

Paterson Redevelopment Project

Outline Specification Outbuildings

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BDP.

GENERAL NOTES

This specification should be read in conjunction with the Whole Building Performance Specification (PRP-BDP-Z01-XX-SP-A-0001) along with the Architectural design drawings and all other relevant design information/reports provided by the design team and specialist consultants.

REVISION HISTORY

Revision	Description	Date
P01	First issue	31.01.20

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Ss_25_13_50_51

BLK-102 Masonry wall leaf systems

Systems

Ss_25_13_50_51 BLK-102 Masonry wall leaf systems

1. Description: Internal blockwork partition wall.
2. System performance: [Ss_25_13_50/200 Accuracy of brick and block walling](#)
[Ss_25_13_50/204 Design supervision and checking for masonry systems](#)
[Ss_25_13_50/206 Design working life of masonry systems](#)
[Ss_25_13_50/235 Design of masonry walling](#)
[Ss_25_13_50/240 Loading for mechanical and electrical services on masonry systems](#)
[Ss_25_13_50/252 Design for fire performance of masonry structures](#)
[Ss_25_13_50/291 Compliance with performance requirements for masonry systems](#)
3. Masonry units: [Pr_20_93_52_01 Aggregate concrete blocks](#)
4. Mortar: [Pr_20_31_53_10 Cement gauged designed mortars](#)
5. Wall ties: [Pr_20_85_84_33 General-purpose slip ties](#)
[Pr_20_85_84_36 Head restraint slip ties](#)
6. Lintels: [Pr_20_85_48_15 Concrete lintels](#)
7. Ancillary structural components: [Pr_20_96_71_83 Stainless steel bed joint reinforcement](#)
8. Movement joint components: [Pr_35_90_87_27 Expanded polyethylene \(PE\) foam strips](#)
9. System accessories: [Pr_20_85_16_96 Wind posts](#)
Secondary steel wind posts by steelwork contractor required to support blockwork leaves.
Centres and sizes TBC.
10. Samples required: [Ss_25_13_50/305 Product samples](#)
11. Execution: [Ss_25_13_50/601 Cleanliness](#)
[Ss_25_13_50/605 Execution Standards for masonry structures](#)
[Ss_25_13_50/674 Masonry movement joints](#)
[Ss_25_13_50/683 Pointing up to soffits](#)
12. System completion: [Ss_25_13_50/895 Verification of performance](#)

System performance

Ss_25_13_50/200 Accuracy of brick and block walling

Shared by: [Ss_25_13_50_51 BRK-103 Masonry wall leaf systems](#)

1. Courses: Level and true to line.
2. Faces, angle and features: Plumb
3. Permissible deviations
 - 3.1. Position in plan of any point in relation to the specified building reference line and/ or point at the same level: ± 10 mm.
 - 3.2. Straightness in any 5 m length: ± 5 mm.
 - 3.3. Verticality up to 3 m height: ± 10 mm.
 - 3.4. Verticality up to 7 m height: ± 14 mm.
 - 3.5. Overall thickness of walls: ± 10 mm.
 - 3.6. Level of bed joints up to 5 m (brick masonry): ± 11 mm.
 - 3.7. Level of bed joints up to 5 m (block masonry): ± 13 mm.

Ss_25_13_50/204 Design supervision and checking for masonry systems

Shared by: [Ss_25_13_50_51 BRK-103 Masonry wall leaf systems](#)

1. Required level of design supervision: To [BS EN 1990](#), DSL 3.
2. Design supervision personnel: Submit proposals.

Ss_25_13_50/206 Design working life of masonry systems

Shared by: [Ss_25_13_50_51 BRK-103 Masonry wall leaf systems](#)

1. Design working life category: 60 years. Refer [BS EN 1990](#).

Ss_25_13_50/235 Design of masonry walling

Shared by: [Ss_25_13_50_51 BRK-103 Masonry wall leaf systems](#)

1. Standard: To [BS EN 1996-1-1](#).
2. Architectural and Functional Requirements::
 - 1: Brickwork shall form walls of half brick, brick, brick and a half thickness or skins of wall as indicated on the Architectural Drawings.
 - 2: Blockwork shall form internal or external walls, or skins of walls as indicated on the Architectural Drawings
 - 3: Walls shall be to dimensions and arrangement indicated on the Architectural Drawings.
 - 4: Works shall include all required masonry accessories to complete the works, meet performance requirements and suit service conditions.
 - 5: Blockwork which is to receive a rendered or plastered finish, shall have a recessed mortar joint, to provide a key.
 - 6: Blockwork designated as required to be airtight shall be regularly inspected to ensure that all bed joints and perpendes are fully filled with mortar that has been tooled on the outer face to ensure that the mortar is fully compressed. Airtight sealant shall be applied at all abutments and interfaces to other works and components.
 - 7: Thermal performance: 0.20W/ m²K (Overall U-value) unless noted otherwise. SFS backing wall with breather membrane, sheathing board, insulation, AVCL and internal linings to be included in overall calculation for masonry wall build up.
 - 8: There shall be no colour difference between exposed mortar above or below the DPC.
 - 9: Refer to Table 1 of PD 6697:2010 (Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2 and BS EN 1996-3:2006) for details of mortar designations.
 - 10: Installation of masonry accessories shall be in accordance with the manufacturer's recommendations.
 - 11: Masonry accessories shall include all components to complete the installation, meet performance requirements and suit service conditions.
3. Masonry Accessories - functional requirements::
 - 1: The Sub-Contractor shall include for masonry accessories in accordance with, but not limited to, the following:
 - i) Lateral restraint ties, cleats and brackets.
 - ii) Head restraint ties, cleats and brackets.
 - iii) Wall ties, cleats and brackets.
 - iv) Insulation fixing roses/ retention clips.
 - v) Bed joint reinforcement.
 - vi) Lintels.
 - vii) Angle supports.
 - viii) Windposts.
 - ix) Movement joints.
 - x) Damp-proofing.
 - xi) Cavity trays.
 - xii) Cavity wall insulation.

- xiii) Weephole and vent formers.
- xiv) Cavity closer profiles.
- xv) Fire protection components.
- xvi) Cavity ventilation.
- xvii) Cills, copings and dressings.

2: Accessories shall meet the minimum standards of PD 6697:2010 (Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2 and BS EN 1996-3:2006) and BS EN 845: Part 1.

3: Accessories shall maintain the performance requirements of interfacing masonry and shall suit installation and service conditions.

4: Components shall meet the anti-corrosion requirements of the Specification.

5: The Sub-Contractor shall agree with the Architect colours/ finishes of exposed accessories, where they are not specified or indicated on the Architectural Drawings. Samples shall be provided for review and acceptance by the Architect.

