

Benoy

Victoria Square, Woking

Job No: 3540

Document Title: Metal & Glass Doors / Shutters / Hatches
(For MC and D&B Packages)

Document Ref: BNY-SA-99-XX-A-L21

- Revision: F00
- Status: For Construction (D & B)
- Date: 07/05/20

REVISIONS				
Rev No.	Date	Revision	Drawn by	Checked
E05	25.01.19		NP	AT
E06	20.03.19	As noted overleaf	CJP	VC
E07	21.03.19	As noted overleaf	CJP	VC
E08	02.04.19	As noted overleaf	CJP	VC
E09	12.04.19	As noted overleaf	CJP	TH
E10	17.05.19	As noted overleaf	CJP	TH
E11	04.06.19	As noted overleaf	TH	TH
E12	18.10.19	For Bandstand Mall Tender	JT	RAB
E13	03.04.20	For DCC Tender	KH	RAB
F00	05.05.20	For Construction	JT	RAB

L21
Doors/ Shutters/ Hatches
Revision F00

Section Revision History

No.	Purpose	
E08	FOR TENDER	2nd Apr 2019
E09	FOR TENDER	12th Apr 2019
E10:	FOR TENDER	17th May 2019
E10	FOR TENDER	17th May 2019
E11	FOR TENDER	4th Jun 2019
E12	For Bandstand Mall Tender	18th Oct 2019
E13	For DCCI Tender	2nd Apr 2020
F00	For Construction	7th May 2020

Clauses amended in Revision F00

No.	Clause	
55	SELECT FROM THE FOLLOWING	Revised
610	ROLLER SHUTTERS	Deleted
612	ROLLER SHUTTER TO WOLSEY WALK WEST	Added

L21 Doors/ Shutters/ Hatches

- 10 METAL AND GLASS DOORS/SHUTTERS/HATCHES **General section as per L20**
- 40 SPECIFICATION TO BE READ WITH DCC DOOR SCHEDULE & OTHER PROJECT DOOR SCHEDULES IN THE BNY (32) SERIES:
- 50 SCOPE
Design, supply and install the following:
[Metal / Glass doors/ shutters/ hatches].
Co ordinate with: [Structural openings, ironmongery and electrical fittings. See Benoy Door Schedules:
BNY-MA(32)SC14
BNY-T1(32)SC15
BNY-T2(32)SC16
BNY-HA(32)SC17

Also refer to Benoy Ironmongery Schedule BNY-MA(32)AL02].

55 SELECT FROM THE FOLLOWING
Manufacturers/ Product reference:

1) Metal Doors from Assa Abloy UK Ltd, School Street, Willenhall, West Midlands, WV13 3PW Contact: Allan Thompson 07887-756165; allan.thomson@assaabloy.com or equal approved.

2) Metal Doors from DATIM, Datim Supplies, Foxwood Industrial Estate Foxwood Road, Chesterfield, S41 9RN. Tel: 01246 572277. or equal approved.

3) Metal Doors from Sunray Engineering Ltd, Kingsnorth Industrial Estate, Wotton Road, Ashford, Kent TN23 6LL, TEL: 01233 639039 as specified by Substation providers.

4) Metal Doors from Dove Steel Doors, Unit 2, Midland Works, Heath Mill Road, Wombourne, WV5 8AP, Phone: +44 (0) 1384 221 144, Fax: +44 (0) 1384 221 509, Email: sales@dovesteeldoors.co.uk

5) Security Roller Shutters, Fireroll Acoustic Shutters & Fire Integrity smoke-tight curtains from: Bolton Gate Company, Waterloo Street, Bolton BL1 2SP. Tel: 01204 871001 Web: www.boltongate.co.uk or equal approved

6) Roof Hatch 711185, Web: surespancovers.com or equal approved.

7) Glazed Sliding Door Assembly with Fixed Side screens to Bandstand Mall:

- Gilgen door Systems (GDUK Door Solutions Ltd), Securiparc House, Wimsey Way, Alfreton, Derbyshire DE55 4LS Contact: Keith Scott, Regional Sales Manager - Head Office: 0800 316 6994 & Mobile: 07818 030677.
- GEZE UK Ltd, Blenheim Way, Fradley Park, Lichfield, Staffordshire, WS13 8SY. Tel: (01543) 443000. Fax: (01543) 443001. Web: www.geze.co.uk Contact: James White Regional Sales Manager MAIL j.white@geze.com PHONE +44 (0)7500 332221 - MOBILE +44 (0)7500 332221.
- Assa Abloy Entrance Systems Ltd, Unit 9 Windmill Business Village, Sunbury-on-Thames, Middlesex, TW16 7DY. Tel: 0333 006 3443. Email: architect.uk.entrance@assaabloy.com Web: www.assaabloyentrance.co.uk Contact: Krish Appavoo Specification Sales Manager Pedestrian Door Solutions Mail: krish.appavoo@assaabloy.com - Mobile/SMS: 07810-058558

98 GENERAL PERFORMANCE REQUIREMENTS
As section Z99.

110 EVIDENCE OF PERFORMANCE
Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.

112 PERFORMANCE REQUIREMENTS - HINGED AND PIVOTED DOORS/ DOORSETS/ASSEMBLIES

Requirement: Design and install doors/ doorsets/ assemblies to:

- Perform satisfactorily in their intended situation and under their expected conditions in use.
 - Have sufficient strength to meet their intended conditions of use.
 - Withstand being slammed shut and slammed open.
 - Resist impacts by human bodies and substantial objects with similar characteristics.
 - Resist impact by hard bodies.
 - Withstand forces that result in torsion to its face.
 - Resist downward forces
 - Withstand the effects of closure against an obstruction
 - Resist jarring and vibration
 - Resist abusive forces applied to the handle
 - Ensure that doors are easy to open or close and fasten or unfasten and remain closed when desired.
 - Be free from any dimensional inaccuracy or distortion likely to affect its installation or operation.
 - Ensure that leaves do not bow or twist to the point where its appearance is unacceptable or other performance requirements cannot be met.
 - Ensure that the doors do not contain any material which by direct contact or otherwise can be detrimental to the health and safety of the user
 - Additional requirements for external doors:
 - Resist the effects of prevailing weather including rain ingress
 - Be resistant to air leakage so that the thermal performance of the building is not reduced significantly.
 - Be capable of resisting wind loads
 - Thermal insulation must be taken into account in relation to the overall insulation requirements of the walls.
 - Composite doorsets comply with BS 8529:2017 where applicable.
 - All glazing in PAS 24:2016 doors & door sets must comply & certificated as per BS EN 356:2000.
 - Communal door sets which require a PAS 24:2016 & operated by electronic access panels/control systems for Secure By Design requirements must be certified to one of the following standards to demonstrate robust construction:
 1. STS 202 Issue 3 (2011) Burglary Rating 2 (minimum)
 2. LPS 1175 Issue 7.2 (2014) Security Rating 2+ (minimum)
 3. PAS 24:2012, paragraph 4.4.3 i.e. tested to BS EN 1627 Resistance Class 3.
- Please note Non mechanical locks fall outside the scope of BS EN 1627. All testing to this standard utilising a mechanical lock shall be conducted in accordance with the 'UK Polic Service (Secured By Design) Interpretation document for BS EN 1627; BS EN 1628; BS EN 1629 & BS EN 1630' in accordance with the National forward of BS EN 1627.

113 SAFETY - POWERED DOORS

Requirement: Comply with the recommendations of:

- BS 7036 Code of practise for safety at powered doors for pedestrian use
- BS EN 16005 General
- BS EN 16005 Straight and curved sliding doors and prismatic and folding doors
- BS EN 16005 Swing doors and balanced doors
- BS EN 16005 Low energy swing doors
- BS EN 16005 Revolving doors

114 SECURITY TO MEET WITH SECURED BY DESIGN (SBD) AND PAS 24

- To ensure the quality of products (doors/ shutters/ hatches) used meets with the correct level of security, commensurate with the risk is utilised for the development in the outset. This involves the Crime Prevention Design Advisor (CPDA) as required by the SBD Commercial Award scheme.
- The manufacturers/ companies whose products to be incorporated meet with the police (SBD) requirements.
 - " Doorsets certified to PAS 24:
- Compliance offers a level of security suitable for buildings exposed to comparable risk.
- Will meet the 'fit for purpose' standards.
- Q Mark certificate issued for doorsets certified.

114A PAS 24:2016 SECURE BY DESIGN DOORS/DOORSETS/ ASSEMBLIES

All products tested to PAS 24:2016 (Clause 5) and subsequently claiming compliance with this standard shall be permanently marked in a position that is visible and readily accessible when the product is open and not visible when the product is closed, with the following information:

- Number and date of the standard
- The date of manufacture of the product (at least the year and quarter)
- The name or trademark of the manufacturer or other means of identifying the manufacturer
- The classification of the doorset e.g. DK or DKT

Important: If a doorset claiming to meet these standards is not marked in accordance with PAS 24 (Clause 5) it does not meet the standard. Secured by Design recommends doorsets are marked on the head (top) of the door to avoid any identifying labels/data being removed during the final site cleaning process. Please note that this is a requirement within PAS 24 (Clause 5) and STS 201 and is an additional requirement to CE marking. MANUFACTURER: ASSA ABLOY UK Limited, School Street, WILLENHALL, WV13 3PW. Contact: Allan Thomson 07887 756165; allan.thomson@assaabloy.com
MANUFACTURER: DATIM, Datim Supplies, Foxwood Industrial Estate Foxwood Road, Chesterfield, S41 9RN. Tel: 01246 572277.

