime silicate safety glass – Part 1: definition and description

BS EN ISO 12543: 1998: Glass in building – Laminated safety glass

BS EN 12600: 2006: Specification for Impact Performance

BS EN 1279: 2002: Glass in building – Insulating glass units

BS 6262: 1982: Code of practice for glazing for buildings

BS 6262: 2005: Glazing for buildings – Part 4: Code of practice for safety related to human impact

BS 6206: 1981: Specification for impact performance requirements for flat safety glass

and safety plastics for use in buildings

BS EN 6180: 1999: Barriers in and about buildings – Code of practice

Outer pane of glazing to achieve self-cleaning properties to the equivalent of Pilkington

Activ™ Self-Cleaning Glass

Thermal transmittance for overall units: not exceeding 1.6 W/m²K, or better

NON-VISION GLAZING

Type: VELFAC Ventilated enamel glass panel

External material: 6mm toughened enamelled glass

External glass colour: as frame colour

Spacer & cavity: Fully ventilated cavity with vacuum impregnated timber spacer profiles.

Internal material: 9mm glass-fibre reinforced, humidity proof and diffusion open paper covered plaster board

Loose fill insulation: Non-combustible insulation to be provided by window installer to achieve U value 0.28W/m²K, or better

Internal facing board: Chipboard manufactured in accordance with BS EN 312 and class E1 according to BS EN 120 with formaldehyde content of less than 7 milligram per 100 gram of board. Board to include integral vapour barrier and to be mounted with concealed clips. Face fixed boards and visible fixings will not be acceptable.

Internal finish: vertically grained pine veneer

Outer pane of glazing to achieve self-cleaning properties to the equivalent of Pilkington

Activ™ Self-Cleaning Glass

Type: VELFAC Architectural louvre panel

Material: Extruded aluminium alloy profiles in accordance with BS EN 755-2 (mechanical properties), BS EN 12020-2 & BS EN 755-9 (dimensional accuracy).

Alloys: EN AW-6060 T5, EN AW-6063 T5, EN AW-6082, EN AW-6005

External finish: Polyester powder coat in compliance with BS EN 6496, BS EN 6497, & DIN 50939 with applicators to be registered under the European Qualicoat and/or GSB quality assurance schemes. Polyester powder coat minimum dry film thickness: 60 – 120 microns

External colour: RAL 7016 to gloss level 77%

Other requirements: Insect mesh to be incorporated within perimeter framing directly behind louvre blades.

PERFORMANCE

Weather tightness:

To BS 6375 Part 1: 2004

Exposure category: 1600 Pa

Air permeability: Tested to 600 Pa in accordance with BS EN 1026: Class 4 to BS EN 12207

Water tightness: Tested to 1500 Pa in accordance with BS EN 1027: Class E1500 to BS EN 12208

Resistance to wind: Tested to 1600 Pa in accordance with BS EN 12211: Class A4 to BS EN 12210 – 1600 Pa wind serviceability / 2400 Pa wind safety

Integrity:

Window installation shall resist the specified wind loads, dead loads and design live loads, and accommodate deflections and movements without damage.

Design wind pressure: Calculated in accordance with BS 6399-2: 1997 either on the following statistical factors or the design wind pressure, both provided by the CA Consulting Engineer. The windows shall accommodate the specified structural deflections and applied environmental loads with no deformation or damage.

Wind loading assessments and/or formal calculations by a chartered engineer will be provided for CA inspection.

Basic wind speed (Vb): [TBC]
Altitude factor (Sa): [TBC]
Direction factor (Sd): [TBC]
Seasonal factor (Ss): [TBC]
Probability factor (Sp): [TBC]
Terrain and building factor (Sb): [TBC]
Size effect factor (Ca): [TBC]

External pressure coefficients (Cpe): -1.3 (unless otherwise advised)
Internal pressure coefficients (Cpi): 0.2 (unless otherwise advised)
Design wind pressure: [TBC]

Permanent imposed loads: No permanent loads to be transmitted to windows
Temporary imposed loads: Static 500 N load applied horizontally through a square of 100mm sides arising from maintenance

Thermal Properties:

The window system shall be tested in accordance with BS EN ISO 10077-2: 2003. All thermal data and calculations supplied must be for the complete window units. Centre pane U-values for insulating glazing units alone will not be acceptable. A thermal data sheet must be supplied to detail all individual U-values for each window type, and a weighted average U-value for all units within the same order for CA approval.

Acoustic Performance:

The complete window system including the specified glazing will be tested in accordance with BS EN ISO 140-3: 1995 (BS 2750-3: 1995). All acoustic data supplied must be for complete window units, not the insulating glazing units alone. Full acoustic test reports must be supplied where appropriate for CA approval.