6: Accessories shall include all components to complete the installation, meet performance requirements and suit service conditions.

Ss_25_13_50/240 Loading for mechanical and electrical services on masonry systems

1. Standard: In accordance with [BS EN 1991-3](#).
2. Imposed loads
 - 2.1. Uniformly distributed loads (maximum): Allow 2.5 kN/ m² in addition to known service loads.
 - 2.2. Defined loads: Refer MEP Engineer's proposals.
3. Concentrated loads: Refer MEP Engineer's proposals.
4. Allowance for future changes: Submit proposals.

Ss_25_13_50/252 Design for fire performance of masonry structures

Shared by: [Ss_25_13_50_51 BRK-103 Masonry wall leaf systems](#)

1. Standard: In accordance with [BS 476-21](#). and In accordance with [BS EN 1365-1](#). Where noted in the Fire Strategy and drawings .
2. Loadbearing capacity, integrity and insulation: As noted in the Fire Strategy and drawings .

Ss_25_13_50/291 Compliance with performance requirements for masonry systems

Shared by: [Ss_25_13_50_51 BRK-103 Masonry wall leaf systems](#)

1. Requirement: Proof of compliance with specified performance.
2. Method
 - 2.1. Previous test results: For structural, fire and acoustic performance.
3. Submittals
 - 3.1. Format: Test results and certification.
 - 3.2. Timing: Before commencing installation.

Products

Pr_20_31_53_10 Cement gauged designed mortars

1. Description: To internal blockwork partitions
2. Manufacturer: Submit proposals.
3. Standard: To [BS EN 998-2](#).

4. Mortar type: Ready to use masonry cement:sand.
5. Mix: (iii) M4.
6. Colour: Manufacturer's standard.
7. Reaction to fire classification: Class A1.
8. Additional requirements: Durability: Freeze/ thaw resistance: Not to be left exposed.
9. Execution: [Pr_20_31_53/605 Testing compressive strength of mortar](#)
[Pr_20_31_53/610 Testing fresh mortar cement content](#)

Pr_20_85_16_96 Wind posts

1. Description: To internal blockwork partitions.
2. Manufacturer: Submit proposals.
3. Material: Mild steel.
Intumescent paint finish (specified separately) to wind posts within fire rated walls.
4. Configuration type: Built into masonry leaf.
5. Section: SHS or RHS
6. Sizes
 - 6.1. Section
 - 6.1.1. SHS or RHS: Maximum 50 mm wide to allow flush finish within depth of wall.
 - 6.2. Span (length): Refer to Engineer's drawings.
7. Head and base fixings: Submit proposals.

Pr_20_85_48_15 Concrete lintels

1. Description: To internal blockwork partitions.
2. Manufacturer: Standard Lintel by Lignacite Ltd
3. Standard: To [BS EN 845-2](#).
4. Lintel type: Single.
5. Dimensions
 - 5.1. Length: Structural opening plus 215 mm bearing each end.
 - 5.2. Cross section: 100 mm wide x 215 mm high.
6. Characteristics
 - 6.1. Deflection under load: Submit proposals. To suit blockwork specification.
 - 6.2. Mass: Submit proposals. To suit blockwork specification.
 - 6.3. Resistance to fire: Submit proposals. To suit blockwork specification.
7. Execution: [Pr_20_85_48/620 Installing lintels](#)

Pr_20_85_84_33 General-purpose slip ties

1. Manufacturer: Ancon.
2. Product reference: Ancon Movement/ Lateral Restraint Slip Ties.
3. Type: Ancon PPV wall tie. sleeved.
4. Standard: To [BS EN 845-1](#).
5. Material: Stainless steel grade 1.4301 (304).
6. Length: 225 mm.
7. Spacings: As manufacturers recommendations for system.
8. Execution: [Pr_20_85_84/615 Installing slip ties for movement joints](#)

Pr_20_85_84_36 Head restraint slip ties

1. Manufacturer: Ancon.
2. Product reference: IHR-V Head Restraint.
3. Material: Stainless steel grade 1.4301 (304).
4. Length: Submit proposals.
5. Spacings: At 450 mm centres.

Pr_20_93_52_01 Aggregate concrete blocks

1. Description: To internal masonry partitions.
2. Manufacturer: Lignacite Ltd Commodity Blocks, Solid - Fair faced
3. Standard: To [BS EN 771-3](#).
4. Block description: Close textured block - fair faced.
5. Appearance: Manufacturer's standard.
6. Configuration: Group 1.
7. Compressive strength
 - 7.1. Mean value: 7.3 N/mm².
 - 7.2. Category: I.
8. Freeze/ thaw resistance: Not to be left exposed.
9. Thermal conductivity: Manufacturer's standard.
10. Thermal resistance: Manufacturer's standard.
11. Recycled content: Manufacturer's standard.
12. Work sizes (length x width x height): 440 x 100 x 215 mm.
13. Tolerance category: D1.
14. Density
 - 14.1. Gross dry density: Manufacturer's standard.
 - 14.2. Net dry density: Manufacturer's standard.
15. Reaction to fire: Class A1 to [BS EN 13501-1](#).
16. Water absorption by capillarity: Manufacturer's standard.
17. Water vapour permeability: 5/15 µ.
18. Execution: [Pr_20_93_52/625 Brickwork and blockwork appearance](#)
[Pr_20_93_52/630 Brickwork and blockwork bond](#)
[Pr_20_93_52/635 Brickwork and blockwork pointing](#)
[Pr_20_93_52/660 Fair faced brickwork and blockwork](#)
[Pr_20_93_52/690 Laying brick and block masonry units generally](#)

Pr_20_96_71_83 Stainless steel bed joint reinforcement

1. Manufacturer: Submit proposals.
2. Standard: To [BS EN 845-3](#).
3. Configuration of bed joint reinforcement: Manufacturer's standard.
4. Dimensions
 - 4.1. Wire size: As recommended for the purpose by block manufacturer or supplier.
 - 4.2. Ladder or truss width (overall): As recommended for the purpose by block manufacturer or supplier.
5. Corrosion protection: Manufacturer's standard.
6. Execution: [Pr_20_96_71/655 Installing bed joint reinforcement](#)

Pr_35_90_87_27 Expanded polyethylene (PE) foam strips

1. Description: To internal blockwork partitions.
2. Manufacturer: Rockwool Ltd.
3. Product reference: Rockwool FirePro Intumescent Movement Joint Seal.
4. Size
 - 4.1. Thickness: As manufacturers recommendations for location and performance.
 - 4.2. Width: As manufacturers recommendations for location and performance.
5. Execution: [Pr_35_90_87/620 Installing movement joint fillers in masonry](#)

Ss_25_13_50/305 Product samples

1. Submittals: Facing bricks, concrete blocks and masonry ties.
2. Purpose: For use as a reference sample.
3. Labelling: Clearly label all submitted samples.
4. Timing: Before ordering for project.