115 FIRE RESISTING DOORS/ DOORSETS/ ASSEMBLIES

Certification by accredited third party certification body. Evidence of fire performance: Provide certified evidence, in the form of a product conformity certificate, directly relevant fire test report engineering assessment, that each door/ doorset/ assembly supplied will comply with the specified requirements for fire resistance if tested to BS 476-22, BS EN 1634-1 or BS EN 1634-3. Such certification must cover door and frame materials, glass and glazing materials and their installation, essential and ancillary ironmongery, hinges and seals.

" Metal Doors to be provided with permanent identification in accordance with BS 476 Part 8 with the appropriate colour core.

" Provide third party certification of product conformity for specified smoke performance for each door or doorset supplied. Include identifier schedule or similar to allow individual doors to be located. Test evidence must be in the name of the door or doorset manufacturer.

120 INTERNAL METAL/STEEL DOORSETS GENERALLY

Workmanship: As section Z11.

" Fixings: As section Z20.

" Adhesives: To BS EN 204 and section Z20.

" Perimeter seals – fire, smoke stop and acoustic: in accordance with the manufacturers fire and acoustic certification for the doorset.

" Installation: In accordance with the manufacturer's recommendations and test certification.

" Construction gaps: Leaf to frame and leaf to leaf gaps should not exceed 3 mm. The gap at the meeting stiles should not exceed 4 mm. Leaves must not be proud of the door frame at any position by more than 1.5 mm.

FIRE RESISTING DOORS/DOORSETS/ASSEMBLIES

Certification by accredited third party certification body. Evidence of fire performance: Provide certified evidence, in the form of a product conformity certificate, directly relevant fire test report engineering assessment, that each door/ doorset/ assembly supplied will comply with the specified requirements for fire resistance if tested to BS 476-22, BS EN 1634-1 or BS EN 1634-3. Such certification must cover door and frame materials, glass and glazing materials and their installation, essential and ancillary ironmongery, hinges and seals.

" Metal Doors to be provided with permanent identification in accordance with BS 476 Part 8 with the appropriate colour core.

" Provide third party certification of product conformity for specified smoke performance for each door or doorset supplied. Include identifier schedule or similar to allow individual doors to be located. Test evidence must be in the name of the door or doorset manufacturer.

NON-FIRE RESISTING DOORS/DOORSETS/ASSEMBLIES

Certification by accredited third party certification body. Provide certified evidence, in the form of a product conformity certificate or engineering assessment, that each door/ doorset/ assembly supplied will comply with the specified requirements to BS EN 14351-1. Such certification must cover door & frame materials, glass and glazing materials and their installation, essential and ancillary ironmongery, hinges and seals.

" Metal Doors to be provided with permanent identification in accordance with BS 476 Part 8 with the appropriate colour core.

" Provide third party certification of product conformity for specified smoke performance for each door or doorset supplied. Include identifier schedule or similar to allow individual doors to be located. Test evidence must be in the name of the door or doorset manufacturer.

125 MATERIAL STANDARDS

Metals: As section Z11.

130 EQUALITY ACT AND BUILDING REGULATIONS PART M REQUIREMENTS

Guidance Documents: To comply with BS8300 and Building Regulations Part M.

" The opening force at the leading edge of the door must not exceed 30N between 0° from closed and 22.5N thence until 60°.

- One of the optimum option to comply with the opening force is the provision of a power operated automatic door (pedestrian sliding and revolving doors), controlled by a motion sensor.

" Door Automation:

- To ensure automatically activated door will open early enough, stay open long enough, to maintain safe entry and exit, the activation device(s) should be positioned to detect traffic at a suitable distance taking account of the width, mass and operating speed of the door.
- Detection by presence and motion sensing devices are recommended (BS 7036-1:1996 Section 8.4).
- The activation system(s) should be positioned and adjusted so that the door starts to open when a person is no closer than 1400 mm from the door.
- When the swing doors open towards people approaching the doors, visual and audible warnings are to be provided to warn people of their automation operation when both opening and shutting.
- Safety provisions should be in accordance with 8 of BS 7036-1:1996 and 5 of BS 7036-3:1996.
- To incorporate a safety stop that is activated if the doors begin to close when a person is passing through.
- The door should be capable of manual operation in the event of power failure.
- " Automated revolving doors:
 - To offer greater space compartment type to minimise risks to disabled users.
 - The use of glass panels enclosing can be confusing particularly to partially sighted people. It is essential that the glass is clearly identified (BS8300 - 9.1.5).
 - It is recommended that a complementary accessible door should be provided immediately adjacent to the revolving door and available for use at all times.

150 SITE DIMENSIONS

Procedure: Before starting work on designated items take site dimensions, record on shop drawings and use to ensure accurate fabrication.

" Designated items:

Check door schedule opening sizes against Assa Abloy or equal approved manufacturer's standard sizes.

170 CONTROLLED SAMPLES

Procedure:

- Finalise component details.
- Fabricate one of each of the following designated items as part of the quantity required for the project.
- Obtain approval of appearance and quality before proceeding with manufacture of the remaining quantity.

" Designated items:

All items listed in the Products section below as required by the Contractor Administrator.

PRODUCTS**480a STEEL SINGLE DOOR - DOOR TYPES 01,03**

Manufacturer: [ASSA ABLOY: as clause 120].

- Product reference: [Powershield Lagan/Encore/Symphony/Fire Dependant on Acoustic/Fire Rating].
- Door leaf: [SMARTform Technology with pre-expanded small honeycomb cell core]
- Material: 1.2mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
- Frame: [Single rebate].
- Material: 1.5mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - architect's choice of colour. See Interiors Finishes Schedules - BNY-APT(40)AL01 & BNY-PA(40)AL01].
- Glazing/ Infill details: [Clear single glazing TUF6;6mm toughened to BS EN 12150, when required / SSAC12;12mm Stadlip Silence to BS EN 12543, when required / 11mm Contraflam Door Lite to BS EN 13501-2, when required].
- Manifestation: [Not applicable].
- Beading: [Standard].
- Ironmongery: [Refer to BNY schedule BNY-MA(32)AL02].
- Perimeter seals:
- NON ACOUSTIC RATING - Not required
- 35dB RW Sound Reducing - Self-adhesive seals in rebate; drop-down acoustic threshold
- 47db RW Sound Reducing - Adjustable surface mounted seals
- Other requirements: [None].
- Fixing: [Powershield frame adjuster system].
- Fire Rating: [Refer to BNY Door Schedules, as clause 50 and Fire Strategy Drawings - Benoy Series 36 Drawings]

EXTERNAL STEEL SINGLE DOOR FOR RESIDENTIAL TOWERS T1 & T2**SECONDARY MOE STAIRS - DOOR TYPES 01A:**

Manufacturer: [ASSA ABLOY: as clause 120].

- Product reference: [Powershield Lagan/Encore/Symphony/Fire Dependant on Acoustic/Fire Rating].
- Door leaf: [SMARTform Technology with pre-expanded small honeycomb cell core]
- Material: 1.2mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
- Frame: [Single rebate].
- Material: 1.5mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - architect's choice of colour. See Interiors Finishes Schedules - BNY-APT(40)AL01 & BNY-PA(40)AL01].
- Glazing/ Infill details: [Clear single glazing TUF6;6mm toughened to BS EN 12150, when required / SSAC12;12mm Stadlip Silence to BS EN 12543, when required / 11mm Contraflam Door Lite to BS EN 13501-2, when required].
- Manifestation: [Not applicable].
- Beading: [Standard].
- Ironmongery: [Refer to BNY schedule BNY-MA(32)AL02].
- Perimeter seals:
- NON ACOUSTIC RATING - Not required
- 35dB RW Sound Reducing - Self-adhesive seals in rebate; drop-down acoustic threshold
- 47db RW Sound Reducing - Adjustable surface mounted seals
- Other requirements: [Fully weathertight & sealed including EPDM rubber door seals,

weather bars or storm bar at door thresholds].

Other requirements: External Door U-Value 1.80 W/m²K to suit MEP Engineer's Thermal Performance Report for Residential Towers T1 & T2.

Other requirements: [Fully accessible door threshold to BS 8300:

- Thresholds should be designed to prevent the ingress of rain.
- Externally, the surface of the platt should be not more than 10mm below the leading edge of any sill, with any exposed edge chamfered or rounded
- An external sill or internal transition unit should be at an angle of not more than 15° from the horizontal and, if sloping, be not more than 150mm in length
- The threshold should either be a height and of a form that will neither impede unassisted access by a wheelchair user nor create a trip hazard. A threshold piece should have a height of not more than 15mm, with any vertical element of more than 5mm height being pencil-rounded or chamfered to an angle of not more than 45° from the horizontal].

Fixing: [Powershield frame adjuster
Other requirements: [Fully weathertight & sealed including EPDM rubber door seals, weather bars or storm bar at door thresholds].
system].

Fire Rating: [Refer to BNY Door Schedules, as clause 50 and Fire Strategy Drawings - Benoy Series 36 Drawings

EXTERNAL STEEL SINGLE DOOR WITH VISION PANELS - DOOR TYPE 03A:

Manufacturer: [ASSA ABLOY: as clause 120].

- Product reference: [Powershield Lagan/Encore/Symphony/Fire Dependant on Acoustic/Fire Rating].

Door leaf: [SMARTform Technology with pre-expanded small honeycomb cell core]

- Material: 1.2mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].

Frame: [Single rebate].

- Material: 1.5mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - architect's choice of colour. See Interiors Finishes Schedules - BNY-APT(40)AL01 & BNY-PA(40)AL01].

