

LANDSCAPE SPECIFICATION

JUNE 2025

Phoenix Ironworks

Radium Street

Ancoats

Manchester

U R B A N
G R E E N

QUALITY MANAGEMENT

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B91 Buildings in the landscape

System outline - Not Used

System performance - Not Used

Products

330 Canopy

1. Description: Sail Shades
2. Manufacturer: Clara Shade Sails
 - 2.1. Product reference: Rectangle Orange Sun Shade Sail
3. Size: W2000xL3000mm
4. Roof covering: Tensile fabrics
5. Accessibility: In accordance with [BS 8300-1](#).
6. Accessories/ special requirements: All associated fixings
7. Method of fixing to ground, base or walls: Fixed to metal pergolas

370 Pergola

1. Description: Metal Pergolas
2. Manufacturer: White Stores
 - 2.1. Product reference: Legacy Aluminium Metal Pergola
3. Size: W3000 x H2508mm x L4000/5300mm
4. Frame: As standard
5. Panels: Not required
6. Roof covering: As standard
7. Accessibility: In accordance with [BS 8300-1](#)
8. Method of fixing to ground or base: To manufacturer and engineer's specification

Materials - Not Used

Execution/ erection/ installation

600 Erection/ installation generally

1. Frameworks: Assemble and brace, including temporary members required for installation
2. Contact between dissimilar metals: Avoid
3. Fixings: Fully bolted together
4. Temporary support: Do not subject members to non-design loading

605 Jointing/ fixing generally

1. Generally: Where not specified precisely, select methods of jointing and fixing and types, sizes and spacings of fasteners in compliance with [section Z20](#)

610 Concrete foundations generally

1. Concrete: To [BS 8500-2](#).
2. Mix: Designated concrete not less than GEN 1 or standard prescribed concrete not less than ST2.

3. **Admixtures:** Do not use.
4. **Depth of foundations, bedding, haunching:** Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.
5. **Foundation holes:** Neat vertical sides.
6. **Components:** Accurately positioned and securely supported.
7. **Concrete fill:** Compact as filling proceeds.
8. **Concrete foundations exposed to view:** Compact until air bubbles cease to appear on the upper surface, then weather to shed water and trowel smooth.
9. **Temporary component support:** Maintain undisturbed for minimum 48 hours.

630 Erection of prefabricated buildings/ structures

1. **Checking:** Five days (minimum) before proposed erection date, check foundations, holding down bolts, etc.
2. **Inaccuracies or defects in prepared bases or supplied buildings/ structures:** Report immediately. Obtain instructions before proceeding.

Completion - Not Used

Ω End of Section

F10 Brick/ block walling

Types of walling

290 Manufactured stone blockwork

1. Description: To Sitting Wall
2. Blocks: To BS 1217.
 - 2.1. Walling type: Granite Solid Stone Wall
 - 2.2. Manufacturer: Hardscape
 - 2.2.1. Product reference: Kobra Grey Granite
 - 2.3. Block type: Solid
 - 2.4. Work sizes (length x height x thickness): W600 x L1000mm, height varies
 - 2.5. Finish/ colour: Picked top with pencil edge, sawn bottom.
 - 2.6. Special shapes: Allow for special starting and ending units
3. Mortar: As section Z21.
4. Bond: Off-centre stretcher
5. Joints: Recessed

Testing - Not Used

Workmanship generally

430 Conditioning of clay bricks and blocks

1. Bricks and blocks delivered warm from manufacturing process: Do not use until cold.
2. Absorbent bricks in warm weather: Wet to reduce suction. Do not soak.

460 Mortar designations

1. Mix proportions: For a specified designation select a mix from the following:
 - 1.1. Designation (i) (BS EN 998-2 M12 equivalent)
 - 1.1.1. 1:0-¼:3 (Portland cement:lime:sand with or without air entraining additive).
 - 1.1.2. 1:3 (Portland cement:sand and air entraining additive).
 - 1.2. Designation (ii) (BS EN 998-2 class M6 equivalent)
 - 1.2.1. 1½:4-5 (Portland cement:lime:sand with or without air entraining additive).
 - 1.2.2. 1:3 (masonry cement:sand containing Portland cement and lime in approximate ratio 1:1, and an air entraining additive).
 - 1.2.3. 1:2½-3½ (masonry cement:sand containing Portland cement and inorganic materials other than lime and air entraining additive).
 - 1.2.4. 1:3-4 (Portland cement:sand and air entraining additive).
 - 1.3. Designation (iii) (BS EN 998-2 class M4 equivalent)
 - 1.3.1. 1:1:5-6 (Portland cement:lime:sand with or without air entraining additive).
 - 1.3.2. 1:3½-4 (masonry cement:sand containing Portland cement and lime in approximate ratio 1:1, and an air entraining additive).
 - 1.3.3. 1:4-5 (masonry cement:sand containing Portland cement and inorganic materials other than lime and air entraining additive).
 - 1.3.4. 1:5-6 (Portland cement:sand and air entraining additive).
 - 1.4. Designation (iv) (BS EN 998-2 class M2 equivalent)

- 1.4.1. 1:2:8-9 (Portland cement:lime:sand with or without air entraining additive).
 - 1.4.2. 1:4½ (masonry cement:sand containing Portland cement and lime in approximate ratio 1:1, and an air entraining additive).
 - 1.4.3. 1:5½-6½ (masonry cement:sand containing Portland cement and inorganic materials other than lime and air entraining additive).
 - 1.4.4. 1:7-8 (Portland cement:sand and air entraining additive).
- 2. **Batching:** Mix proportions by volume.
 - 3. **Mortar type:** Continuous throughout any one type of masonry work.