Weighted sound reduction index (Rw) within 100 to 3150 Hz frequency range to BS EN ISO 717-3 (BS EN 5821-3) between internal and external surfaces of window (minimum):

Rw: [TBC]

Installation

Frame reinforcing

Mild steel frame reinforcement sections to relevant sections of BS 7668, BS EN 10029, BS EN 10113, BS EN 10137, BS EN 10155, BS EN 10210.

Protective coating: Hot dip galvanised to BS EN ISO 1461

Dimensions: To be sized according to environmental loads in accordance with VELFAC structural assessment and/or calculations.

PROTECTION OF COMPONENTS

General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry floored and covered storage.

Stored components: Factory packed vertically or near vertically on wooden pallets, separated with spacers to prevent damage, all pallets to be shrink-wrapped, referenced and labelled prior to dispatch from factory.

WINDOW INSTALLATION GENERALLY

Installation: Install windows into suitably prepared openings, maintaining a clearance of 15 mm (+0 / -5mm) between the frame edge and the surrounding construction.

Distortion: Install windows without twist or diagonal racking.

Accuracy of installation: ± 2 mm for adjoining windows limited to ± 5 mm from notional datum/position on all axis.

DAMP PROOF COURSES IN PREPARED OPENINGS

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

FIXING OF COMPOSITE FRAMES

Spacing: Position fasteners strictly in accordance with VELFAC installation guide unless specifically indicated otherwise on VELFAC construction issue drawings.

SEALANT JOINTS

External Sealant: Apply pre-compressed external sealant tape immediately following frame installation in accordance with the manufacturer's recommendations. The seal is applied to the timber frame perimeter behind the aluminium sash to provide UV protection. The use of sealant placed in the outermost plane of the windows/screens in order to seal between units and/or other adjacent materials will be unacceptable.

External seal manufacturer: Tremco Illbruck

Product reference: Compriband 600 certified under BBA 96/3309

Type: Minimum 20mm depth – width to suit finished joint.

Colour: Black.

Internal seal: Apply silicone seal immediately following frame installation in accordance with the manufacturer's recommendations. Ensure all surfaces are clean, dry and free from contamination and prepare the joint using an approved cleaning wipe. Insert closed cell, cross-linked, foam polyethylene backing rod or bond breaker tape as required and solidly fill the joint and tool to finish.

Internal seal manufacturer: Adsheed Ratcliffe

Product reference: ARBOSIL 1090 or ARBOSIL LM according to colour

Type: Low modulus one part silicone sealant, Type A in accordance with BS 5889

Colour: To match or compliment window frames

IRONMONGERY

Ironmongery selected from VELFAC standard range of components. To include restrictors to opening lights.

Fixing: All ironmongery fitted to frames prior to dispatch from factory.

Checking/ Adjusting/ Lubricating: Carry out at completion and ensure correct functioning.

400 ROOF SMOKE VENT ABOVE COMMON STAIR

Manufacturer: Submit proposals to provide opening with free area of minimum 1 m².

Flashings: As required to suit roof covering.

Accessories: Remote opening device operated from Ground Floor entrance lobby, to meet requirements of the fire strategy and of the Fire and Rescue Service.

L20 Doors

55 DOORS AND GLAZED SCREENS (GFT) TO EXTERNAL MAIN FRONT ENTRANCE AND REAR ENTRANCE

Manufacturer: Reynaers, or equal approved

Product ref: Vision 50, or equal approved.

Type: As drawings.

Thermal performance (U-value maximum): [1.8 W/m²K].

Finish: polyester powder coat. RAL 7016 77%

Access control: linked to intercom/access system. Emergency exit without key operation.

60 DOORSETS FLAT ENTRANCE DOORS

Manufacturer: Contractors proposals

Fire resistance: 60 minutes fire resisting doors with intumescent strips and smoke seals fitted and overhead closer to latch door properly on closing.

Acoustic performance: To meet Building Regulations AD Part E requirements.

Minimum sound reduction index of 29 dB R_w with good perimeter sealing including at the threshold. Minimum mass per unit area of 25kg/m².

Thermal performance (U-value maximum): [1.8 W/m²K].
Security: To achieve requirements of BS publication PAS 24:2012 'Secure by Design'
Fire Resistance: Entrance door to all Flats to achieve FD 30 S
Accessories: Overhead self closer. Level threshold. Manufacturer's standard ironmongery. Spy hole. Security chain. Integral top and bottom thumb turn bolts. Door knocker. Door stop to protect wall .

65 DOORSETS WITHIN COMMON CORRIDOR/LOBBY AREAS

Manufacturer: Contractors proposals
Fire resistance: As shown on fire strategy drawing 1232-2010 fitted with intumescent strips and smoke seals fitted and overhead closer to latch door properly on closing.
Vision Panel: To all doors on escape routes, to Building Regulations requirements.
Accessories: Overhead self closer. Manufacturer's standard ironmongery. Kick plates both sides. Push plates/Pull handles.