Glazing/ Infill details: [Clear single glazing TUF6;6mm toughened to BS EN 12150, when required /

SSAC12;12mm Stadlip Silence to BS EN 12543, when required /

11mm Contraflam Door Lite to BS EN 13501-2, when required].

- Manifestation: [Not applicable].

- Beading: [Standard].

Ironmongery: [Refer to BNY schedule BNY-MA(32)AL02].

Perimeter seals:

NON ACOUSTIC RATING - Not required

35dB RW Sound Reducing - Self-adhesive seals in rebate; drop-down acoustic threshold

47db RW Sound Reducing - Adjustable surface mounted seals

Other requirements: [Fully weathertight & sealed including EPDM rubber door seals, weather bars or storm bar at door thresholds].

Other requirements: External Door U-Value 1.80 W/m²K to suit MEP Engineer's Thermal Performance Report for Residential Towers T1 & T2.

Other requirements: [Fully accessible door threshold to BS 8300:

- Thresholds should be designed to prevent the ingress of rain.
- Externally, the surface of the platt should be not more than 10mm below the leading edge of any sill, with any exposed edge chamfered or rounded
- An external sill or internal transition unit should be at an angle of not more than 15° from the horizontal and, if sloping, be not more than 150mm in length
- The threshold should either be a height and of a form that will neither impede unassisted access by a wheelchair user nor create a trip hazard. A threshold piece should have a height of not more than 15mm, with any vertical element of more than 5mm height being pencil-rounded or chamfered to an angle of not more than 45° from the horizontal].

Fixing: [Powershield frame adjusterOther requirements: [Fully weathertight & sealed including EPDM rubber door seals, weather bars or storm bar at door thresholds]. system].

Fire Rating: [Refer to BNY Door Schedules, as clause 50 and Fire Strategy Drawings - Benoy Series 36 Drawings]].

480b STEEL DOUBLE DOORS - DOOR TYPES 02,04,28

Manufacturer: [ASSA ABLOY: as clause 120].

- Product reference: [Powershield Lagan/Encore/Symphony/Fire Dependant on Acoustic/Fire Rating].
Door leaf: [SMARTform Technology with pre-expanded small honeycomb cell core]
- Material: 1.2mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
Frame: [Double rebate].
- Material: 1.5mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
Glazing/ Infill details: [Clear single glazing TUF6;6mm toughened to BS EN 12150, when required /
SSAC12;12mm Stadlip Silence to BS EN 12543, when required /
11mm Contraflam Door Lite to BS EN 13501-2, when required].
- Manifestation: [Not applicable].
- Beading: [Standard].
Ironmongery: [Refer to BNY schedule BNY-MA(32)AL02].
Perimeter seals:
NON ACOUSTIC RATING - Not required
35dB RW Sound Reducing - Self-adhesive seals in rebate; drop-down acoustic threshold
47db RW Sound Reducing - Adjustable surface mounted seals
Other requirements: [None].
Fixing: [Powershield frame adjuster system].
Fire Rating: [Refer to BNY Door Schedules, as clause 50 and Fire Strategy Drawings - Benoy Series 36 Drawings]

EXTERNAL STEEL DOUBLE DOORS - DOOR TYPES 02A, 04A & 28A:

Manufacturer: [ASSA ABLOY: as clause 120].

- Product reference: [Powershield Lagan/Encore/Symphony/Fire Dependant on Acoustic/Fire Rating].
Door leaf: [SMARTform Technology with pre-expanded small honeycomb cell core]
- Material: 1.2mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
Frame: [Double rebate].
- Material: 1.5mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
Glazing/ Infill details: [Clear single glazing TUF6;6mm toughened to BS EN 12150, when required /
SSAC12;12mm Stadlip Silence to BS EN 12543, when required /
11mm Contraflam Door Lite to BS EN 13501-2, when required].
- Manifestation: [Not applicable].
- Beading: [Standard].
Ironmongery: [Refer to BNY schedule BNY-MA(32)AL02].
Perimeter seals:
NON ACOUSTIC RATING - Not required
35dB RW Sound Reducing - Self-adhesive seals in rebate; drop-down acoustic threshold
47db RW Sound Reducing - Adjustable surface mounted seals
Other requirements: [Fully weathertight & sealed including EPDM rubber door seals, weather bars or storm bar at door thresholds].
Other requirements: External Door U-Value 1.80 W/m²K to suit MEP Engineer's Thermal Performance Report for Residential Towers T1 & T2.

Other requirements: PAS 24:2012 or PAS 24:2016 or STS 201 Issue 4:2012 or LPS 1175 Issue 7.2 (2014) Security Rating 2+ or STS 202 Issue 3 (2011) Burglary Rating 2 or LPS 2081 Issue 1 (2015) Security Rating B+

Other requirements: [Fully accessible door threshold to BS 8300:

- Thresholds should be designed to prevent the ingress of rain.
- Externally, the surface of the platt should be not more than 10mm below the leading edge of any sill, with any exposed edge chamfered or rounded
- An external sill or internal transition unit should be at an angle of not more than 15° from the horizontal and, if sloping, be not more than 150mm in length
- The threshold should either be a height and of a form that will neither impede unassisted access by a wheelchair user nor create a trip hazard. A threshold piece should have a height of not more than 15mm, with any vertical element of more than 5mm height being pencil-rounded or chamfered to an angle of not more than 45° from the horizontal].

Fixing: [Powershield frame adjusterOther requirements: [Fully weathertight & sealed including EPDM rubber door seals, weather bars or storm bar at door thresholds]. system].

Fire Rating: [Refer to BNY Door Schedules, as clause 50 and Fire Strategy Drawings - Benoy Series 36 Drawings

Fixing: [Powershield frame adjuster system].

480c METAL SINGLE LOURVERED DOOR HOTEL LV ROOM - DOOR TYPE 14

Manufacturer: [Sunray Engineering Ltd: as clause 120 as specified by Substation providers.

- Product reference: [Louvre Doors & Doorsets].
- Door leaf: [Louvre blades welded into a 50mm x 40mm x 5mm steel angle section framing. Louvre blades formed to profile as per manufacturer's details. Standard blade thickness is 2.5mm. Pitch is 50mm.]
- Size: Refer to Door Schedules as per clause 50 for exact structural openings for single door sets.
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY -PA(40)AL01 & Door Schedules as clause 50].
- Frame: [100 x 50 x 3mm rectangular hollow section to head and jambs with 100 x 10mm flat threshold and lugs for M10 sleeve anchors (supplied). Hinge parts welded to frame and door leaf.].
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01 & Door Schedules as clause 50].
- Ironmongery: [Refer to BNY schedule BNY-MA(32)AL03].
- Louvre Panels: [Louvre blades welded into a 50mm x 40mm x 5mm steel angle section framing. Refer to Door elevations drawings].
- Fixings: 100mm x 50mm x 6mm bolting in lugs

Fire Rating: Non Rated].

Other requirements: Maintenance free lift off hinge system and anti-vermin mesh].

480d METAL DOUBLE LOUVRED DOORS - DOOR TYPES 15

Manufacturer: [Sunray Engineering Ltd: as clause 120 as specified by Substation providers].

- Product reference: [Louvre Doors & Doorsets].
 - Door leaf: [Louvre blades welded into a 50mm x 40mm x 5mm steel angle section framing. Louvre blades formed to profile as per manufacturer's details. Standard blade thickness is 2.5mm. Pitch is 50mm.]
 - Size: Refer to Door Schedules as per clause 50 for exact structural openings for double door sets.
 - Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01 & Door Schedules as clause 50].
 - Frame: [100 x 50 x 3mm rectangular hollow section to head and jambs with 100 x 10mm flat threshold and lugs for M10 sleeve anchors (supplied). Hinge parts welded to frame and door leaf.].
 - Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01 & Door Schedules as clause 50].
 - Ironmongery: [Refer to BNY schedule BNY-MA(32)AL03].
 - Louvre Panels: [Louvre blades welded into a 50mm x 40mm x 5mm steel angle section framing. Refer to Door elevations drawings].
 - Fixings: 100mm x 50mm x 6mm bolting in lugs. Connection to earthing system via earthing lug on the door frame. Door leaves bonded to door frame using 16mm² PVC covered copper braid.
- Fire Rating: Non Rated].
- Other requirements: Maintenance free lift off hinge system and anti-vermin mesh. Generator Access Hatch to the passive leaf of the door set. Size 300mm high x 200mm wide. Bottom corner location].

480e STEEL SERVICE RISER DOORS - DOOR TYPE 18,19

Manufacturer: [ASSA ABLOY: as clause 120].

- Product reference: [Powershield Lagan/Encore/Symphony/Fire Dependant on Acoustic/Fire Rating].
- Door leaf: [SMARTform Technology with pre-expanded small honeycomb cell core]
- Material: 1.2mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
- Frame: [Single Door Type 18 / Double Door Type 19 rebate].
- Material: 1.5mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
- Glazing/ Infill details: [Clear single glazing TUF6;6mm toughened to BS EN 12150, when required / SSAC12;12mm Stadlip Silence to BS EN 12543, when required / 11mm Contraflam Door Lite to BS EN 13501-2, when required].
- Manifestation: [Not applicable].
- Beading: [Standard].
- Ironmongery: [Refer to BNY schedule BNY-MA(32)AL02].
- Perimeter seals: 35dB RW Sound Reducing - Self-adhesive seals in rebate; drop-down acoustic threshold
- Other requirements: [None].
- Fixing: [Powershield frame adjuster system].
- Fire Rating: [Refer to BNY Door Schedules, as clause 50 and Fire Strategy Drawings - Benoy Series 36 Drawings].