500 Laying generally

- 1. **Mortar joints:** Fill vertical joints. Lay bricks, solid and cellular blocks on a full bed.
- 2. **AAC block thin mortar adhesive and gypsum block adhesive joints:** Fill vertical joints. Lay blocks on a full bed.
- 3. **Clay block joints**
 - 3.1. **Thin-layer mortar:** Lay blocks on a full bed.
 - 3.2. **Interlocking perpends:** Butted.
- 4. **Bond where not specified:** Half-lap stretcher.
- 5. **Vertical joints in brick and concrete block facework:** Even widths. Plumb at every fifth cross joint.

520 Accuracy

- 1. **Courses:** Level and true to line.
- 2. **Faces, angles 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.

635 Jointing

- 1. **Profile:** Consistent in appearance.

690 Adverse weather

- 1. **General:** Do not use frozen materials or lay on frozen surfaces.
- 2. **Air temperature requirements:** Do not lay bricks/ blocks:
 - 2.1. In cement-gauged mortars when at or below 3°C and falling or unless it is at least 1°C and rising.
 - 2.2. In hydraulic lime:sand mortars when at or below 5°C and falling or below 3°C and rising, or as manufacturer's/ supplier's recommendations.
 - 2.3. In thin-layer mortars when outside the limits set by the mortar manufacturer.
- 3. **Temperature of walling during curing:** Above freezing until hardened.
- 4. **Newly erected walling:** Protect at all times from:
 - 4.1. Rain and snow.
 - 4.2. Drying out too rapidly in hot conditions and in drying winds.

Additional requirements for facework

760 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.
 - 3.1. Setting out: To produce satisfactory junctions and joints with built-in features and components.
 - 3.2. Coursing: Evenly spaced using gauge rods.
4. Lifts: Complete in one operation.
5. Methods of protecting facework: Submit proposals.

780 Ground level

1. Commencement of facework: Not less than 150 mm below finished level of adjoining ground or external works level.

830 Cleanliness

1. Facework: Keep clean.
2. Mortar on facework: Allow to dry before removing with stiff bristled brush.
3. Removal of marks and stains: Rubbing not permitted.

Ω End of Section

L37

External stairs/ ramps/ handrails/ balustrades

Clauses - Not Used

General

110 External stairs

1. Description: To Maker's Yard and Residential Garden
2. Type: Hardscape Kobra Grey Granite Step Units
3. Base/ fabric: Kobra Grey Granite
4. Unobstructed width: As drawing 240010-UG-ZZ-XX-D-L-0000101
5. Accessories: Applied stair nosings, handrail system.

120 External ramps

1. Description: To Residential Garden
2. Type: Built in situ.
3. Base/ fabric: In situ concrete
4. Surface: Clay brick pavers, as section Q24.
5. Minimum surface width: As drawing 240010-UG-ZZ-XX-D-L-0000101
6. Gradients
 - 6.1. Going: 1:20 maximum.
 - 6.2. Cross fall: 1:50 maximum.
7. Accessories: Handrail system.

150 External handrails

1. Description: To External Steps and Ramps
2. Material: Steel
 - 2.1. Cross section: As drawing 240010-UG-ZZ-XX-D-L-0000204
 - 2.2. Finish: Polyester powder-coated, as section Z31.
3. Height (to upper surface of handrail)
 - 3.1. Above pitch line: 900
 - 3.2. Above landing: 900

Design/ performance requirements - Not Used

Products

420 Applied stair nosings

1. Description: To Step Units
2. Standard: In accordance with BS 8300-1.
3. Manufacturer: AATi
 - 3.1. Product reference: SN9/55
4. Material: Cast metal
5. Size – outer dimensions (rise x going): 55mm
6. Profile: 55mm

7. Colour: Zinc plated black colour

Fabrication

510 Fabrication generally

1. Design: Complete the detailed design and obtain approval prior to commencing fabrication.
2. Shop drawings: Submit.
3. Structural calculations: Submit.
4. Frameworks: Assemble and brace, including temporary members required for installation.
5. Contact between dissimilar metals: Avoid.
6. Fixings: Fully bolt together. Tighten bolts.
7. Temporary support: Do not subject members to non-design loadings.

Execution

610 Loading

1. Site activities: Restrict, to ensure that design loads are not exceeded, or submit proposals for temporary supports.

620 Concrete foundations generally

1. Standard: To BS 8500-2.
2. Concrete: Designated not less than GEN 1 or standard prescribed not less than ST2.
3. Admixtures: Do not use.
4. Foundation holes: Neat vertical sides.
5. Depth of foundations, bedding, haunching: Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

630 Setting components in concrete

1. Holes:
2. Components: Accurately positioned and securely supported.
3. Concrete fill: Compact as filling proceeds.
4. Concrete foundations exposed to view: Finished to weathering profile to shed water and trowel smooth.
5. Temporary component support: Maintain undisturbed for minimum 48 hours.