L30 Stairs/ ladders/ walkways/ handrails/ balustrades

PURPOSE MADE MESH SCREEN TO OPEN STAIRWELL IN COMMON STAIR

As drawing: TBC

Manufacturer: Potter and Soar

Mesh pattern: Niagara 12-12-12-12

Support frame: Stainless steel tube and tension edge frame fixed to stair and landing structure

BALUSTRADES TO STAIRS AND LANDINGS

Make adjustments to ensure minimum guarding heights comply to current building regulations. Adjustments to match existing balustrade/guarding design

Workmanship:

Metalwork: As section Z11.

Other requirements: To match existing guarding / handrail.

Fixing: Fixed to concrete without compromising structure

INSTALLATION GENERALLY

Fasteners and methods of fixing: To contractor's design

Temporary support: Do not use stairs, walkways or balustrades as temporary support or strutting for other work.

Make good substrate surfaces and prepare/ prime as applied feature manufacturer's recommendations before application.

M50 Floor sheeting

140 ACOUSTIC UNDERLAY TO ALL FLOORS WITHIN FLATS

Base: Existing screed / Self levelling screed

Manufacturer and product reference: Regupol 4515 Multi

Thickness: 3 mm

Special requirements: Laid in accordance with manufacturer's recommendations and acoustic best practice.

In addition the floor on levels 03 and 04 are required to achieve Airborne sound insulation of no less than 43 dB DnT,w + Ctr (Minimum value) and Impact sound insulation of no greater than 64 dB L'nT,w (Maximum value) in accordance with Building Regulations Approved Document Part E.

Typical construction in 2 locations (to be agreed with contract administrator) to be subject to pre-completion sound testing.

P10 Sundry insulation/ proofing work

INSULATION FIXED TO EXPOSED UNDERSIDE OF FLOOR SLAB LEVEL 02
FLATS - as shown on section drawing 4000.

Manufacturer: Rockwool.

Product reference: Soffit Slab.

Thickness: To achieve U-value of 0.22 w/m²K, or better.

Vapour Control Layer: Form continuous VCL between insulation and building structure.

Seal around all penetrations.

Installation requirements:

Joints: Butted, no gaps.

Service openings: Sealed.

VENTILATED CAVITY BARRIERS

Within rainscreen cladding work package.

Positioned at perimeter of rainscreen and along any separation/complementation walls between flats and around all openings.

Manufacturer: Rockwool.

Product reference: SP Firestop.

Material: M.

Size: To suit cavity and FR requirements.

Thickness: To suit cavity and FR requirements.

Fire resistance rating: To BS EN 1363, EI 30.

Installation requirements: Continuous with minimum joints.

Fasteners: Fixing brackets as manufacturers recommendations.

Other requirements: -.

P11 Fibre cavity wall insulation

INSULATION TO FILL RETAINED CAVITY WALLS – on north and south elevations and to stair/lift core – as elevation drawings.

Manufacturer: Knauf, or equal approved.

Product reference: Supafil 34, or equal approved.

Thickness: To achieve U-value of 0.28 w/m²K, or better.

Preparation: Provide endoscope CCTV survey of cavities for CA approval prior to installation.

P12 Fire stopping systems

GENERAL

10 FIRE STOPPING THROUGH SEPARATING WALLS BETWEEN FLATS

Resistance to fire: To BS EN 13501-2, EI 30.

Reaction to fire: To BS EN 13501-1, class A1.

PRODUCTS

36 INTUMESCENT FOAM

Manufacturer: Contractor's choice.

Product reference: Contractor's choice .

40 MINERAL WOOL RIGID BATTS

Standard: To BS EN 13162.

Manufacturer: Contractor's choice.

Product reference: Contractor's choice .

Recycled content: Contractor's choice.

43 PIPE COLLAR - CONCEALED INTUMESCENT

Manufacturer: Contractor's choice.

Product reference: Contractor's choice .

48 SEALANT - ONE-PART FIRE RESISTING ACRYLIC

Manufacturer: Contractor's choice.

Product reference: To BS EN 11600 .

EXECUTION

62 EXECUTION GENERALLY

Gaps: Seal gaps between building elements and services, to provide fire resistance and resist the passage of smoke.

Adjacent surfaces: Prevent overrun of sealant or mortar on to finished surfaces.

64 APPLYING INTUMESCENT FOAM

New joints: Remove builder's debris, mortar droppings, grease, and other contaminants.

Old joints: Clean and remove existing sealant from each joint.

Priming: Lightly moisten substrate with water.

Application: Fill joint to approximately half its depth, and allow foam to expand to face of joint.