Execution

Pr_20_31_53/605 Testing compressive strength of mortar

1. Testing authority: A UKAS Accredited laboratory.
2. Test method: To [BS EN 1015-11](#).
3. Preliminary tests procedure
 - 3.1. Specimens
 - 3.1.1.Number: 6.
 - 3.1.2.Specimen type: 40 x 40 x 160 mm prisms.
 - 3.1.3.Preparation: At least six weeks before walling commences.
 - 3.2. Specimen testing: Half of specimens at 7 days, remainder at 28 days.
 - 3.3. Retarded mixes: Extend curing periods to include retardation period.
 - 3.4. Response to result: If mean compressive strength at 28 days is not within the range given below repeat tests with more suitable sand or next higher designation of mortar.
4. Site tests procedure
 - 4.1. Specimens
 - 4.1.1.Number: Six per 150m² of walling or per storey, whichever the more frequent.
 - 4.1.2.Specimen types: As preliminary test, but prepared during construction.
 - 4.1.3.Timing: Half of specimens at 7 days remainder at 28 days.
 - 4.1.4.Retarded mixes: Extend curing periods to include retardation period.
5. Required test mean compressive strength at 28 days (N/mm²)
 - 5.1. Walling type: Internal blockwork partitions
 - 5.2. Preliminary tests minimum (N/mm²): 4
 - 5.3. Site tests minimum (N/mm²): 4
6. Results: Submit.

Pr_20_31_53/610 Testing fresh mortar cement content

1. Test method: BREMORTEST in accordance with [Building Research Establishment Information Paper 8/89](#).
2. Mortar test specimens: Pr_20-31-53_10 cement gauged mortars
3. Results: Submit

Pr_20_85_48/620 Installing lintels

1. Bedding: On mortar as used for adjacent work.
2. Support arrangement: As schedule
3. Bearing length (minimum): 150 mm.

Pr_20_85_84/615 Installing slip ties for movement joints

1. Debonding arrangement: Polyethylene sheet wrapping to one half length of tie.
2. Fixing centres: Alternate courses.

Pr_20_93_52/625 Brickwork and blockwork appearance

1. Brick/ block selection: Do not use units with damaged faces or arrises.
2. Cut masonry units: Where cut faces or edges are exposed, cut with table masonry saw.
3. Quality control: Lay masonry units to match relevant reference panels.
4. Setting out: To produce satisfactory junctions and joints with built-in features and components.
5. Coursing: Evenly spaced using gauge rods.
6. Lifts: Complete in one operation.

Pr_20_93_52/630 Brickwork and blockwork bond

1. Bond type: Half lap stretcher.

Pr_20_93_52/635 Brickwork and blockwork pointing

1. Joint preparation: Remove debris. Dampen surface.
2. Profile: To be confirmed through review of sample panels - Bucket Handle or Weathered.

Pr_20_93_52/660 Fair faced brickwork and blockwork

1. Definition of facework: Applicable in this specification to brick and block walling finished fair.
2. Definition of painted facework: The only requirement to be waived is that relating to colour.

Pr_20_93_52/690 Laying brick and block masonry units generally

1. Mortar joints: Lay units on a full bed. Fill vertical joints and voids.
2. Thin mortar joints
 - 2.1. Generally: Lay blocks on a full bed. Fill vertical joints.
 - 2.2. Clay block vertical joints: Interlock without mortar.
3. Joint appearance: Neat and consistent.
4. Bond where not specified: Half lap stretcher.
5. Vertical joints in brick and concrete block facework: Plumb at every fifth cross joint.
6. Cleanliness
 - 6.1. Facework: Keep clean.
 - 6.2. Mortar on facework: Allow to dry before removing with a stiff bristled brush.
 - 6.3. Removal of marks and stains: Rubbing and other abrasive or chemical cleaning methods not permitted.

Pr_20_96_71/655 Installing bed joint reinforcement

1. Placement: Lay on an even bed of mortar in a continuous strip with full laps at angles. Keep back 20 mm from face of external work, 12 mm back from face of internal work and finish joint to normal thickness.

2. Lap length (minimum): 225 mm or as manufacturer's recommendations.

Pr_35_90_87/620 Installing movement joint fillers in masonry

1. Application: Fire resisting movement joints that do not use sealant.
2. Filler placement: Compress and insert into place in open joint.

Ss_25_13_50/601 Cleanliness

1. Cavity base and faces, ties, insulation and exposed dpcs: Free from mortar and debris.

Ss_25_13_50/605 Execution Standards for masonry structures

1. Standard: To [BS EN 1996-2](#).

Ss_25_13_50/674 Masonry movement joints

1. Joint frequency: 6 m.
2. Joint width: Width of joint in mm to be 30% more than the distance between joints in metres.
3. Joint location: Intersecting walls, piers, floors, etc.;
window and door openings;
changes in height, thickness of walls, or type of foundation;
chases in walls; and
movement joints in the building as a whole or in floor slabs

Ss_25_13_50/683 Pointing up to soffits

1. Top joint of loadbearing walls: Fill and consolidate with mortar.

System completion

Ss_25_13_50/895 Verification of performance

Shared by: [Ss_25_13_50_51 BRK-103 Masonry wall leaf systems](#)

1. Requirement: Check completed system and provide assurance of compliance with specified performance.
2. Submittals
 - 2.1. Format: Description of inspections, remedial works carried out and certification of compliance.
 - 2.2. Timing: At completion of installation.