650 Installation generally

1. Fasteners: To section Z20.
2. Structural members: Do not modify, cut, notch or make holes in structural members, except as indicated on drawings.
3. Temporary support: Do not use finished work as temporary support or strutting for other work.
4. Applied finishes: Substrates to be even, dry, sound and free from contaminants. Make good substrate surfaces and prepare/ prime as finish manufacturer's recommendation before application.

660 Installation of manufactured stone elements

1. Selection: Do not use damaged units.
2. Accuracy
 - 2.1. Courses: Level and true to line.

- 2.2. Faces, angles and features: Plumb.
- 2.3. Setting out: Achieve satisfactory junctions and joints with adjoining or built-in elements and components.
- 3. Absorbent units: Dampen in warm weather to reduce suction.
- 4. Mortar joints: 6 x 6 mm recess.
 - 4.1. Laying: Full bed of mortar with all joints and voids filled.
 - 4.2. Temporary distance pieces: Lead or stainless steel. Remove when mortar is sufficiently strong.
 - 4.3. Appearance: Neat and consistent.
- 5. Cleanliness: Keep facework clean. Rubbing and other abrasive or chemical cleaning methods to remove marks and stains, not permitted.
- 6. Cutting of reinforced units: Not permitted.

662 Adverse weather

- 1. General: Do not use frozen materials and do not lay on frozen surfaces.
- 2. Working limits: Do not lay blocks/ dressings:
 - 2.1. Cement gauged mortars: When the air temperature is at or below 3°C and falling or below 1°C and rising (unless mortar has a temperature of not less than 4°C when laid and work is thoroughly protected).
 - 2.2. Hydraulic lime:sand mortars: When the air temperature is at or below 5°C and falling or below 3°C and rising.
- 3. Temperature of the work: Maintain above freezing until mortar has fully set.
- 4. Newly erected work: Protect from precipitation; Prevent rapid drying in hot conditions.
- 5. Remedial work: Rake out and replace mortar damaged by frost.
 - 5.1. Damaged work: Rebuild.

670 Installation of tread inserts/ nosings

- 1. Treads: Fully cured, sound and level.
- 2. Fixing
 - 2.1. Location/ position: In accordance with BS 8300-1.
 - 2.2. Fixings: As manufacturer's recommendations.
 - 2.2.1. Centres: As manufacturer's recommendations.

Completion - Not Used

Ω End of Section

Q10

Kerbs/ edgings/ channels/ paving accessories

Types of kerbs/edgings and channels

120 Granite Edge Type 1

1. Description: Granite Edge Type 1
2. Standard: To BS EN 1343.
3. Supplier: Hardscape
4. Stone type: Kobra grey granite
5. Size (width x height): W300XH80mm
 - 5.1. Tolerances on overall width and height (nominal): Class 2
6. Finish: Flamed
7. Bedding: To engineer's specification

120 Granite Edge Type 2

1. Description: Granite Edge Type 2
2. Standard: To BS EN 1343.
3. Supplier: Hardscape
4. Stone type: Kobra grey granite
5. Size (width x height): W200XH80mm
 - 5.1. Tolerances on overall width and height (nominal): Class 2
6. Finish: Flamed
7. Bedding: To engineer's specification

120 Natural stone kerbs Type A

1. Description: Granite Road Kerb
2. Standard: To BS EN 1343.
3. Supplier: [Hardscape Products Ltd](#)
4. Contact details
 - 4.1. Address: Eagley House
Deakins Business Park
Egerton
Bolton
Lancashire
United Kingdom
BL7 9RP
 - 4.2. Telephone: [+44 \(0\)1204 565500](tel:+44(0)1204565500)
 - 4.3. Web: www.hardscape.co.uk
 - 4.4. Email: enq@hardscape.co.uk
5. Product reference: Kobra Grey Granite Kerb
6. Types: Rectangular with radiused exposed edges
 - 6.1. Tolerances on batter: Class 2
7. Stone type: Granite
8. Size (width x height): 125x255mm
 - 8.1. Tolerances on overall width and height (nominal): Class 2

9. Special shapes: Transition kerbs
10. Finish: Flamed
11. Bedding: To engineer's specification

180 Drainage channel systems with gratings

1. Manufacturer: ACO
 - 1.1. Product reference: RainDrain
2. Size: L1000xW118xD97mm
3. Type of fall: To engineer's specification
4. Finish: Wedge wire steel grating
5. Colour:
6. Bedding: To engineer's specification

Roads/paving accessories/ marking/ demarcation - Not Used

Laying

510 Laying kerbs, edgings and channels

1. Cutting: Neat, accurate and without spalling. Form neat junctions.
 - 1.1. Long units (450 mm and over) minimum length after cutting: 300 mm.
 - 1.2. Short units minimum length after cutting: The lower of one third of their original length or 50 mm.
2. Bedding of units: Positioned true to line and levelled along top and front faces, in a mortar bed on accurately cast foundations or on a race of fresh concrete.
3. Securing of units: After bedding has set, secured with a continuous haunching of concrete or on a race of fresh concrete with backing concrete cast monolithically.

520 Adverse weather

1. Conditions: Do not construct if the temperature is below 3°C on a falling thermometer or 1°C on a rising thermometer. Adequately protect foundations, bedding and haunching against frost and rapid drying by sun and wind.