480f STEEL LEAF AND A HALF DOOR - DOOR TYPE 35 & 36

Manufacturer: [ASSA ABLOY: as clause 120].

- Product reference: [Powershield Lagan/Encore/Symphony/Fire Dependant on Acoustic/Fire Rating].
Door leaf: [SMARTform Technology with pre-expanded small honeycomb cell core]
- Material: 1.2mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
Frame: [Double rebate].
- Material: 1.5mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
Glazing/ Infill details: [Clear single glazing TUF6;6mm toughened to BS EN 12150, when required /
SSAC12;12mm Stadlip Silence to BS EN 12543, when required /
11mm Contraflam Door Lite to BS EN 13501-2, when required].
- Manifestation: [Not applicable].
- Beading: [Standard].
Ironmongery: [Refer to BNY schedule BNY-MA(32)AL02].
Perimeter seals:
NON ACOUSTIC RATING - Not required
Other requirements: [None].
Fixing: [Powershield frame adjuster system].
Fire Rating: [Refer to BNY Door Schedules, as clause 50 and Fire Strategy Drawings - Benoy Series 36 Drawings]

EXTERNAL STEEL LEAF AND A HALF DOOR - DOOR TYPE 35A: SECURITY RATED

Manufacturer: [ASSA ABLOY: as clause 120].

- Product reference: [Powershield Lagan/Encore/Symphony/Fire Dependant on Acoustic/Fire Rating].
Door leaf: [SMARTform Technology with pre-expanded small honeycomb cell core]
- Material: 1.2mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
Frame: [Double rebate].
- Material: 1.5mm Magizinc to EN10142:2000
- Finish as delivered: [PPC - Refer to BNY Finishes schedule - BNY-APT(40)AL01 & BNY-PA(40)AL01].
Glazing/ Infill details: [Clear single glazing TUF6;6mm toughened to BS EN 12150, when required /
SSAC12;12mm Stadlip Silence to BS EN 12543, when required /
11mm Contraflam Door Lite to BS EN 13501-2, when required].
- Manifestation: [Not applicable].
- Beading: [Standard].
Ironmongery: [Refer to BNY schedule BNY-MA(32)AL02].
Perimeter seals:
NON ACOUSTIC RATING - Not required
35dB RW Sound Reducing - Self-adhesive seals in rebate; drop-down acoustic threshold
47db RW Sound Reducing - Adjustable surface mounted seals
Other requirements: [Fully weathertight & sealed including EPDM rubber door seals, weather bars or storm bar at door thresholds].
Other requirements: PAS 24:2012 or PAS 24:2016 or STS 201 Issue 4:2012 or LPS 1175 Issue 7.2 (2014) Security Rating 2+ or STS 202 Issue 3 (2011) Burglary Rating 2 or LPS 2081 Issue 1 (2015) Security Rating B+
Other requirements: External Door U-Value 1.80 W/m²K to suit MEP Engineer's Thermal

Performance Report for Residential Towers T1 & T2.

Other requirements: [Fully accessible door threshold to BS 8300:

- Thresholds should be designed to prevent the ingress of rain.
- Externally, the surface of the platt should be not more than 10mm below the leading edge of any sill, with any exposed edge chamfered or rounded
- An external sill or internal transition unit should be at an angle of not more than 15° from the horizontal and, if sloping, be not more than 150mm in length
- The threshold should either be a height and of a form that will neither impede unassisted access by a wheelchair user nor create a trip hazard. A threshold piece should have a height of not more than 15mm, with any vertical element of more than 5mm height being pencil-rounded or chamfered to an angle of not more than 45° from the horizontal].

Fixing: [Powershield frame adjusterOther requirements: [Fully weathertight & sealed including EPDM rubber door seals, weather bars or storm bar at door thresholds]. system].

Fire Rating: [Refer to BNY Door Schedules, as clause 50 and Fire Strategy Drawings - Benoy Series 36 Drawings

Fixing: [Powershield frame adjuster system].

480g METAL DOUBLE LOUVRE DOORS - TO DISTRICT COOLING CENTRE

- Location: Refer to Benoy drawing 'BNY-DC(25)0020'
- Manufacturer: Dove Steel Doors or equal approved
- Product reference: Substation - Double Dove Steel Fully Louvred Doorset
- Door leaf: Fully Louvered Door - Louvre blades formed to profile set by Dove.
- Blades: Standard thickness - 3mm Mild Steel.
- Blade Pitch: 50mm
- Material: Outer door frame manufactured from 100x50x3mm RHS; Frame rebate manufactured from 40x40x3mm SHS; Door frames manufactured from 50x50x6mm Angle
- Finish Polyester Powder-coated Colour RAL 7016
- Frame: Outer door frame manufactured from 100x50x3mm RHS; Frame rebate manufactured from 40x40x3mm SHS; Door frames manufactured from 50x50x6mm Angle
- Ironmongery: Refer to BNY schedule BNY-MA(32)AL02
- Perimeter seals: NON ACOUSTIC RATING - Standard frame weather seals; 2No. Face fixed brush strips
- Other requirements: Lockable Generator Cable Access Hatch to Bottom of Passive Leaf; 100x50x5mm Welded Fixing Plates; To be connected to the substation earthing system via the earthing lug on the door frame. 100x6mm Steel Flat Bar Threshold (Removable)
- Fixing: Refer to manufacturer's details.
- Fire Rating: None Fire Rated. Refer to BNY Door Schedules, as clause 50 and Fire Strategy Drawings - Benoy Series 36 Drawings
- Air Flow: Approximately 50% free air
- Guarding and Screens: Anti-vermin Mesh Fixed to Rear

- 481 METAL LOUVRE PANEL DOORS - TX2 LV SWITCH ROOM SINGLE SUNRAY SAVER DOOR DT-32
- Location: Refer to Benoy Door Schedule BNY-MA(32)SC14
 - Manufacturer: Sunray Engineering Ltd: as clause 120 as specified by Substation providers
 - Product reference: Sunray SaverDoor
 - Door leaf: Solid Door with 2 no. louvred panels, 2.0mm Zintec steel double skinned with interlocking seams, reinforced vertically with interlocking channels and horizontally with tubes to prevent twisting. Honeycomb core as standard - see Benoy Drawing BNY-MA(32)0007
 - Louvred panels: 305 x 305mm
 - Leaf thickness: 45mm standard thickness. Other thicknesses are available on request
 - Material: Frame: 2.0mm Zintec steel. Single rebated profile. In welded or demountable form, reinforced and fitted fixing plates. Frame depth as per standard Manufacturer's range.
 - Finish Frame & Leaf - Polyester Powder-coated Colour RAL 7022
 - Ironmongery: Depending on the size and weight, doors are supplied with 3, 4 or 5 stainless steel ball bearing butt hinges - manufacturer to advise on weights. Sizes as per benoy Schedule BNY-MA(32)SC14. See Benoy Ironmongery Schedule BNY-MA(32)AL02 for other ironmongery elements
 - Perimeter seals: NON ACOUSTIC RATING - Standard frame weather seals.
 - Other requirements: Generator Access Hatch to the passive leaf of the door set. Size 300mm high x 200mm wide. Bottom corner location. Removable Threshold
 - Fixing: Refer to manufacturer's details.
 - Fire Rating: Refer to BNY Door Schedules, as clause 50, Door Schedule BNY-MA(32)SC14 and Fire Strategy Drawings - Benoy Series 36 Drawings
 - Air Flow: Approximately 50% free air
 - Guarding and Screens: Anti-vermin Mesh Fixed to Rear of louvred panels

481A METAL DOUBLE SOLID DOORS - TX1 & TX2 SUBSTATIONS DOUBLE SUNRAY SAVER DOOR DT-33

- Location: Refer to Benoy Door Schedule BNY-MA(32)SC14 & BNY-DC(25)0020
- Manufacturer: Sunray Engineering Ltd: as clause 120 as specified by Substation providers
- Product reference: Sunray SaverDoor
- Door leaf: Solid Doors, 2.0mm Zintec steel double skinned with interlocking seams, reinforced vertically with interlocking channels and horizontally with tubes to prevent twisting. Honeycomb core as standard - see Benoy Drawing BNY-MA(32)0007 & DC(25)0020
- Leaf thickness: 45mm standard thickness. Other thicknesses are available on request
- Material: Frame: 2.0mm Zintec steel. Single rebated profile. In welded or demountable form, reinforced and fitted fixing plates. Frame depth as per standard Manufacturer's range.
- Finish Frame & Leaf - Polyester Powder-coated Colour RAL 7022 & 7016
- Ironmongery: Depending on the size and weight, doors are supplied with 3, 4 or 5 stainless steel ball bearing butt hinges - manufacturer to advise on weights. Sizes as per benoy Schedule BNY-MA(32)SC14 & DC(25)0020. See Benoy Ironmongery Schedule BNY-MA(32)AL03 & DC(25)0020 for other ironmongery elements.
- Perimeter seals: NON ACOUSTIC RATING - Standard frame weather seals.
- Other requirements: Generator Access Hatch to the passive leaf of the door set. Size 300mm high x 200mm wide where required. Bottom corner location. Removable Threshold
- Fixing: Refer to manufacturer's details. Connection to earthing system via earthing lug on the door frame. Door leaves bonded to door frame using 16mm² PVC covered copper braid .
- Fire Rating: Refer to BNY Door Schedules, as clause 50, Door Schedule BNY-MA(32)SC14, DC(25)0020 and Fire Strategy Drawings - Benoy Series 36 Drawings
- Air Flow: N/A
- Guarding and Screens: N/A