Ω End of System

Ss_25_13_50_51 BRK-103 Masonry wall leaf systems

Systems

Ss_25_13_50_51 BRK-103 Masonry wall leaf systems

1. Description: To Service Yard Stores - masonry engineering facing brickwork to external cavity wall with blockwork inner leaf.
2. System performance: [Ss_25_13_50/200 Accuracy of brick and block walling](#)
[Ss_25_13_50/204 Design supervision and checking for masonry systems](#)
[Ss_25_13_50/206 Design working life of masonry systems](#)
[Ss_25_13_50/235 Design of masonry walling](#)
[Ss_25_13_50/252 Design for fire performance of masonry structures](#)
[Ss_25_13_50/291 Compliance with performance requirements for masonry systems](#)
3. Mortar: Cement gauged designed mortar.
Designation (iii) above DPC.
Designation (ii) below DPC.
Profile: Bucket handle.
4. Masonry units:
 - 4.1. Outer leaf: Wienerberger - Baggeridge Blues - Staffordshire Smooth Blue
Work size (length x width x height): 215 x 102 x 65 mm.
Bond: Half lap stretcher.
 - 4.2. Inner leaf: Lignacite Solid
Standard: To BS EN 771-3.
Block description: Common block, fair faced finish
Configuration: Group 1.
Compressive strength
Mean value: 10.4 N/mm².
Category: I.
Freeze/ thaw resistance: Frost resistant.
Work sizes (length x width x height): 440x100x215mm inner leaf
Bond: Half lap stretcher.
Net dry density: 1570kg/m³
5. Concrete fill: Designated concrete to base of cavity.
6. Tanking: Refer to C&S Engineers drawings and specifications for tanking below ground
7. Dpcs: Pitch polymer damp proof courses and cavity trays with associated joint sealant tape.
8. Dpcs - specific applications
 - 8.1. Below coping or capping: DPC as 7 above or EPDM
9. Cavity trays: As 7 above with associated joint sealant tape.
10. Wall ties: Ancon ST1 cavity wall ties.
11. Lintels: Ancon cavity wall lintels
12. Insulation : Not required.
13. Cavity fire barriers: Mineral wool cavity barriers
14. Cavity closers: Mineral wool insulated cavity closers and DPC's around window and door openings.
15. Ancillary structural components: Wall starters and connectors.
16. Movement joint components: Construction joint sealants and foam strips.
17. System accessories: Perpend joint plastics weep holes
[Pr_25_93_54_03 Aluminium coping units](#)

18. Samples required: Provide benchmark samples for acceptance of the Architect including mortar colour prior to ordering for main project reference panel.
19. System completion: [Ss_25_13_50/895 Verification of performance](#)

System performance

See [Ss_25_13_50/200 Accuracy of brick and block walling](#) in [Ss_25_13_50_51 BLK-102 Masonry wall leaf systems](#)

See [Ss_25_13_50/204 Design supervision and checking for masonry systems](#) in [Ss_25_13_50_51 BLK-102 Masonry wall leaf systems](#)

See [Ss_25_13_50/206 Design working life of masonry systems](#) in [Ss_25_13_50_51 BLK-102 Masonry wall leaf systems](#)

See [Ss_25_13_50/235 Design of masonry walling](#) in [Ss_25_13_50_51 BLK-102 Masonry wall leaf systems](#)

See [Ss_25_13_50/252 Design for fire performance of masonry structures](#) in [Ss_25_13_50_51 BLK-102 Masonry wall leaf systems](#)

See [Ss_25_13_50/291 Compliance with performance requirements for masonry systems](#) in [Ss_25_13_50_51 BLK-102 Masonry wall leaf systems](#)

Products

Pr_25_93_54_03 Aluminium coping units

1. Description: Copings to external wall heads where noted on drawings.
2. Manufacturer: Optima Clip-On by Sotech Limited
3. Material: [BS EN 515](#), [BS EN 573-3](#), [BS EN 485-1](#) and [BS EN 485-2](#).
4. Finish: PPC, colour TBC
5. Material thickness (minimum): Submit proposals suitable for coping size and span. Minimum 3mm
6. Dimensions: Refer to drawings
7. Fixings: Secret fixings. As supplied and recommended by manufacturer to suit the design intent coping widths.
Support System:
Fully supported with tapered top hats. Joint straps fabricated from extruded 6063 T6 alloy grade aluminium. Extruded aluminium support to include a series of grooves into which the double EPDM gaskets are fitted.
EPDM fixed across wall head below all coping units.

System completion

See [Ss_25_13_50/895 Verification of performance](#) in [Ss_25_13_50_51 BLK-102 Masonry wall leaf systems](#)

Ω End of System

Ss_25_30_20_25 DRL-102 Louvre Doorset systems

Systems

Ss_25_30_20_25 DRL-102 Louvre Doorset systems

1. **Description:** External louvre doorset (single and double).
External factory polyester powder-coated steel security doorset system to the configurations and nominal dimensions as indicated on the Architectural drawings.
Comprising:
 - Steel construction with suitable security rating for a commercial building.
 - Ironmongery integrated into the doorset system as required to maintain the security rating.
 - Fire escape ironmongery in locations indicated as final fire escape exits.
 - Weather seals and gaskets as required to maintain the system performance.
 - Security rating to meet Secure by Design Principles and be compliant with and certified to BS PAS 24:2012, STS202 or LPS 1175 SR2.
2. **System manufacturer:** Sunray Engineering Ltd
Sunray's ExcluLouvre SR2 Doorset

Ω End of System

Ss_25_50_45_45 LVR-102 Louvre screen systems

Systems

Ss_25_50_45_45 LVR-102 Louvre screen systems

1. Description: Metal Louvres to Service Yard Stores at Ground Floor Level
Louvres at ground floor level to be robustly constructed and fixed, to ensure they cannot be easily removed or damaged.
CONTRACTOR DESIGN - This Section, when read with the Architectural Drawings, indicates the design intent with which the Sub-Contractor must comply when undertaking the Detailed Design. The Sub-Contractor retains full responsibility for completing the Detailed Design and execution of the works and for meeting the specified performance criteria.
2. System performance: [Ss_25_50_45/205 Compliance with performance requirements](#)
[Ss_25_50_45/215 Design of acoustic, screening and ventilation louvre systems](#)
[Ss_25_50_45/220 Durability](#)
3. System manufacturer: Sunray Engineering Ltd
Sunray ExcluLouvre SR2
4. Screen framing:

[Pr_30_59_48_12 Carbon steel louvre frames](#)
Multiple stacked louvre sections to have invisible horizontal joints to give a continuous vertical appearance.
5. Louvres
 - 5.1. Type: [Pr_30_59_48_11 Carbon steel louvre blades](#)
 - 5.2. Operation: Fixed.
6. Installation fasteners: [Pr_20_29_76_85 Stainless steel hexagon head screws](#)
7. System accessories:

[Pr_30_59_57_40 Insect guard mesh](#)
8. Samples required: [Ss_25_50_45/305 Product samples](#)
9. Execution: [Ss_25_50_45/620 Preconstruction survey](#)
[Ss_25_50_45/630 Corrosion protection](#)
[Ss_25_50_45/640 Fixing of steel frames](#)
[Ss_25_50_45/660 Fixing of components](#)
[Ss_25_50_45/665 Frame sealant joints](#)
10. System completion: [Ss_25_50_45/805 Removal of samples](#)
[Ss_25_50_45/810 Protection and cleaning](#)
[Ss_25_50_45/815 Documentation relating to louvre systems](#)
[Ss_25_50_45/895 Verification of performance](#)

System performance

Ss_25_50_45/205 Compliance with performance requirements

1. Requirement: Proof of compliance with specified performance.
2. Method
 - 2.1. Previous test results: Penetration (weather) Class, airflow class and overall performance
3. Submittals: Typical plan, elevation and section drawings at suitable scales.
Acoustic lab test results.
Warranty criteria and limitations.
4. Timing: Before manufacture.