530 Concrete for foundations, races and haunching

1. Standard: To BS 8500-2.
2. Designated mix: Not less than GEN0 or Standard mix ST1.
3. Workability: Very low.

540 Cement mortar bedding

1. General: To section Z21.
2. Mix (Portland cement:sand): 1:3.
 - 2.1. Portland cement: Class CEM I 42.5 to BS EN 197-1.
 - 2.2. Sand: to BS EN 12620, grade 0/4 or 0/2 (MP).
3. Bed thickness: 12-40 mm.

570 Channels

1. Installation: To an even gradient, without ponding or backfall.
2. Lowest points of channels: 6 mm above drainage outlets.

580 Drainage channel systems

1. **Installation:** To an even gradient, without ponding or backfall. Commence laying from outlets.
2. **Silt and debris:** Removed from entire system immediately before handover.
3. **Washing and detritus:** Safely disposed without discharging into sewers or watercourses.

590 Drainage channel systems with built in fall

1. **Installation:** Top of channels level, installed in correct sequence to form an even gradient without ponding or backfall. Commence laying from outlets.
2. **Silt and debris:** Removed from entire system immediately before handover.
3. **Washings and detritus:** Safely disposed without discharging into sewers or watercourses.

600 Radius kerbs/ channels

1. **Usage:** Radii of 15 m or less.

610 Angle kerbs

1. **Usage:** Internal and external 90° changes of direction.
2. **Cutting of mitres:** Not permitted.

620 Accuracy

1. **Deviations (maximum)**
 - 1.1. **Level:** ± 6 mm.
 - 1.2. **Horizontal and vertical alignment:** 3 mm in 3 m.

625 Regularity of paved surfaces

1. **Maximum undulation of (non-tactile) paving surface:** 3 mm.
 - 1.1. **Method of measurement:** Under a 1 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface).
2. **Difference in level between adjacent units (maximum)**
 - 2.1. **Joints flush with the surface:** Twice the joint width (with 5 mm max difference in level).
 - 2.2. **Recessed, filled joints:** 2 mm.
 - 2.2.1. **Recess depth (maximum):** 5 mm.
 - 2.3. **Unfilled joints:** 2 mm.
3. **Sudden irregularities:** Not permitted.

640 Tooled mortar joints

1. **Jointing:** Ends of units buttered with bedding mortar as laying proceeds. Joints completely filled and tooled to a neat flush profile.
 - 1.1. **Joint width:** 6 mm.

Ω End of Section

Q22

Asphalt roads/ pavings

Types of paving

110 Asphalt concrete paving

1. Description: Vehicular Surface to School Court
2. Standard: To [BS EN 13108-1](#)
3. Subgrade improvement layer: To engineer's details and specification
4. Geotextile: To engineer's details and specification
5. Granular sub-base: To engineer's details and specification
6. Base: To engineer's details and specification
7. Binder course: To engineer's details and specification
8. Surface course: To engineer's details and specification
9. Reclaimed content
 - 9.1. Standard: To [BS EN 13108-8](#).
10. Surface treatment: To engineer's details and specification

115 Asphalt concrete paving

1. Description: Pedestrian Surface to School Court
2. Standard: To [BS EN 13108-1](#)
3. Subgrade improvement layer: To engineer's details and specification
4. Geotextile: To engineer's details and specification
5. Granular sub-base: To engineer's details and specification
6. Binder course: To engineer's details and specification
7. Surface course: To engineer's details and specification
8. Reclaimed content
 - 8.1. Standard: To [BS EN 13108-8](#).
9. Surface treatment: To engineer's details and specification

Preparatory work/ requirements

220 Bituminous materials generally

1. Suppliers' names: Submit.
 - 1.1. Timing (minimum): Two weeks before starting work.
2. Test certificates: At the time of delivery for each manufacturing batch submit certificate:
 - 2.1. Confirming compliance with this specification and the relevant standard.
 - 2.2. Stating full details of composition of mix.

240 Acceptance of surfaces

1. Surface: Sound, clean and suitably close textured.
2. Level tolerances: To [BS 594987](#).
3. Kerbs and edgings: Complete, adequately bedded and haunched and to the required levels.

250 Abutments

1. Vertical edges of manholes, gullies, kerbs and other abutments: Clean and paint with a thin uniform coating of
2. Finishing: Tamp surface around projections.
 - 2.1. Level: Flush or not more than 3 mm above projections.

Laying

310 Laying generally

1. Preparation: Remove all loose material, rubbish and standing water.
2. Adjacent work: Form neat junctions. Do not damage.
3. Channels, kerbs, inspection covers etc: Keep clean.
4. New paving
 - 4.1. Keep traffic free until it has cooled to prevailing atmospheric temperature.
 - 4.2. Do not allow rollers to stand at any time.
 - 4.3. Prevent damage.
 - 4.4. Lines and levels: With regular falls to prevent ponding.
 - 4.5. Overall texture: Smooth, even and free from dragging, tearing or segregation.
 - 4.6. State on completion: Clean.

320 Adverse weather

1. Frozen materials: Do not use.
2. Suspend laying
 - 2.1. During freezing conditions
 - 2.2. If the air temperature reaches 0°C, or in calm dry conditions -3°C, on a falling thermometer.
 - 2.3. Hot rolled asphalt: During periods of continuous or heavy rain or if there is standing water on the base.

330 Levels

1. Permissible deviation from the required levels, falls and cambers (maximum): In accordance with [BS 594987](#), clause 5.2.