481B METAL DOUBLE SOLID DOORS - TX3 LV SWITCH ROOM DOUBLE SUNRAY SAVER DOOR DT-31

- Location: Refer to Benoy Door Schedule BNY-MA(32)SC14
- Manufacturer: Sunray Engineering Ltd: as clause 120 as specified by Substation providers
- Product reference: Sunray SaverDoor
- Door leaf: Solid Door with 2 no. louvred panels to the inactive leaf only, 2.0mm Zintec steel double skinned with interlocking seams, reinforced vertically with interlocking channels and horizontally with tubes to prevent twisting. Honeycomb core as standard - see Benoy Drawing BNY-MA(32)0007
- Louvred panels: [305 x 305mm]
- Leaf thickness: 45mm standard thickness. Other thicknesses are available on request
- Material: Frame: 2.0mm Zintec steel. Single rebated profile. In welded or demountable form, reinforced and fitted fixing plates. Frame depth as per standard Manufacturer's range.
- Finish Frame & Leaf - Polyester Powder-coated Colour RAL 7022
- Ironmongery: Depending on the size and weight, doors are supplied with 3, 4 or 5 stainless steel ball bearing butt hinges - manufacturer to advise on weights. Sizes as per benoy Schedule BNY-MA(32)SC14. Sizes as per benoy Schedule BNY-MA(32)SC14. See Benoy Ironmongery Schedule BNY-MA(32)AL02 for other ironmongery elements.
- Perimeter seals: NON ACOUSTIC RATING - Standard frame weather seals.
- Other requirements: Removable Threshold
- Fixing: Refer to manufacturer's details.
- Fire Rating: None Fire Rated. Refer to BNY Door Schedules, as clause 50, Door Schedule BNY-MA(32)SC14 and Fire Strategy Drawings - Benoy Series 36 Drawings.
- Air Flow: Approximately 50% free air
- Guarding and Screens: Anti-vermin Mesh Fixed to Rear of louvred panels

481C METAL SINGLE SOLID DOOR - TO DISTRICT COOLING SUNRAY SAVER DOOR

- Location: Refer to Benoy Door Drawing/Schedule BNY-DC(25)0020
- Manufacturer: Sunray Engineering Ltd: as clause 120 as specified by Substation providers
- Product reference: Sunray SaverDoor
- Door leaf: Solid Doors, 2.0mm Zintec steel double skinned with interlocking seams, reinforced vertically with interlocking channels and horizontally with tubes to prevent twisting. Honeycomb core as standard - see Benoy Drawing BNY-DC(25)0020
- Leaf thickness: 45mm standard thickness. Other thicknesses are available on request
- Material: Frame: 2.0mm Zintec steel. Single rebated profile. In welded or demountable form, reinforced and fitted fixing plates. Frame depth as per standard Manufacturer's range.
- Finish Frame & Leaf - Polyester Powder-coated Colour RAL 7016
- Ironmongery: Depending on the size and weight, doors are supplied with 3, 4 or 5 stainless steel ball bearing butt hinges - manufacturer to advise on weights. Sizes as per benoy Schedule BNY-DC(25)0020
- Perimeter seals: NON ACOUSTIC RATING - Standard frame weather seals.
- Other requirements: Generator Access Hatch to the passive leaf of the door set where required. Size 300mm high x 200mm wide. Bottom corner location. Removable Threshold
- Fixing: Refer to manufacturer's details. Connection to earthing system via earthing lug on the door frame. Door leaves bonded to door frame using 16mm² PVC covered copper braid .
- Fire Rating: Refer to BNY Door Schedules, as clause 50, Door Schedule BNY-DC(25)0020
- Air Flow: N/A
- Guarding and Screens: N/A

490 AUTOMATIC SLIDING DOORS TELESCOPIC BI-PARTING AUTOMATIC SLIDING DOORS WITH FIXED SIDE SCREENS ACROSS BANDSTAND MALL AS INDICATED ON DRAWING No's: BNY-BM(32)0001 & BNY-BM(32)0002.

Manufacturer: Please refer to 3 No manufacturer's listed under Clause 55 Item 7 above. We have held meetings with Geze & Assa Abloy and at the moment it would appear that Geze can provide a door assembly closest to our Drawings. We have not yet had a meeting with Gilgen Door Systems but we have received a specification from them.

We attach the following as Appendices to this Specification:

- Benoy Door Operation & Maintenance Specification
- A sample Geze Sliding door Specification (1 page)
- A sample Gilgen Door Systems Ltd Sliding door Specification (4 pages)
- A sample Assa Abloy Sliding door Specification (2 pages)

Door Operation & Maintenance Specification

Proposed Bandstand Mall Framed Auto Sliding Door Installation

PART A

A1 General Description & Introduction

The intention of this Specification is to set out the standards and requirements of The Client in order to provide a Framed Automatic Door Installation which is robust, reliable and meets the needs and expectations of users in the retail environment in which it is installed.

This is an automatic telescopic bi-parting PPC RAL 7022 Aluminium or Steel framed clear double-glazed non-fire rated sliding door assembly fully compliant with Part B & Part M of the Building Regulations that is located across Bandstand Mall adjacent to Grid Line exR, which consists of 4 No sliding leaves and 2 No fixed side screens.

It separates the new semi-external end of Bandstand Mall South from the existing internal environment of Bandstand Mall North.

The Client wishes this door to be held fully open, as a minimum, during the trading hours of the Peacocks Centre, which are currently as follows:

Monday	9.30am - 6.00pm
Tuesday	9.30am - 6.00pm
Wednesday	9.30am - 6.00pm
Thursday*	9.30am - 8.00pm (Individual store opening times may vary)
Friday	9.30am - 6.00pm
Saturday	9.00am - 6.00pm
Sunday	11.00am - 5.00pm
Bank Holiday Hours	10.00am - 5.00pm

However, this is likely to change in the future with increased Opening Hours for the Peacocks Centre.

However, whilst the Peacocks Centre is open for business it may be necessary to close these doors and they would then operate on automatic door sensors located on both sides.

The Centre Management currently locks all public entrance door sets into the Peacocks Centre at (time to be advised) after the adjoining Ambassador's Theatre, cinemas & Town Centre restaurants within Wolsey Place & the Peacocks Centre have closed.

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These doors would be provided with a magnetic locking mechanism, which would “fail safe open” upon activation of fire alarm/smoke detection on either side of the door. This is required because the door serves as a Means of Escape from the southern semi-external end of Bandstand Mall into the existing route located between Unit 5 of the new CPR scheme & existing SU03 within Bandstand Mall. This escape route leads eventually to a final exit located within the former Toys R Us Service Yard.

It is also a Means of escape from the Peacocks Centre and replaces the original set of automatic sliding doors located under the now demolished smoke extract tower.

The minimum clear width of this set of doors needs to be 4000mm as this was the clear width of the original doors.

In line with the fire strategy the doors are required to open in the event of a fire in either Bandstand Mall North or Bandstand Mall South as well as the Peacocks Centre as the opening provides an air path for makeup air to smoke ventilation systems throughout. When closed and locked it shall be necessary for the lock to open and for the doors themselves to fail safe to the open position. To achieve this, it may be necessary for the door controller(s) to power the door in the closed position, therefore if the power is cut then the doors automatically open. Fire Alarm interface between the fire alarm systems shall provide signal to open the lock and door in the event of a fire.

A2 WORK INCLUDED

The Specification shall be read in conjunction with the drawings provided by the architect appointed by The Client for this project.

If there is a difference between the requirements of the Specification and the drawings, the difference shall be clarified.

Where ‘shall’ is used to give instructions in respect of a part of this Section of the Works, all costs arising from such instructions shall be deemed to be included.

A3 INFORMATION BEFORE TENDERING

In the context of this Specification, the Framed Automatic Door Contractor shall be referred to in this Specification as the Contractor and shall be deemed to mean any nominated persons or company that designs, manufactures, provides and/or installs any of the items of equipment as detailed in Part B of this Specification.

A4 MATERIALS, DESIGNS AND INSTALLATIONS

Unless otherwise specified and approved, all materials and designs shall comply with the current issue of the relevant British/European Standard Specification and/or part thereof as

appropriate. Their installation shall comply with the relevant current British/European Standard Code of Practice and/or part thereof as appropriate.

Materials, designs and installations shall comply with the current Health and Safety at Work Act and any other statutory Rules and Regulations as applicable.

A5 EXAMINATION OF DRAWINGS AND INFORMATION PROVIDED

The Specification shall not be varied in any way unless agreed in writing.

Examination of drawings or other information will not relieve the Contractor of his responsibilities for discrepancies, errors or omissions in the drawings, provided that such discrepancies, errors or omissions are not due to inaccurate information provided to him in accordance with the Conditions of Contract.

A6 PROTECTION OF MATERIALS AND WORK

The following shall be provided, for storage and installation:

- Adequate and suitable protection against the weather and ingress of dirt or moisture into working parts.
- Precautions and protection against frost, building works or operations by others.
- Precautions and protection against mechanical damage by other trade contractors.

A7 RESPONSIBILITY FOR WORKS

The framed auto-door operators, door panels and pocket screens installed to Bandstand Mall shall be manufactured and assembled by the same company commissioned to supply and install the door operator, door panels and pocket screens and that they are a fully matching and integrated set.

The door operators, door panels and pocket screens shall be installed by direct workforce to the vendor commissioned to supply and install the door operators, door panels and pocket screens.

The door operators, door panels and pocket screens shall be manufactured, installed and commissioned in accordance with the Client's issued specification for these doors.

A8 ELECTRICAL CONTINUITY

All metal equipment shall be bonded to earth potential.