5. Format: Test results and certification.

Ss_25_50_45/215 Design of acoustic, screening and ventilation louvre systems

1. Inlet operation
 - 1.1. Water penetration class (minimum): To [BS EN 13030](#), class A.
 - 1.2. Entry loss coefficient (minimum): LVR-101 - to [BS EN 13030](#), class 2 - to be reviewed by M&E designers to confirm airflow requirements are satisfied.
LVR-102 - TBC
 - 1.3. Core velocity (maximum): LVR-101 - Up to 3.0 m/s.
LVR-102 - TBC
2. Discharge operation
 - 2.1. Discharge loss coefficient (minimum): LVR-101 - 0.289 - to be reviewed by M&E designers to confirm airflow requirements are satisfied.
LVR-102 - TBC
 - 2.2. Core velocity (maximum): LVR-101 - 0 m/s.
LVR-102 - TBC
3. Acoustic performance
 - 3.1. Laboratory test standard: [BS EN ISO 140-3](#) rated to [BS EN ISO 717-1](#).
 - 3.2. Test body: [UKAS](#) or equivalent accredited.
 - 3.3. Calculated weighted sound reduction index (Rw): TBC

Ss_25_50_45/220 Durability

1. Design life span: 35 years

Products

Pr_20_29_76_85 Stainless steel hexagon head screws

1. Manufacturer: Submit proposals

Pr_30_59_48_11 Carbon steel louvre blades

1. Manufacturer: Submit proposals
2. Profile: 'Z' profile.
3. Material: Carbon steel plain sheet, to [BS EN 10130](#) and [BS EN 10131](#).
4. Finish: Galvanised with powder coating to [BS EN 13438](#).
5. Colour: TBC
6. Texture: Matt.
7. Mounting arrangement: Louvres to be mechanically assembled using stainless steel fasteners

Pr_30_59_48_12 Carbon steel louvre frames

1. Manufacturer: Submit proposals
2. Size: Refer to drawings.
3. Material: Carbon steel to [BS EN 10130](#) and [BS EN 10131](#).
4. Finish: Galvanised with powder coating to [BS EN 13438](#).
5. Colour: TBC
6. Texture: Matt.
7. Construction: Flangeless frame.

Pr_30_59_57_40 Insect guard mesh

1. Manufacturer: Submit proposal.
2. Material: Stainless steel to [BS EN 10088-1](#), grade 1.4401.
3. Configuration: 3.5 mm diamond.

Ss_25_50_45/305 Product samples

1. Manufacturer: As louvre manufacturer.
2. Submittals: 1000x1000mm louvre frame and blades with part back pan and part insect mesh. Include invisible horizontal joint.
3. Purpose: For aesthetic evaluation
4. Labelling: Clearly label all submitted samples.
5. Timing: Before ordering for project.

Execution

Ss_25_50_45/620 Preconstruction survey

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

Ss_25_50_45/630 Corrosion protection

1. Material: Manufacturer's standard
2. Application of protective material: Before fixing components.

Ss_25_50_45/640 Fixing of steel frames

1. Spacing: When not predrilled or specified otherwise, position fasteners not less than 50 mm and not more than 190 mm from ends of each member and at maximum 900 mm centres.

Ss_25_50_45/660 Fixing of components

1. Holes for through fixings and components: No larger than required for satisfactory fit and operation.
2. Fixing: Assemble and fix carefully and accurately.
3. Adjacent surfaces: Do not damage hardware and adjacent surfaces.

Ss_25_50_45/665 Frame sealant joints

1. Application: Prepare joints. Use appropriate backing strip for deep joints. For joints formed by surfaces at 90° to each other, form triangular fillets finished to a flat or slightly convex profile.

System completion

Ss_25_50_45/805 Removal of samples

1. Items to be removed: Product samples.
2. Timing: At project completion.

Ss_25_50_45/810 Protection and cleaning

1. **Cement and plaster based spillage:** Remove whilst wet.
2. **Protection:** Prevent staining, scratching and other disfigurement.
3. **Completion:** Remove protective coverings. Thoroughly clean external and internal surfaces with appropriate agents.

Ss_25_50_45/815 Documentation relating to louvre systems

1. **Operation and maintenance instructions**
 - 1.1. **Scope:** All products used throughout this system.
 - 1.2. **Requirements:**
 - Contact details for subcontractors and suppliers.
 - Design criteria for the system.
 - Product information for components and materials including manufacturers literature, COSHH data sheets and recommendations for cleaning maintenance and repair.
 - Copies of material, components and finishes certification and test report.
 - A full set of construction drawings, updated to include any changes made up to the time of completion.
 - 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 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.
2. **Dismantling:** Submit recommendations for safe dismantling and reuse, recycling or disposal of system and products.
3. **Record layout drawings indicating:** General arrangement drawings showing the location and type of louvre screens and units, and any actuators or controls.
4. **Drawing format:** Drawings and specification in BIM compliant format.

Ss_25_50_45/895 Verification of performance

1. **Requirement:** Check completed system and provide assurance of compliance with specified performance.
2. **Submittals**
 - 2.1. **Format:** Description of inspections, remedial works carried out and certification of compliance.
 - 2.2. **Timing:** At project completion