340 Flatness/ Surface regularity

1. Deviation of surface: Where appropriate in relation to the geometry of the surface, the variation in gap under a 3 m straightedge placed anywhere on the surface to be not more than:
 - 1.1. Base: Hand laid, 25 mm
 - 1.2. Binder course: Machine laid, 13 mm
 - 1.3. Surface course: Machine laid, 7 mm
 - 1.4. Where a straightedge cannot be used the surface must be of a comparable standard of accuracy when judged by eye.

350 Contractor's use of pavements

1. Before use
 - 1.1. Timing: allow newly laid sections to cool before trafficking.
 - 1.2. Open-grained surface: Fill with 0/4 mm size coated grit. Remove surplus.
 - 1.3. Finish: Uncoated chipping and binder surface treatment.
2. Preparation for final surfacing

- 2.1. Timing: Defer laying until as late as practicable.
- 2.2. Immediately before laying final surfacing: Clean and make good the base/ binder course. Allow to dry.
- 2.3. Finishing: Allow emulsion to break completely before applying surface.

Completion

390 Documentation

1. Standard: [BS EN 13108-1](#)
 - 1.1. Declaration of conformity: Submit.
2. Number of copies: 2
3. Submission: Two weeks after request

Ω End of Section

Q23

Gravel/ hoggin/ woodchip/ resin bound roads/ pavings/ overlays

Types of surfacing

160 Reinforced gravel

1. Description: To Reinforced Gravel / Gravel Strip
2. Manufacturer: Stone Warehouse or equal and approved
 - 2.1. Product reference: Heritage Quartz Gravel 14mm
3. Subgrade improvement layer: As Q25/185
 - 3.1. Compacted thickness: To engineer's specification
4. Geotextile: To engineer's specification
5. Granular sub-base: Type 1 unbound mixture
 - 5.1. Compacted thickness: To engineer's specification
6. Blinding to sub-base: To engineer's specification
7. Gravel: Loose laid and raked to uniform thickness.
 - 7.1. Colour: Heritage Quartz
 - 7.2. Size: 14mm
 - 7.3. Thickness: 40mm

Laying

320 Samples

1. Submit: Representative samples of all aggregates.

340 Laying generally

1. Channels, gullies, etc: Keep clear.
2. Finished surfaces
 - 2.1. Lines and levels: To prevent ponding.
 - 2.2. Overall texture: Even.
 - 2.3. State at completion: Clean.

350 Cold weather working

1. Frozen materials: Do not use.
2. Freezing conditions: Do not lay pavings.
3. Cold bituminous surface dressings: Do not apply when ambient temperature is below 10°C.
4. Other dressings or overlays: As manufacturers' recommendations.

360 Drainage falls

1. Sealed surfaces
 - 1.1. Falls and cross falls (minimum): 1:40.
 - 1.2. Camber (minimum): 1:50.
2. Unsealed surfaces (minimum): 1:30.

380 Laying granular surfaces in pedestrian areas and cycle tracks

1. Permissible deviation from required levels, falls and cambers (maximum): ± 12 mm.
2. General: Spread and level in 100 mm maximum layers. As soon as possible, compact each layer.
3. Dry weather: Lightly water layers during compaction.

Completion - Not Used

Ω End of Section

Q24

Interlocking brick/ block roads/ pavings

Types of paving

120 Conventional clay paver paving

1. Description: Clay pavers
2. Manufacturer: Hardscape Wienerberger
 - 2.1. Product reference: Atlas Alder UWF Tumbled
3. Subgrade improvement layer: To engineer's specification
4. Geotextile: To engineer's specification
5. Granular sub-base: To engineer's specification
6. Laying course
 - 6.1. Material: In accordance with [BS 7533-3](#).
 - 6.2. Method of screeding, in accordance with BS 7533-3: Compaction.
 - 6.3. Nominal thickness after compaction: To engineer's specification
7. Pavers: To [BS EN 1344](#):
 - 7.1. Sizes: Length 200mm
Vehicular: W50xD60mm
Pedestrian: W60xD50mm
 - 7.2. Colour/ Finish: Dark grey, sanded and tumbled
8. Jointing
 - 8.1. Material: In accordance with [BS 7533-3](#).
 - 8.2. Joint width: 2-5 mm.
9. Setting out
 - 9.1. Bond: Stretcher

130 Natural stone sett paving Pedestrian

1. Description: Granite Small Module Setts
2. Manufacturer: Hardscape
 - 2.1. Product reference: Kobra Grey Granite Setts
3. Subgrade improvement layer: To engineer's specification
4. Granular sub-base: To engineer's specification
5. Geotextile: To engineer's specification
6. Laying course
 - 6.1. Material: In accordance with [BS 7533-101](#).
 - 6.2. Compaction: In accordance with [BS 7533-101](#).
7. Setts
 - 7.1. Standard: To [BS EN 1342](#).
 - 7.2. Sizes: 100x100x100mm
 - 7.3. Colour/ Finish: Grey, tumbled finish
8. Method of cutting sett sides: Cropped edges
9. Jointing
 - 9.1. Material: In accordance with [BS 7533-101](#).
 - 9.2. Joint width: 2-4 mm.