The means of continuity at joints and flanges shall be provided by metal to metal contact and shall be robust, permanent, effective and compatible. Continuity across connections shall be by means of 4 mm² earth bonding conductors in accordance with the current Edition of BS 7671.

A9 HANDOVER

When the Installation(s) are complete and compliant with the Specification and all accessories, components, spares and tools have been provided, a recommendation will be made to handover the equipment.

The Contractor shall issue a Certificate of Handover on the successful completion of the Works.

The Contractor shall also provide and include in any O&M manuals issued the fully completed and signed Door Installation Declaration Certificate.

A10 CODES AND STANDARDS

Each Contractor shall work to the requirements of this Specification which will achieve compliance with the Clients objectives and maintain compliance with the requirements as stated within the current edition of BSEN16005.

All codes and standards referred to in this specification shall be the latest published edition available, at the time of the tasks being undertaken.

A11 DEFINITIONS

BS EN 16005:2012	Power operated pedestrian door-sets. Safety in use. Requirements and test methods
BS EN 60335-1:2012 +A11:2014	Household and similar electrical appliances. Safety general arrangements.
BS EN 62061:2005 +A2:2015	Safety of machinery. Functional safety of safety related electrical electronic and programmable electronic control systems
ISO 13849-1:2015	Safety of Machinery - Safety-related parts

A12 COMPLIANCE WITH REGULATIONS

Each tenderer shall confirm within their tender that the equipment conforms to the relevant EC codes of conformity listing all those relevant to the equipment.

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PART B

B1 SCHEDULE OF DRAWINGS

For drawings showing the location of the installation, refer to the following Drawings as listed below:

BNY-BM (32)0001 & BNY-BM (32)0002

B2 CENTRE OPENING (BI-PARTING) TELESCOPIC FRAMED AUTOMATIC DOOR SPECIFICATION

The equipment below shall comply fully with the current edition of BS 7036 for Entrance Doors, BS EN 16005:2012, BS EN 60335-1:2012+A11:2014, BS EN 62061:2005+A2:2015 and ISO 13849-1:2015 and all in accordance with this specification.

The auto door purchaser shall advise the supplier the doors are to be installed across Bandstand Mall and shall include for the reinforced steel box type staples.

All doors & door operators shall be from the same approved contractor. The doors and operators shall be supplied and installed by nominated vendor and not an agent or distributor of same.

The control and operational features of the door operator shall be fully open protocol.

Low Energy Sensors are not acceptable

Number of External Automatic Doors to be Installed	Refer to Architects Drawings listed under B1
Type of Door	Centre Opening (Bi-Parting) Framed Automatic Doors (fail-safe to the open position). (Refer to Architects drawings listed under B1).
Door Openings	Refer to Architects drawings listed under B1.
Drive	Electro-mechanical by toothed rubber belt with micro-processor controlled adjustable speed and delay controls. The door operator and drive system shall be fully integrated with the doors and from the same manufacturer as the doors. The mass of the doors shall not exceed 75% of the door operator and drive operating capability. This performance shall also include for any anticipated wind resistance to the successful door operation.
Power Supply	240 Volt, 50 Hz, 5 Amp switched spur.

Control System	<p>The control system shall comply with the requirements of EN ISO13849-1. The control system shall also be of suitable power and design to prevent forced opening when doors not mechanically locked. This system shall incorporate a heavy-duty motor brake or solenoid locking mechanism to hold the doors closed until the doors are switched on and activated by the key-switch control.</p> <p>The doors shall still open under fire alarm and/or emergency status.</p> <p>There shall also be included a break glass release installed to the inside of the entrance door threshold with a door open switch to over-ride the locking mechanism should an emergency other than fire escape input require the doors to be opened.</p> <p>The performance level shall be determined by the Architect. The requirements the doors must conform to in respect of escape route doors and non-escape route doors shall be determined by the current relevant national building regulations applicable at the time of the installation and BS999-2017 part 14.2 and 14.3. The control system shall constantly monitor the safety devices/system to ensure the system fail-safes to a predetermined arrangement (fully open) in the event of a power failure.</p> <p>For sensors on declared escape routes the activation elements of the sensors on the escape side must be monitored. The activation distance shall be 1500 mm.</p>
Key Control	<p>Key control switches shall be installed on the door frame stanchions. The key control for the door to be designated as the entrance door to be located inside the lobby area. For the door to be designated as the exit door the key control to be located</p>

	<p>within Bandstand Mall North.</p> <p>The first key switch shall be 4-position giving choice of 'OPEN', 'CLOSED', 'AUTO' AND 'EXIT ONLY'.</p> <p>The second key switch shall be labelled 'WINTER' and 'SUMMER'. In the Winter position the doors shall open 70% of the travel.</p>
Fire Alarm Control	<p>A fire alarm relay (by others) will be provided which will deactivate the contactor supplying the 240v- 5amp power supply to the door gear and opening the door on the monitored battery back-up system.</p> <p>The battery back-up shall be constantly monitored for successful operation and operate on "power failure". The system must be interfaced with the fire alarm system to ensure the doors open and remain open in the case of emergency.</p> <p>There shall be provided in the control system volt- free contacts for the connection into the fire-alarm system (connection by others). There shall also be the facility for connecting in the forced door sensor (connection by others)</p>
Finish	All sections shall be polyester powder coated - RAL 7022.
Glazing	6.4 mm clear laminated glass (both panes) for double glazed units with manifestation. All glass panels to include BSI kite mark in a visible location.
Draught and Weatherproofing	The door frame shall incorporate all draught and weatherproofing. Astragals shall be fitted to the leading edge of the doors.
Presence-Sensing (Active Safety Devices)	Various types of presence-sensing safety devices which may be fitted in various

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	<p>positions at power operated doors. These devices include active infra- red, capacitive, ultrasonic or photo-electric types.</p> <p>Devices of this type should be used to detect the presence of slow moving or stationary pedestrian traffic in the path of a door.</p> <p>Low Energy Detectors shall not be accepted</p> <p>Detection by a presence-sensing device should occur when pedestrian traffic is in the protection area.</p>
External Activation (Bandstand Mall South side of door assembly)	<p>Approaching traffic shall be monitored by a single sensor located central in the door header.</p> <p>Low Energy Detectors shall not be accepted</p>
Internal Activation (Bandstand Mall North side of door assembly)	<p>Approaching traffic shall be monitored by two photo-electric sensors mounted in the door header.</p> <p>The rear of each door shall also be monitored by safety sensors mounted on the header.</p> <p>Low Energy Detectors shall not be accepted.</p>
Additional Items to be Included	<ul style="list-style-type: none"> a) All site surveys. b) All off-loading and distribution. c) Any initial protective screening to structural openings. d) Protection to glazing and architectural finishes e) Upon power failure the doors shall failsafe to the open position. f) The door contractor shall supply encapsulated schematic drawings showing how the door operates under each key-switch condition. These shall be retained in the O&M manuals.

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	<p>g) The door and operator supplier shall allow for attendance of a suitable engineer on day of official opening.</p> <p>h) Provide and include in any O&M manuals issued the fully completed and signed Door Installation Declaration Certificate.</p>

GEZE Specification - Project Title

(GEZE Project No:#####)

Door Ref: ##### (SLT-01 telescopic bi-part slide)

Manufacturer: GEZE UK Ltd, Blenheim Way, Fradley Park, Lichfield, Staffordshire, WS13 8SY.

Tel: (01543) 443000. Fax: (01543) 443001. Web: www.geze.co.uk

Automatic Operator:

- GEZE Slimdrive SLT Electro-mechanical bi-parting TELESCOPIC Sliding Door Operator with Microprocessor control and silent brushless D.C. Motor.
- Operator height only 70mm, depth (back to front) 247mm. Maximum door leaf weight of 60kg (Per leaf).

Activation and control system:

- Unique LED Programme switch to provide Off, One way traffic, Reduced opening and Fully Automatic Modes.

Entry: Combined & Monitored activation and safety sensor EN 16005:2012 level D

Exit: Combined & Monitored activation and safety sensor EN 16005:2012 level D

(These devices provide additional presence detection within the threshold area to comply with EN16005)

Safety devices:

- 1no. Battery Pack for fail open or closed in the event of power failure.
- 2no. Sidescreen Safety Sensors - doors will slow to creep mode should persons be detected within the rear door slide area. Surface mounted onto face of canopy section.

Operator Locking mechanism if required:

Option One

Electro-mechanical belt locking device housed within drive unit - this will be active when the programme switch is in the "exit only" position.

Option Two

MOTOR locking device housed within drive unit - this will be energised when the programme switch is in the "Night" or "Off" position (To be used in conjunction with access control).

Materials:

- **Doors:** #####mm wide x #####mm high each.
- **Screenwork / Frame:** Package size #####mm wide x #####mm high.
- Doors and screens formed from GEZE ISO Slim Profile sections glazed with 10mm clear toughened safety glass. Vertical profiles 30-40mm, top and bottom rails 60mm. Weatherstripping as standard to door stiles and top and bottom rails.
- Manual locking supplied in the form of a Euro profile cylinder & dead lock c/w surface mounted lock block on to the bottom rails of the leading door leaves.

Finishes:

- Operator to be Powder Coated to a standard RAL colour. (Pick One)
- Operator to be Simulated Stainless Steel finished. (Pick One)

Signs:

- Standard signage to EN16005.
- Manifestation not included.

Other requirements:

- N/A.

Associated works:

- 1 no. 240V 13A switched spur required, positioned above operator by others.
- Connection to the fire alarm system (if required) would require one pair of normally open volt free contacts to be supplied terminating at drive unit location by others.
- Any concealed containment (inc. draw wires) must be undertaken by others. Cabling to activation devices will otherwise be fitted by GEZE in surface mini trunking at a minimum distance to suit industry standards.