Ω End of System

Ss_30_40_30_72 RFH-201 Reinforced bitumen membrane warm roof covering systems

Systems

Ss_30_40_30_72 RFH-201 Reinforced bitumen membrane warm roof covering systems

1. **Description:** Built-up reinforced bitumen membrane warm deck roof - Bauder Total Roof System by Bauder.
CONTRACTOR DESIGN - This Section, when read with the Architectural Drawings, indicates the design intent with which the Sub-Contractor must comply when undertaking the Detailed Design. The Sub-Contractor retains full responsibility for completing the Detailed Design and execution of the works and for meeting the specified performance criteria.
Traditional drained
Roof finishes as per BDP roof finishes drawing.
Design to accommodate 1 No. 'tell tale' overflow per roof.
Proprietary access chamber to be provided to each outlet to enable FM access for inspection.
Allowance for all upstands/ plant supports/ AOV's/ handrail supports/ hatches/ plant housings to be included in design included any insulation/ flashings required.
Allow for coordination with lightning protection system including any fixings required.
Maximum roof loadings as per structural engineers drawings.
2. **System performance:** [Ss_30_40_30/210 Roof covering design](#)
[Ss_30_40_30/240 Thermal design](#)
[Ss_30_40_30/260 Fire performance – external](#)
[Ss_30_40_30/270 Durability](#)
3. **System manufacturer:** Contractor's choice .
4. **Preparation**
 - 4.1. **Horizontal work :** Contractor's design .
 - 4.2. **Skirtings and vertical work:** Contractor's design .
5. **Air and vapour control layer**
 - 5.1. **Type:** Contractor's design .
 - 5.2. **Attachment:** Contractor's design .
6. **Insulation**
 - 6.1. **Type:** Contractor's design . Product details to be submitted to client/ architect for approvals.
All insulation boards to have either FM Global or LPCB approval.
 - 6.2. **Fixing:** Contractor's design .
7. **Overlay**
 - 7.1. **Type:** Contractor's design .
 - 7.2. **Fixing:** Contractor's design .
8. **Waterproof covering**
 - 8.1. **First layer**
 - 8.1.1. **Type:** Contractor's design .
 - 8.1.2. **Attachment:** Contractor's design .
 - 8.2. **Intermediate layer**
 - 8.2.1. **Type:** Contractor's design .
 - 8.2.2. **Attachment:** Contractor's design .
 - 8.3. **Top layer**

8.3.1.Type: Contractor's design .

8.3.2.Attachment: Contractor's design .

9. Detail work

9.1. Flashings: Contractor's design .

9.2. Skirtings and upstands: Contractor's design .

9.3. Weltded drips: Contractor's design .

9.4. Cover strips: Contractor's design .

9.5. Ancillary items: Contractor's design .

10. Surface protection: [Pr_20_31_04_48 Loose surfacing decorative aggregates](#)

11. System accessories: Contractor's design .

12. System completion: [Ss_30_40_30/810 Inspection of completed work](#)

[Ss_30_40_30/830 Electronic roof integrity test](#)

[Ss_30_40_30/850 Completion](#)

[Ss_30_40_30/890 Verification of performance type B.](#)

System performance

Ss_30_40_30/210 Roof covering design

1. General

1.1. Waterproof covering: Secure and weathertight.

1.2. Roof surfaces: Free draining.

1.3. Architectural and Functional Requirements:

General: Contractor to provide detail design drawings and specification for review by architect.

1: The works shall meet the recommendations of BS 6229.

2: The components of the system shall be covered by a single source warranty. Therefore, guarantees shall be obtained on the basis of a "back to back" type agreement provided jointly by the membrane manufacturer and the Sub-Contractor for the complete roofing system(s).

The warranty shall cover the entire roof assembly and shall be obtained for the full warranty period with an insurance company backing based upon a single whole term premium paid at the inception of the policy with no requirement for periodic renewal premiums.

3: Proprietary systems shall be British Board of Agrément (BBA) certified and tested to satisfy the requirements of the Architectural Specification.

4: The works shall include movement joints as required, which shall be installed in accordance with the manufacturer's recommendations. Exposed elements shall be accepted by the Architect through sampling.

5: The works shall include all primers, bonding compounds, adhesives, fixings, sealants, ventilators, fillets and all other components necessary to complete the installation and meet performance requirements.

6: The works shall include all junctions and interfaces at perimeters to the external cladding, rooflights, plant upstands, services penetrations and other interfacing works.

7: When installing the waterproof membrane using mechanical fasteners, adhesive or tape, the recommendations of the manufacturer shall be followed.

8: The perimeter of the membrane shall be sealed with mechanical fastenings at all roof edges, changes of plane, kerbs and upstands.

9: Include for and determine the type, thickness and density of insulation, including for any integral or separate overlay to satisfy the requirements of the Architectural Specification.

10: Underlayers, where required, shall be formed from materials proposed by the Sub-Contractor and accepted by the Architect.

11: Where not specified elsewhere, and when recommended by the roofing manufacturer, provide suitable rigid decking fixed to the primary structure and arranged to suit roof configurations.

Drainage:

12: Contractor's design.

13: Where required, provide drainage outlets at locations indicated on the Architectural Drawings and agreed with the Services Engineer.

i) Outlets shall meet drainage performance requirements and shall be accepted by the roofing system manufacturer.

ii) Outlets shall not thermally bridge the works.

iii) Outlets shall be connected to the roofing membrane in accordance with the outlet and membrane manufacturer's recommendations to maintain the performance requirements of the Architectural Specification.

iv) Outlets shall be set at levels to maintain drainage requirements and shall include raising pieces as required.

v) Outlets shall include attenuator flow restrictors as designed by the sub contractor.

14: Provide bolt fixed or locked leaf/ gravel guards to drainage outlets. Guard type and finish, where not specified, shall be accepted by the Architect through sampling. Guards shall maintain drainage performance requirements and shall be set to levels to suit drainage requirements.

Ballast and Coverings: Contractor's design.

15: Stone ballast, where indicated on the Architectural Drawings, shall be smooth round aggregate, nominally 20mm to 40mm graded, freeze/ thaw cycle resistant, solar reflective, of a type that birds cannot pick up and shall meet the requirements of BS 6229. Stone ballast shall be suitable to prevent flotation of insulation as required.

Minimum depth 60mm subject to agreement with structural engineer (refer to SE loading drawings)

16: Concrete paving slabs, where indicated on the Architectural Drawings, shall have a nominal thickness of 50mm and shall be suitable to prevent flotation of insulation as required. Pavings shall be to arrangement and finished levels indicated on the Architectural Drawings and shall be

mounted on proprietary support spacers.

17: Provide ballast stops inclusive of factory formed drainage apertures, whilst retaining the ballast.

Pressed Metal Components/Accessories: Contractor's design.

18: Systems shall incorporate all necessary pressed metal accessories including flashings, collars, copings, cappings to all penetrations, upstands and perimeter conditions as required.

19: Components shall be formed from fully welded and/ or sealed pressed aluminium sheets, which shall be sufficiently thick to provide a visually flat surface and to eliminate excessive distortion and permanent deformation.

20: Provide special prefabricated corner pieces for changes in direction as shown on the Architectural Drawings. Cut corners at changes in direction shall not be accepted.

21: Components shall be of a finish, colour and texture confirmed by the Architect, where not specified.

22: Provide concealed support as required.

23: Insulation shall be included as required to meet the performance requirements, including anti-drumming insulation to the underside.

24: Include airtightness, breather and vapour control membranes.