10. Setting out:
 - 10.1. Bond: Stack bond

130 Natural stone sett paving Vehicular

1. Description: Vehicular Setts to Proposed Garage Entrance
2. Manufacturer: Hardscape
 - 2.1. Product reference: Kobra Grey Granite Setts
3. Subgrade improvement layer: To engineer's specification
4. Granular sub-base: To engineer's specification
5. Geotextile: To engineer's specification
6. Laying course
 - 6.1. Material: In accordance with [BS 7533-101](#).
 - 6.2. Compaction: In accordance with [BS 7533-101](#).
7. Setts
 - 7.1. Standard: To [BS EN 1342](#).
 - 7.2. Sizes: 100x200x100mm
 - 7.3. Colour/ Finish: Grey, flamed finish
8. Method of cutting sett sides: Diamond sawn.
9. Jointing
 - 9.1. Material: In accordance with [BS 7533-101](#).
 - 9.2. Joint width: 2-4 mm.
10. Setting out:
 - 10.1. Bond: Stretcher bond

Execution

200 Execution generally – concrete block and clay paver paving

1. Standard: In accordance with [BS 7533-3](#).

205 Execution generally – natural stone paving

1. Standard: In accordance with BS 7533-7 (remains current) replaced by [BS 7533-101](#), as relevant to flexible (non-rigid) laying and construction.
2. Subgrade, sub-base and roadbase presentation: Tight and dense surface, to prevent loss of laying course material into it during construction and use.
3. Joint filling: Do not work in damp conditions. Top joints up at the earliest opportunity.

211 Colour banding

1. General: Unless premixed by manufacturer, select blocks/ pavers/ setts from at least separate packs in rotation, to avoid colour banding.

220 Samples

1. General: Before ordering, submit samples of all blocks/ pavers/ setts that are representative of colour and appearance.

240 Adverse weather

1. General: Do not use frozen materials or lay bedding on frozen or frost covered sub-bases.

485 Laying blocks/ pavers/ setts

1. **Setting out:** Start from an edge restraint.
2. **Cutting:** Cleanly, accurately and vertically, without spalling. Do not mark or damage visible surfaces.
3. **Cut edges:** Turn inwards where possible; do not position against edge restraints or other features.
4. **In situ mortar or concrete infill:**
5. **Compaction:** Vibrate to produce thoroughly interlocked paving of even overall appearance with regular joints and accurate to line, level and profile. Do not mark or damage paving units, kerbs and adjacent work.
 - 5.1. **Concrete blocks and clay pavers:** In accordance with [BS 7533-3](#), Annex F, to site category required for laying course material.

500 Regularity of paved surfaces

1. Maximum variation in gap under a 3 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface)
 - 1.1. Precast concrete paving blocks and clay pavers for flexible pavements: 10 mm.
2. Difference in level between adjacent paving units (maximum): 2 mm.
3. Sudden irregularities: Not permitted.

Completion

615 Completion of paving

1. Final compaction of the surface course: In accordance with [BS 7533-3](#).
2. Vacuum cleaning machines: Not allowed.

Ω End of Section

Q25

Slab/ brick/ sett/ cobble pavings

General

185 Gravel-filled plastics paving system

1. Description: To Reinforced Gravel
2. Geomembrane: To engineer's specification
3. Granular sub-base: Type 1 unbound mixture
 - 3.1. Compacted thickness: To engineer's specification
4. Water collection: To engineer's specification
5. Paving units: ECCOGravel40 gravel grid 40 mm
 - 5.1. Filling: Gravel as Q23 160

System performance

285 Design – gravel-filled plastics paving system

1. Design: Complete in accordance with manufacturer's instructions.
2. Proposals: Submit drawings, technical information, calculations and manufacturers' literature.

Products

310 Natural stone paving slabs Type A

1. Description: Yorkstone Scoutmoor Flag Paving
2. Standard: To [BS EN 1341](#).
3. Supplier: [Marshalls plc](#)
 - 3.1. Contact details
 - 3.1.1. Address: Landscape House
Lowfields Business Park
Elland
West Yorkshire
HX5 9HT
 - 3.1.2. Telephone: [+44 \(0\)330 0574472](tel:+44(0)3300574472)
 - 3.1.3. Web: <https://www.marshalls.co.uk>
 - 3.1.4. Email: specification.support@marshalls.co.uk
 - 3.2. Product reference: Yorkstone Scoutmoor
 - 3.3. Quarry: Scoutmoor
4. Finish: Sawn
5. Sizes: W500xL600xD65mm

315 Concrete flags

1. Description: Large Format Concrete Slabs
2. Standard: To [BS EN 1339](#).
 - 2.1. Manufacturer: Hardscape
3. Colour: Grijs (grey)
 - 3.1. Finish: Stippled
 - 3.2. Nominal sizes: W1995xL1995xD140mm

320 Tactile flags and slabs Type A

1. Description: To Steps in Courtyard
2. Standard: To [PD CEN/TS 15209](#).
3. Material: Granite
 - 3.1. Manufacturer: Hardscape
 - 3.1.1. Product reference: XR Red Granite Corduroy Tactile Paving
4. Nominal sizes: 400x400x50mm
5. Colour: XR Red
6. Type of surface: Rib – Type R1

320 Tactile flags and slabs Type B

1. Description: To Section 278 Crossing Points
2. Standard: To [PD CEN/TS 15209](#).
3. Material: Granite
 - 3.1. Manufacturer: Hardscape
 - 3.1.1. Product reference: Crystal Black Granite Blister Tactile Paving
4. Nominal sizes: 400x400x50mm
5. Colour: Crystal Black
6. Type of surface: Blister – Type B1