Notes: Installation carried out by the manufacturer's engineers. Installed to and complying with EN16005

- *This specification is meant as an information aid, we hope we have interpreted your requirements correctly from the information provided, please check information before issuing for tender purposes and please contact us if clarification is required.*

NBS Specification

SL Automatic telescopic sliding door system

Designed, constructed and installed to satisfy BSEN 16005:2012 Gilgen SL sliding door operators are tested for 1 million cycles, providing proven reliability. Compliance with other notable UK standards such as Part M & Part B of the building regulations, The Equality Act and BS8300:2009 is also achieved.

The integration of a number of technological advancements such as CAN-Bus technology for enhanced operational safety and blue tooth wireless technology for easier access and control ensures suitability for a wide variety of applications such as retail trade, hotels, offices, airports, stations, hospitals, schools, colleges, garden centres and leisure.

All equipment is installed by Automatic Door Suppliers Association (ADSA) accredited engineers.

Standard details for SL 35 Telescopic automatic sliding door system

- Product reference SL 35 Telescopic automatic sliding door system

Product properties

- Door configuration
 - Single sliding 2 wing, no fixed panel
 - Single sliding 2 wing, one fixed panel
 - Bi parting 4 wing NO fixed side panels
 - Bi parting 4 wing TWO fixed side panels
- Door clearance width 2050 mm to 4000mm
- Door height 2100mm to 3000mm
- Finish
 - Polyester powder coated standard RAL colours
 - Silver anodized
 - Stainless steel cladding, brushed
 - Stainless steel cladding, mirrored
 - Stainless steel cladding, patterned
 - Stainless steel cladding, satin
- Drive operation
 - Standard SL
 - Standard SLX plus booster
 - Standard SLX drive plus dual motor
- Glazing
 - Installation specific please consult manufacturer
- Control
 - D-Bedix hard wired control unit
 - 6 position key switch.
 - F Key
 - Kombi D-Bedix
 - Portable Bedix wireless unit
- Activation
 - Integration with access control systems
 - Manual push pad
 - Motion sensors

- | | |
|------------------------|---|
| | Touch-less push pad |
| ▪ Locking & Security | installation specific; please consult manufacturer |
| ▪ Door movement guide: | Recessed floor track
Surface mounted fixed point guide |
| ▪ Rear door safety | Rear edge safety sensors |

As standard for SL 35 Telescopic automatic sliding door system

Door profile

40mm thick with standard PSXP profile system

Drive system

SL 35 sliding door drive system integrates Bluetooth wireless control technology and a powerful, near silent drive into a very slender in profile. System components are connected via a CAN-Bus, which not only guarantees smooth and reliable operation, but also facilitates constant communication with the processor to ensure optimum operational safety.

Safety

- Combined presence and activation sensing devices to ensure door opening distances are in accordance with BSEN 16005, doors do not close on pedestrians within the threshold area and provide a signal to the door control system thereby optimising pedestrian safety
- Rear edge sensors (electro sensitive protection equipment ESPE) complying with BSEN 16005 located within the door operator maintain back of door safety and protect pedestrians against impact at the main closing edge
- Failsafe system (battery back- up) that enables up to 30 minutes operation (subject to use) in the event of a mains failure. This fail safe system is automatically tested at least once every 24 hours.
- Fire alarm interface connection enabling door leaves to fail safe to open in the event of an emergency. In compliance with BSEN 16005.

Operation

Reliable DC motor with microprocessor controller which allows extensive options for opening width, electric locking, summer/ winter modes, exit only, manual control, speed of opening and the length of time the door is open.

Power requirements

230V single phase. Please note a 13A LIVE neon lit fused spur supply, protected by a 30mA RCD MUST be provided by OTHERS prior to installation. In compliance with BSEN 16005 the mains connection must be capable of disconnection to safeguard against unintentional and unauthorised reactivation.

Options for SLX telescopic automatic sliding door system

Door clearance width:

Single sliding

- 2 wing 1100–3000mm (standard SL drive)
- 2 wing 1400 – 3000mm (standard SLX drive plus booster)

Bi parting

- 4 wing 1200–4000 mm (standard SL drive)

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Crow House, Crow Arch Lane
GB-Ringwood, Hampshire, BH24 1PD
T +44 (0) 870 000 2424
info@gilgendoorsystems.co.uk
www.gilgendoorsystems.com

Member of the **Nabtesco** Group

- 4 wing 1400–4000 mm (standard SLX drive plus booster)
- 4 wing 2050 –4000 mm (standard SLX drive plus dual motor)

Door height

- 2100–3300mm - Nominal depending upon location and door panel width and weight.

Weight:

Single sliding

- 2 x 120 kg (SL standard drive)
- 2 x 150 kg (SLX standard drive plus booster)

Bi parting

- 4 x 60 kg (standard SL drive)
- 4 x 100 kg (standard SLX drive plus booster OR dual motor)

Security

A key turn manual hook lock (with steel insert in the leading edge for improved security and strength) is included as standard however there are a range of options available such as in head electric locks and multi point locking for added security. Integration with access control systems is also achievable. Please consult manufacturer.

Control

D Bedix hard wired programming key pad (incorporating digital display screen) designed for installation in a central control panel. Configured for automatic/ manual/ night/ exit/ open door operating modes.

- Portable Bedix wireless control unit designed to enable selection of operating modes (as per D-Bedix) and configure parameters. Simple menu based controls. No fixed location required. Password protected
- Kombi D-Bedix, push button control (as standard D Bedix) incorporating additional security key to prevent unauthorized access
- F Key: Multi user, compact programmable portable unit enabling restricted personnel access.
- 6 position key switch. Single point door control but with NO fault identification

Operation

Additionally, the door allows for fitting of door position switches, fire or smoke alarm signals, voice message systems to assist partially sighted people and integrates with access control systems.

Glazing

- Single or double glazed with a range of U-values as low as 1.6.
- Tinted glazing.
- Glazed fan lights.

Door movement guide:

- Surface mounted fixed point guide enhances efficiency of door movement
- Recessed floor track, helps further improve door security as well as improved weather sealing and resistance to strong winds and driving rain.

Approvals

- CE
- TUV NORD
- DIN18650-1 and DIN 18650-2 2005 and 2010
- ISO 9001: 2008

500 AUTOMATIC SLIDING DOORS

External Entrance Doors to M&S and Boots.

Manufacturer:

ASSA ABLOY or equal approved Entrance Systems Limited, Unit 9 Windmill Business Village, Sunbury-on-Thames, Middlesex, TW16 7DY. Tel: 01932 765 888. Sales fax: 01932 765888. General fax: 01932 765864. Email: rps.uk.besam@assaabloy.com Web: www.assaabloyentrance.co.uk or www.besam.co.uk

Models:

Besam SLIM THERMO Sliding Door System, with two sliding door leaves and two fixed side screens, complete with SL500 operator providing automated operation of the sliding door leaves. Providing full retraction of the doors to maximize the clear open width.

Dimensions:

Frame Height (FH): see drawings

Frame Width (FW): see drawings

Between Jambs size (COW): to suit FW measurement.

Clear Opening Height (COH): To suit FH measurement.

Overlight(Fanlight) Type: THREE panel

Overlight Dimensions: OH = 2400mm OW = varies- see drawings

M&S doors to achieve min.1850mm clear opening

Standard equipment:

System: BEAM MOUNTED

TIGHTSEAL high performance draught excluder: YES

Frame finish: Besam powder coat finish RAL ref: TO BE CONFIRMED

Glass type: DOUBLE GLAZED UNITS. 22MM SINGLE FOIL, TOPN AND KRYPTON

SL500 Operator including normal installation to comply with BS7036/EN16005.

Operation Mode Selector: FLUSH.

Emergency unit: EEU (electrical)

Electric Locking Required: FAIL SAFE OPEN

Integrated Air Curtain: NO

Activation and control system:

An Electronic control unit with plug-in connections and power supply.

SC-31M Combined direction and threshold presence detection entry activator.

SC-31M Combined direction and threshold presence detection exit activator.

Safety device(s):

Electronic monitored emergency opening unit.

Automatic reversing.

Monitored two way threshold presence safety system.

Side Screen Safety: POCKET SCREENS

Locking mechanism:

Mechanical lock: YES positioned in bottom rail of the door.

Euro Cylinder: DOUBLE

Maintenance:

Warranty with bi-annual service visits for optimum performance and longevity

1 YEAR

Please consult ASSA ABLOY Entrance Systems Limited technical literature for further details and the quotation for project specific notes.

510 AUTOMATIC REVOLVING DOORS
HOTEL ENTRANCE

- Drawings: BNY 20 Series.
- Manufacturer: As clause 55.
 - Product reference: As clause 55 Refer to Addendum Manufacturer's specification.
- Description:
Steel framed PPC finish, colour from Manufacturer's standard range, Single toughened glazing panels. Metal canopy colour and finish to match doors. Failsafe on fire alarm activation.
 - Warranty period minimum 1 year and service visits to be confirmed as part of manufacturer's quotation.