Trimming: Trim excess foam to give a neat, flush appearance.

APPLYING INTUMESCENT MORTAR

Sequence: Install mortar after services are permanently installed.

Loose dust and combustible materials: Remove from the opening.

Shuttering: Install suitable shuttering panels to the faces of the opening.

Temperature: Do not apply mortar when it could be damaged by frost.

Powder:water ratio: 2:1 for trowel grade by volume.

Mortar cure: Do not disturb mortar before final set has taken place.

Shuttering: Remove after mortar has cured.

INSTALLING MINERAL WOOL BATTS

Installing batts: Fit tight into void between the penetrating services and the surrounding construction to form a solid barrier.

- Brackets: Impale batts on proprietary pressed steel brackets at 500 mm maximum centres and not greater than 250 mm from ends of batts..

Bracket fixing: as required by manufacturer.

Face of batts: Flush with the surface of wall, floor or soffit.

Joints between batts: Closed butt joints; seal with fire resisting sealant.

Gaps between services and barrier: Seal with fire resisting sealant.

68 FIXING PIPE COLLARS

Collar fixing: Contractor's choice .

Gap around collar: Seal with intumescent foam.

Length of wraps: Project 50 mm from each side of the element.

73 APPLYING SEALANTS GENERALLY

Application: As section Z22.

Z11 Sundry repairs to brick walling

10 REPOINTING TO CRACKED JOINTS IN EXISTING FACEWORK ON ALL ELEVATIONS

Preparation: Cut out joints to form a rectangular recess of 15-20 mm depth. Clean and dampen joints sufficiently to control suction.

Joint profile: to match existing .

Mortar: As section Z21.

Standard: To BS EN 998-2.

Mix: 1:5 masonry cement:sand 4 N/mm² (mortar class 4). Sample to match existing.

20 BRICKWORK REPAIR

Bricks to match existing for areas of infilling and repairs. The Contractor must establish at an early stage that matching bricks are available for the work.

4.4 Sample Panels

Allow for a reference section of brickwork repair and pointing for approval by the contract administrator.

Z11 Purpose made metalwork

METAL PRODUCTS

Grades of metals, section dimensions and properties: To the appropriate British Standards and suitable for the purpose.

Fasteners: Generally, same metal as component, with matching coating and finish.

PREPARATION FOR APPLICATION OF COATINGS

General: Fabrication complete, and fixing holes drilled before applying coatings.

Paint, grease, flux, rust, burrs and sharp arrises: Removed.

FABRICATION GENERALLY

Contact between dissimilar metals in components: Avoid.

Finished components: Rigid and free from distortion, cracks, burrs and sharp arrises.

Moving parts: Free moving without binding.

Corner junctions of identical sections: Mitre.

Pre-finished metals: Do not damage or alter appearance of finish.

WELDING AND BRAZING GENERALLY

Surfaces to be joined: Clean thoroughly.

Tack welds: Use only for temporary attachment.

Joints: Fully bond parent and filler metal throughout with no inclusions, holes, porosity or cracks.

Surfaces of materials that will be self-finished and visible in completed work: Protect from weld spatter.

Flux residue, slag and weld spatter: Remove.

WELDING OF STEEL

Method: Metal arc welding to BS EN 1011-1 and -2.

FINISHING WELDED AND BRAZED JOINTS VISIBLE IN COMPLETE WORK

Butt joints: Smooth, and flush with adjacent surfaces.

Fillet joints: Neat.

Grinding: Grind smooth where indicated on drawings.

GALVANIZING

Standard: To BS EN ISO 1461.

Z22 Sealants

JOINTS

Primer, backing strip, bond breaker: Types recommended by sealant manufacturer.

EXECUTION

SUITABILITY OF JOINTS

Pre-sealing checks:

Joint dimensions: Within limits specified for the sealant.

Substrate quality: Surfaces regular, undamaged and stable.

Joints not fit to receive sealant: Submit proposals for rectification.

PREPARING JOINTS

Surfaces to which sealant must adhere:

Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.

Clean using materials and methods recommended by sealant manufacturer.

Vulnerable surfaces adjacent to joints: Mask to prevent staining or smearing with primer or sealant.

Backing strip and/ or bond breaker installation: Insert into joint to correct depth, without stretching or twisting, leaving no gaps.

Protection: Keep joints clean and protect from damage until sealant is applied.

APPLYING SEALANTS

Substrate: Dry (unless recommended otherwise) and unaffected by frost, ice or snow.

Environmental conditions: Do not dry or raise temperature of joints by heating.

Sealant application: Fill joints completely and neatly, ensuring firm adhesion to substrates.

Sealant profiles:

Butt and lap joints: Slightly concave.

Fillet joints: Flat or slightly convex.

Protection: Protect finished joints from contamination or damage until sealant has cured.