350 Plastics pavers

1. Description: Gravel Reinforcement
2. Paving units
 - 2.1. Manufacturer: CED Stone London
 - 2.1.1. Product reference: ECCOGravel 40 gravel grid 40 mm
3. Size: 1600x1200x40mm

365 Geotextile sheet

1. Manufacturer: To engineer's specification

Execution

620 Adverse weather

1. General
 - 1.1. Temperature: Do not lay or joint paving if the temperature is below 3°C on a falling thermometer or below 1°C on a rising thermometer.
 - 1.2. Frozen materials: Do not use. Do not lay bedding on frozen or frost covered bases.
2. Paving with mortar joints and/ or bedding
 - 2.1. Protect from frost damage, rapid drying out and saturation until mortar has hardened.
3. Paving laid and jointed in sand/ fine aggregate
 - 3.1. Stockpiled laying course sand/ fine aggregate: Protect from saturation.
 - 3.2. Exposed areas of unbound laying course and uncompacted areas of unbound paving: Protect from heavy rainfall.
 - 3.3. Saturated unbound laying course: Remove and replace, or allow to dry before proceeding.

- 3.4. **Laying dry sand/ fine aggregate jointed paving in damp conditions:** Brush in as much jointing sand as possible. Minimize site traffic over paving. As soon as paving is dry, top up joints and complete compaction.

625 Laying pavings – general

1. **Appearance:** Smooth and even with regular joints and accurate to line, level and profile.
2. **Falls:** To prevent ponding.
3. **Bedding of paving units:** Firm so that rocking or subsidence does not occur or develop.
 - 3.1. **Bedding/ Laying course:** Consistently and accurately graded, spread and compacted to produce uniform thickness and support for paving units.
4. **Slopes:** Lay paving units upwards from the bottom of slopes.
5. **Paving units:** Free of mortar and sand stains.
6. **Cutting:** Cut units cleanly and accurately, without spalling, to give neat junctions with edgings and adjoining finishes.

630 Levels of paving

1. **Permissible deviation from specified levels**
 - 1.1. **Generally:** +/-6 mm.
2. **Height of finished paving above features**
 - 2.1. **At gullies:** +6 to +10 mm.
 - 2.2. **At drainage channels and kerbs:** +3 to +6 mm.

635 Regularity of paved surfaces

1. **Maximum variation in gap under a 3 m straight edge placed anywhere on the surface (where appropriate in relation to the geometry of the surface)**
 - 1.1. **Precast concrete paving blocks and clay pavers for flexible pavements:** 10 mm.
 - 1.2. **Precast concrete flags or natural stone slabs:** 3 mm.
2. **Difference in level between adjacent paving units (maximum):** 2 mm.
3. **Sudden irregularities:** Not permitted.

710 Laying flag and slab paving – sand/ fine aggregate laying course and jointing

1. **Standard:** In accordance with [BS 7533-4](#).
2. **Flag installation and cutting:** To [Interpave](#) publication [Concrete flag paving](#).
3. **Laying course**
 - 3.1. **Nominal thickness after compaction:** To engineer's specification
4. **Joint width:** 2–5 mm.

770 Laying gravel-filled plastics pavers

1. **Laying:** Tamp down into lightly compacted laying course
 - 1.1. **Nominal thickness of laying course after compaction:** To engineer's specification
2. **Filling:** Allow to settle and refill level with surface.

Completion

915 Completion of paving with dry sand or fine aggregate-filled joints

1. **Sand dressing:** Leave a thin layer of dry jointing sand/ fine aggregate over the paving, sweep clean before practical completion

2. Final compaction of the surface course: In accordance with [BS 7533-3](#).
3. Vacuum cleaning machines: Not allowed.

Ω End of Section

Q28

Topsoil and soil ameliorants

System outline

105 Container planting growing media system

1. Description: For raised growing beds and feature plant pots
2. Composition
 - 2.1. Growing media: Imported topsoil to BS 3882
 - 2.2. Ameliorants: Fertilizer to be incorporated into topsoil

135 Planting bed topsoil system

1. Description: To all planting beds
2. Composition
 - 2.1. Topsoil: Imported topsoil to BS 3882

155 Mulching and top dressing system

1. Description: To all planting beds
2. Composition
 - 2.1. Material: Organic materials

Products

300 Preparation materials generally

1. Purity: Free of pests and disease.
2. Foreign matter: On visual inspection, free of fragments and roots of aggressive weeds, sticks, straw, subsoil, pieces of brick, concrete, glass, wire, large lumps of clay or vegetation, and the like.
3. Contamination: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
 - 3.1. Corrosive, explosive or flammable.
 - 3.2. Hazardous to human or animal life.
 - 3.3. Detrimental to healthy plant growth.
4. Subsoil: In areas to receive topsoil or planting media, do not use subsoil contaminated with the above materials.
5. Objectionable odour: None.
6. Give notice: If any evidence or symptoms of soil contamination are discovered on the site or in topsoil or planting media to be imported.