612 ROLLER SHUTTER TO WOLSEY WALK WEST

- Drawing: Refer to Benoy Drawing No's: BNY-MA(34)0160 & BNY-MA(34)0161
- Manufacturer: Bolton Gate Company or equal approved, refer to Clause 55 above.
 - Product reference: Bolton Gate Security Roller Shutter or equal approved
- Performance: Non fire-rated with no Acoustic requirements.
- Size: As indicated on Benoy drawings subject to site survey.
- Structural support: Vertical support by others to be confirmed (Secondary steel work)
- Weight of Roller Shutter System: Approximately 35 kgs per m².
- Arrangement: As indicated on Benoy drawings.
- Shutter curtain: Constructed from 76mm curved section steel laths with steel endlocks fitted to alternate laths to prevent lateral movement. The bottom rail is a steel inverted tee section. Curtain & bottom rail to be Polyester Powder Coated to RAL 7022.
- Frame/ Guides: The side guides are formed from steel channels and prepared for fixing to the opening structure by means of continuous fixing angles.
Finish as delivered: Polyester Powder Coated to RAL 7022
- Roller: The roller is manufactured from mild steel tube of sufficient diameter and wall thickness to resist deflection and is mounted in bearings or cups on each end plate.
- Endplates: Fabricated from mild steel of adequate thickness relative to door size and supplied with angles for fixing to the structure.
- Shutter Box Casing: To be provided & fabricated from galvanised steel sheet to manufacturer's details. It is recommended that full access to the shutter box be provided across the opening for maintenance and replacement of any shutter components within the proposed new ceiling to Wolsey Walk West being installed by others under a separate contract.
- Operation: Electrical operation is by means of a single phase tubular motor. A safety brake is fitted to all shutters where personnel could pass underneath thus meeting all relevant Health & Safety requirements. A fused spur within 500mm of the motor position is to be provided by others.
- Controls: The standard method of control is by means of internal wall-mounted push buttons. Other types of control including keyswitches and group controls are to be confirmed with the Client. Allow for 2 No keyswitches - one on both sides of the shutter and a link back to the BMS system.
- Ironmongery: Manufacturer to propose method of manual operation for use during power failure/ emergency.
- Other requirements: Allow for 2 No Vision panels in line with each other in the roller shutter on the side where the controls are located. One vision panel to be a minimum of 300mm high & located above 500mm from Ground Level & the other Vision panel to be a minimum of 350mm high & located above 1150mm from Ground Level.

The requirements from Secured by Design Commercial 2015 document state the following: The minimum standard for roller shutters, when required, is certification to either LPS 1175: Issue 7 Security Rating 1 or STS 202: Issue 3, Burglary Rating 1.

For roller shutters, the above minimum security ratings are generally sufficient where:

- " a shutter is required to prevent minor criminal damage and glass breakage or
- " the shutter is alarmed and the building is located within a secure development with access control and security patrols or
- " the shutter or grille is intended to prevent access into a recess or
- " the door or window to be protected is of a high security standard in its own right.

However, Security ratings higher than the minimum may be required and will be dictated by one or more of the following security considerations:

- " Level of crime risk
- " Location of the building
- " Security level of the door or window being protected

Such a requirement will be justified and communicated to the applicant by the Designing Out Crime officer in writing.

- Roller shutters to be installed by certified/approved installer.

614 SMOKE CURTAIN

SMOKE CURTAINS [1 no. of 1 hr rated Fire Integrity smoke-tight curtains to be located in front of each of the 2 nos. Service Lifts with through doors at Lower Ground level of Energy Centre. The smoke curtains are required and to be installed on the Retail Unit side if the tenant is not providing a fire lobby in front of the Goods Lifts. Similarly, this smoketight curtains to be installed behind the louvre which requires to be 1 hr fire-rated referenced EC-206 as specified under Clause L11/650A].

" Drawing: [Refer to Architect's drawings].

" Manufacturer: [Boltan Gate Company or equal approved].

- Product reference: [Fieroll S Rolling Fire Curtains].

" Performance: [1 hour fire integrity to EN 1634-1 achieved a rating of EW120 (integrity and radiation reduction) and also a smoketight seal in accordance with EN 1634-3 for smoke leakage and achieved a rating of Sa].

" Arrangement: [Face Fix or Side Fix depends on the existing structure at openings].

" Smoke curtains: [Constructed from specially reinforced and coated fibre-glass material sewn together with stainless steel wire. The bottom rail to be formed from a triangular steel section which to receive PPC finish].

- Finish as delivered: [Self finished in Grey one side and Silver the other].

" Frame/ Guides: [Slim profile of 100x50mm galvanised steel to be bolted to the opening structure. An integral sealing arrangement is incorporated to prevent the passage of smoke around the edges of the curtain].

- Finish as delivered: [All metalwork to be Polyester Powder Coated in standard RAL 7035 colour].

" Roller: To comprise of 102mm diameter steel tube in which the tubular motor is fitted at one end and steel shafts/disc at the other. The roller is supported at each end on galvanised steel plates with integral angles for fixing to the bulkhead. A galvanised steel casing with an integral smoke seal which housed the roller also acts as a fire seal at head.

" Operation: [Electrical operation is by means of a 240 volt tubular motor with gravity failsafe closure.

The standard unit is pre-wired obviating the need for a site electrician].

" Fire Activation: In a fire condition, activation is initiated by an incoming signal from the fire alarm system. Closure is by gravity with a controlled descent.

" Ironmongery: [N/A].

" Weight: Approximately 30 kgs per linear of width.

" Other requirements: [Speed of operation of approx. 100mm/sec. The fire curtain's operation under fire alarm system to be incorporated in the overall Fire Strategy system].

- 617 M&S LOADING BAY ROLLER SHUTTER
M&S LOADING BAY ROLLER SHUTTER DOCKING SYSTEM (2no.)
" Drawings: Refer to Structural Engineers drawing M4263/Q0208WKG001-S-SK007 regarding M&S Requirements.
" Manufacturer: STERTIL STOKVIS .
" 'INSUROLL' INSULATED ROLLER SHUTTERS to M&S DOCKS (M&S Supplier 'Frame work Product')
DIRECT DRIVE ELECTRICALLY OPERATED SHUTTERS
Specification: As addendum Woking Stertil Stokvis MSInsuroll.pdf.
Two vision panels to be supplied, one above the other.
Size
2900 mm wide x 3750 mm high (Clear opening)
Guarantee
All equipment carries a 12 month parts and labour guarantee subject to maintenance by Stertil UK Ltd excluding acts of negligence and wilful damage.
- 630 ROOF ACCESS HATCHES
ROOF ACCESS HATCHES TO PROVIDE ACCESS FROM THE INTERNAL SPACE OF BUILDING TO THE EXTERNAL ROOF SPACE FOR MAINTENANCE PURPOSE.
THE ROOF HATCHES ARE TO BE LOCATED AT TOP OF ROOF OF STAIR 1 AND STAIR 3 OF HOTEL; TOP OF ROOF OF RESIDENTIAL TOWER ONE -STAIR 7; RESIDENTIAL TOWER TWO - STAIR 11, GREEN CAR PARK LEVEL 6 - STAIR 9 AND THE ENERGY CENTRE LEVEL 3 - STAIR 01 ROOF.
" Manufacturer: Surespan Ltd, refer to Clause 55 above.
- Product reference: SRHP50.
- Description:
Single leaf roof access hatch with a 50 mm thermal break and insulated with 0.43 W/m²K U-value polyisocyanurate insulation. Manufactured from aluminium with a 300 mm kerb upstand.
" Type: [Modular - size 900x900mm with metal hatch cover].
" Material: 2 mm aluminium with 50 mm thermal break
" Cover: 50 mm fully insulated kerb and lid, corner welded and reinforced.
" Frame: [Aluminium].
- Finish: [Mill finish].
- Colour: [N/A].
" Kerb: [300 mm in height with external curb liner, 50 mm thermal break and 50mm insulation to be mounted on builderwork's opening concrete upstand].
" Insulation: 50 mm Standard insulation (0.43W/m²K) - As standard.
" Glazing details: [N/A].
" Operation: 24 V electric motors. Gas springs.
" Locking: L01 Cablock - As standard.
" Fixing: As per recommended by the manufacturer.
" Other requirements: [To provide external handle on the cover].

EXECUTION

- 710 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: Stacked on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.

740 CORROSION PROTECTION

- Surfaces to be protected: All metal elements in contact with timber and copper, lead or zinc.
- Isolate dissimilar metals: Prevent electrolytic action.
- Protective coating: Two coats of bitumen solution to BS 6949 or an approved mastic impregnated tape.
 - Timing of application: Before fixing components.

750 FIXING DOORSETS

Timing: After associated rooms have been made weathertight and the work of wet trades is finished and dried out.

800 FIXING OF LOOSE THRESHOLDS

Spacing of fixings: Maximum 150 mm from each end and at 600 mm maximum centres.

809 FIRE RESISTING / SMOKE CONTROL DOORS / DOORSETS

Installation: By a firm currently registered under a third party accredited fire door installer scheme in accordance with instructions supplied with the product conformity certificate, test report or engineering assessment.

810 FIRE RESISTING SMOKE CONTROL DOORS/ DOORSETS

Gaps between frames and supporting construction: Filled as necessary in accordance with requirements for certification and/ or door/ doorset manufacturer's instructions.

820 SEALANT JOINTS

Sealant:

- Manufacturer: As per timber manufacturer's recommendations.
Product reference: submit proposals.
- Colour: tbc.
- Application: As section Z22 to prepared joints. Triangular fillets finished to a flat or slightly convex profile.

830 FIXING IRONMONGERY GENERALLY Fasteners: Supplied by ironmongery manufacturer.

- Finish/ Corrosion resistance: To match ironmongery.
 - " Holes for components: No larger than required for satisfactory fit/ operation.
 - " Adjacent surfaces: Undamaged.
 - " Moving parts: Adjusted, lubricated and functioning correctly at completion.

COMPLETION**910 CLEANING**

Surfaces: Clean, defect free and dust free.