25: Joints:

i) Joints shall be of profiles accepted by the Architect and shall maintain the performance requirements of the Architectural Specification.

ii) Locations shall be as indicated on the Architectural Drawings, or to the acceptance of the Architect.

iii) Where required, joints shall be assembled centrally over bracketry.

iv) In all conditions simple butt straps shall not be accepted.

v) Joints shall include concealed continuous sealed gaskets with recessed/ folded interconnecting joints to provide a neat flush external appearance.

Ss_30_40_30/240 Thermal design

1. Requirement: Determine type and thickness of insulation to satisfy thermal performance.

2. Thermal transmittance (U-value) of roof (maximum): 0.14 W/m²K

Ss_30_40_30/260 Fire performance – external

1. External fire exposure
 - 1.1. Standard: To [BS EN 13501-5](#).
 - 1.2. Requirement: BROOF (t4) and AA, AB or AC.

Ss_30_40_30/270 Durability

1. System warranty: Minimum 20 years.

Products

Pr_20_31_04_48 Loose surfacing decorative aggregates

1. Manufacturer: Contractor's choice .
2. Supplied by: Contractor's choice .
3. Standard: To [BS EN 13043](#).
4. Material: Pebbles.
5. Particle shape: Rounded.
6. Aggregate size: Graded, 20/40.
7. Colour: Natural.
8. Washing: Manufacturer's standard .

System completion

Ss_30_40_30/810 Inspection of completed work

1. Waterproof coverings surfaces : When complete or cured, check for discontinuities.
2. Defective areas: Repair or apply additional coverings.
3. Interim and final roof inspections: Submit reports.
4. Completion certificate: Required.

Ss_30_40_30/830 Electronic roof integrity test

1. Testing authority: UKAS approved laboratory.
2. Timing of test: Before, and on completion of access by other trades.
3. Condition of roof before testing
 - 3.1. Waterproof covering : Complete to a stage where integrity can be tested.
 - 3.2. Surface: Clean.
4. Test results: Submit, on completion of testing.
5. Test certificate: Required.

Ss_30_40_30/850 Completion

1. Roof areas: Clean.
2. Outlets: Clear.
3. Flashings: Dress into place.
4. Work necessary to provide a weathertight finish: Complete.
5. Storage of materials on finished surface: Not permitted.
6. Completed waterproof covering : Do not damage. Protect from petroleum based solvents and other chemicals, traffic and adjacent or high level working.

Ss_30_40_30/890 Verification of performance type B

1. **Requirement:** Check completed system and provide assurance of compliance with specified performance.
2. **Submittals**
 - 2.1. **Format:** Description of inspections, remedial works carried out and certification of compliance.
 - 2.2. **Timing:** At completion of installation

Ω End of System

Ss_30_42_30_30 **FLH-601 Floor coating systems**

Systems

Ss_30_42_30_30 FLH-601 Floor coating systems

1. Description: 2-part Epoxy Floor Paint to floors in risers and plant rooms and services yard stores.
2. System performance: [Ss_40_90_60/210 Design of coating system](#)
3. System manufacturer: Blackfriar
A division of Tor Coatings Ltd.
Portobello Industrial Estate,
Birtley,
Chester-le-Street,
DH3 2RE
4. Preparation: Ensure all surfaces to be painted are sound, clean, dry and completely free from oil, grease and polish. Concrete surfaces to be free of dust, grit, cement fines and laitence. Dense smooth surfaces such as power floated concrete slabs may require to be acid etched to improve coating adhesion. Refer to manufacturer to confirm requirement and for specific guidance.
5. Initial coats: Etch primer may be required on smooth concrete. Refer to manufacturer to confirm requirement and for specific guidance.
[Pr_35_31_66_26 Etching primers](#)
6. Primer Coat: [Pr_35_31_66_67 Primer-sealers](#)
7. Finishing coats: [Pr_35_31_22_18 Concrete floor paints](#)
8. Execution:

[Ss_40_90_60/603 Handling and storage of coating materials](#)
[Ss_40_90_60/607 Wet paint signs](#)
[Ss_40_90_60/610 Control samples of coating systems](#)
[Ss_40_90_60/615 Inspection by coating manufacturers](#)
[Ss_40_90_60/620 Preparation for coating systems generally Type A](#)
[Ss_40_90_60/700 Applying coating generally](#)
[Ss_40_90_60/665 Uncoated concrete Type A](#)
9. System completion:

[Ss_40_90_60/800 Information to be provided on completion](#)

System performance

Ss_40_90_60/210 Design of coating system

Shared by: [Ss_40_90_60_95 PTS-403 Waterborne paint systems](#)

1. Design: Execute the design in accordance with requirements below.
2. Standard: In accordance with BS 6150.
3. Compatibility: Coating materials shall be compatible with each other and be appropriate for the particular surface of application and conditions of exposure, all in accordance with manufacturers' recommendations. They shall also be compatible with, and not inhibit the performance of, any preservative/ fire retardant or other pretreatment.
4. Proposals: For any necessary items additional to those covered in this section, submit technical information, calculations (if appropriate) and manufacturers' literature.
5. Timing: Before execution.

Products

Pr_35_31_22_18 Concrete floor paints

1. Description: 2-part Epoxy Floor Paint
2. Manufacturer: Blackfriar (Tor Coatings).
3. Product: Blackfriar Professional Water-based Epoxy Floor Paint
4. Colour: TBC from standard range
5. Execution: [Pr_35_31_22/703 Applying coating Type D](#)

Pr_35_31_66_26 Etching primers

1. Description: Acid etch solution for dense smooth concrete floor surfaces.
2. Manufacturer: Blackfriar (Tor Coatings).
3. Product: Blackfriar Professional Acid Etch.
4. Execution: Apply according to manufacturer's instructions.
After etch has completed rinse surface fully before applying following coats.

Pr_35_31_66_67 Primer-sealers

1. Description: Water-based Epoxy Floor Primer
2. Manufacturer: Blackfriar (Tor Coatings).
3. Product: Blackfriar Professional Water-based Epoxy Floor Primer
4. Composition: 2-part water based epoxy coating.
5. Execution: Apply according to manufacturer's instructions.
[Pr_35_31_66/685 Primer dry film thickness \(dft\)](#)

Execution

Pr_35_31_22/703 Applying coating Type D

1. Initial coats
 - 1.1. Number of coats: One, if required due to smooth surface. Refer to manufacturer for guidance.
 - 1.2. Application: To manufacturer's instructions. Rinse well after etch action is completed.
2. Undercoats
 - 2.1. Number of coats: One
 - 2.2. Application: Brush or Roller
3. Finishing coats
 - 3.1. Number of coats: Two
 - 3.2. Application: Brush or Roller

Pr_35_31_66/685 Primer dry film thickness (dft)

1. Locations: All
2. Dry film thickness (minimum): As recommended by manufacturer.
3. Measuring primer dft : As recommended by manufacturer

Ss_40_90_60/603 Handling and storage of coating materials

Shared by: [Ss_40_90_60_95 PTS-403 Waterborne paint systems](#)

1. Coating materials: Deliver in sealed containers, labelled clearly with brand name, type of material and manufacturer's batch number.

2. Materials from more than one batch: Store separately. Allocate to distinct parts or areas of the work.

Ss_40_90_60/607 Wet paint signs

1. Requirement: Provide where necessary.

Ss_40_90_60/610 Control samples of coating systems

Shared by: [Ss_40_90_60_95 PTS-403 Waterborne paint systems](#)

1. Sample areas of finished work: To be agreed.
2. Timing: Apply during preliminary installation.
3. Approval of appearance: Obtain before starting general coating work.

Ss_40_90_60/615 Inspection by coating manufacturers

Shared by: [Ss_40_90_60_95 PTS-403 Waterborne paint systems](#)

1. General: Permit manufacturers to inspect work in progress and take samples of their materials from site.

Ss_40_90_60/620 Preparation for coating systems generally Type A

1. Standard: In accordance with [BS 6150](#).
2. Substrates: Sufficiently dry in depth to suit coating.
3. Suspected existing hazardous materials: Prepare risk assessments and method statements covering operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
4. Efflorescence salts: Remove.
5. Dirt, grease and oil: Remove.
6. Contamination of surfaces and substrates : Give notice.
7. Surface irregularities: Remove.
8. Joints, cracks, holes and other depressions: Review with architect, fill with concrete repair system where agreed before application of sealer. Fillers to be compatible with finishing coats.
9. Dust, particles and residues from preparation: Remove and dispose of safely.

Ss_40_90_60/665 Uncoated concrete Type A

1. Release agents: Remove.
2. Cement/mortar splashes: Remove.
3. Loose or otherwise defective material: Remove.
4. Surface defects: Grind flush or fill and finish flush. Fillers to be compatible with finishing coats.

Ss_40_90_60/700 Applying coating generally

Shared by: [Ss_40_90_60_95 PTS-403 Waterborne paint systems](#)

1. Application: In accordance with [BS 6150](#), clause 9.
2. Environmental conditions : Maintain suitable temperature, humidity and air quality during application and drying.
3. Surfaces: Clean and dry at time of application.
4. Thinning and intermixing of coatings: Not permitted unless recommended by manufacturer.
5. Overpainting: Do not paint over intumescent strips or silicone mastics.
6. Initial coats

- 6.1. **Thickness:** To suit surface porosity.
- 6.2. **Application:** As soon as possible on same day as preparation is completed.
- 7. **Finish:** Even, smooth and of uniform colour. Free from brush marks, sags, runs and other defects.
- 8. **Cutting in:** Cut in neatly.
- 9. **Doors, opening windows and other moving parts:** Ease before coating, and between coats.

System completion

Ss_40_90_60/800 Information to be provided on completion

Shared by: [Ss_40_90_60_95 PTS-403 Waterborne paint systems](#)

- 1. **Submittals:** Operation and maintenance information. Product certification.

Ω End of System

Ss_40_90_60_95 PTS-403 Waterborne paint systems

Systems

Ss_40_90_60_95 PTS-403 Waterborne paint systems

1. Description: Water-based paint finish to internal and external exposed in-situ concrete soffits in Service Yard.
2. System performance: [Ss_40_90_60/210 Design of coating system](#)
3. System manufacturer: Dulux (Akzo)
4. Preparation: Thoroughly clean down the surfaces to remove all dirt, grease and surface contaminants. Carefully remove cement and mortar deposits. Remove efflorescence and under-bound slurry by brushing or rubbing with a dry cloth followed by wiping with a damp cloth. Allow to dry. Brush the surface to remove any loose aggregate. (Do not use wire brushes)
5. Initial coats: Prime with 1 coat of Dulux Trade Weathershield Smooth Masonry Paint of selected shade thinned up to 1 part clean water to 5 parts of product as appropriate.
6. Finishing coats: 2 coats of Dulux Trade Weathershield Smooth Masonry Paint
Colour - TBC
7. Execution: [Ss_40_90_60/603 Handling and storage of coating materials](#)
[Ss_40_90_60/610 Control samples of coating systems](#)
[Ss_40_90_60/615 Inspection by coating manufacturers](#)
[Ss_40_90_60/665 Uncoated concrete](#)
[Ss_40_90_60/700 Applying coating generally](#)
[Ss_40_90_60/620 Preparation for coating systems generally](#)
8. System completion: [Ss_40_90_60/800 Information to be provided on completion](#)

System performance

See [Ss_40_90_60/210 Design of coating system](#) in [Ss_30_42_30_30 FLH-601 Floor coating systems](#)

Execution

See [Ss_40_90_60/603 Handling and storage of coating materials](#) in [Ss_30_42_30_30 FLH-601 Floor coating systems](#)

See [Ss_40_90_60/610 Control samples of coating systems](#) in [Ss_30_42_30_30 FLH-601 Floor coating systems](#)

See [Ss_40_90_60/615 Inspection by coating manufacturers](#) in [Ss_30_42_30_30 FLH-601 Floor coating systems](#)

Ss_40_90_60/620 Preparation for coating systems generally

1. Standard: In accordance with [BS 6150](#).
2. Substrates: Sufficiently dry in depth to suit coating.
3. Suspected existing hazardous materials: Prepare risk assessments and method statements covering operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
4. Efflorescence salts: Remove.
5. Dirt, grease and oil: Remove.
6. Contamination of surfaces and substrates : Give notice.
7. Surface irregularities: Remove.
8. Joints, cracks, holes and other depressions: Fill flush with surface. Provide smooth finish.
9. Dust, particles and residues from preparation: Remove and dispose of safely.

10. Water-based stoppers and fillers: Apply before priming.
11. Oil based stoppers and fillers: Apply after priming.
12. Doors, opening windows and other moving parts: Ease, if necessary, before coating.

Ss_40_90_60/665 Uncoated concrete

1. Release agents: Remove.
2. Cement/mortar splashes: Remove.
3. Loose or otherwise defective material: Remove.
4. Surface defects: Review with architect before installation to confirm preferred action.

See [Ss_40_90_60/700 Applying coating generally](#) in [Ss_30_42_30_30 FLH-601 Floor coating systems](#)

System completion

See [Ss_40_90_60/800 Information to be provided on completion](#) in [Ss_30_42_30_30 FLH-601 Floor coating systems](#)

Ω End of System