305 Permitted materials

1. Materials: Composted bark
2. Give notice: before ordering or using.
3. Declaration of compliance in accordance with BS EN 13650: Required

310 Materials not permitted

1. Materials: River and canal dredgings, peat, products containing peat

315 Imported topsoil to BS 3882

1. Description: All planting bed topsoil

2. **Quantity:** Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
3. **Standard:** To BS 3882.
4. **Classification:** Multipurpose
5. **Source:** Contractor's choice

355 Organic materials

1. **Description:** To planting beds
2. **Type:** Medium bark mulch to be free of pests, disease, fungus and weeds, no recycled mulch content permitted
3. **Source:** Contractor's choice

Execution

610 Topsoil analysis

1. **Soil to be analysed:** Imported topsoil
2. **Samples:** Collect in accordance with BS 3882.
3. **Submit**
 - 3.1. **Declaration of analysis:** In accordance with BS 3882, clause 6 and Table 1.
 - 3.2. **Additional analysis:** Chemical analysis, chemical contaminants
 - 3.3. **Report detailing soil analyst's recommendations.**

620 Importing topsoil

1. **Give notice:** Before stripping topsoil for transfer to site.
 - 1.1. **Notice period:** 7 days

630 Documentation for imported topsoil

1. **Timing:** Submit at handover.
2. **Contents**
 - 2.1. **Full description of all soil components.**
 - 2.2. **Record of source for all soil components.**
 - 2.3. **Record drawings showing the location and depth of all soils by type and grade.**
 - 2.4. **Declaration of analysis:** in accordance with BS 3882, clause 6 and Table 1.
3. **Number of copies:** Two

650 Notice

1. **Give notice before**
 - 1.1. **Setting out.**
 - 1.2. **Spreading topsoil.**
 - 1.3. **Applying herbicide.**
 - 1.4. **Applying fertilizer.**
 - 1.5. **Visiting site during maintenance period.**
2. **Period of notice:** 1 week

655 Mechanical tools

1. **Restrictions:** Do not use within 100 mm of tree and plant stems. Do not damage adjacent planting.

660 Grading subsoil for:

1. **Standard:** In accordance with BS 8601.
2. **General:** Grade to smooth flowing contours to achieve specified finished levels of topsoil.
3. **Areas of thicker topsoil:** Excavate locally.
4. **Avoid compaction.**
5. **Excess subsoil:** Remove.

665 Subsoil surface preparation for:

1. **Description:** Planting areas
2. **Standard:** In accordance with BS 3882.
3. **General:** Excavate and/ or place fill to required profiles and levels, as section D20.
4. **Loosening**
 - 4.1. When ground conditions are sufficiently dry to allow breaking up of soils, loosen thoroughly to specified depth
 - 4.1.1. Light and noncohesive subsoils: 300 mm
 - 4.1.2. Stiff clay and cohesive subsoils: 450 mm
 - 4.1.3. Rock and chalk subgrades: Lightly scarify to promote free drainage.
 - 4.2. **Wet conditions:** Do not loosen subsoils.
5. **Stones:** Immediately before spreading topsoil, remove stones larger than 50 mm.
6. **Remove from site:** Arisings, contaminants and debris

670 Inspecting formations

1. **Give notice:** Before spreading topsoil for planting beds, lawn areas.
2. **Notice period:** 14 days

675 Preparation of undisturbed topsoil

1. **Standard:** In accordance with BS 4428.
 - 1.1. **Grading and cultivation:** Category B
2. **Hard ground:** Break up thoroughly.
3. **Clearing:** Remove visible roots and large stones with a diameter greater than 50 mm.
4. **Areas covered with turf or thick sward:** Plough or dig over to full depth of topsoil.
5. **Fallow period (minimum):** Two months
 - 5.1. **Weed control:** At appropriate times treat with a suitable translocated nonresidual herbicide.

680 Surplus topsoil to be retained

1. **Generally:** Spread and level on site:
 - 1.1. **Locations:** As directed by landscape architect
 - 1.2. **Protected areas:** Do not raise soil level within root spread of trees that are to be retained.

685 Surplus materials to be removed

1. **Topsoil removal from site:** Topsoil remaining after completion of all landscaping work
2. **Subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, rubbish, prunings and other arisings:** Remove.

690 Topsoil storage heaps

1. **Location:** As directed by landscape architect

2. Height (maximum): 1.5 m
3. Width (maximum): 4.0 m
 - 3.1. Formation: Loose tip and shape from the side only, without running machinery on the heap at any time.
4. Protection
 - 4.1. Do not place any other material on top of storage heaps.
 - 4.2. Do not allow construction plant to pass over storage heaps.
 - 4.3. Prevent compaction and contamination, by fencing and covering as appropriate.

700 Grading of topsoil

1. Topsoil condition: Reasonably dry and workable.
2. Contours: Smooth and flowing, with falls for adequate drainage.
 - 2.1. Hollows and ridges: Not permitted.
3. Give notice: If required levels cannot be achieved by movement of existing soil.

705 Handling topsoil

1. Standard: In accordance with BS 3882.
2. Aggressive weeds: Give notice and obtain instructions before moving topsoil.
3. Plant: Select and use plant to minimize disturbance, trafficking and compaction.
4. Contamination: Do not mix topsoil with:
 - 4.1. Subsoil, stone, hardcore, rubbish or material from demolition work.
 - 4.2. Other grades of topsoil.
5. Multiple handling: Keep to a minimum. Use or stockpile topsoil immediately after stripping.
6. Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall, or when the moisture content is greater than the plastic limit.

710 Spreading topsoil on:

1. Standard: In accordance with BS 3882.
2. Temporary roads/ surfacing: Remove before spreading topsoil.
3. Layers
 - 3.1. Depth (maximum): 150 mm.
 - 3.2. Gently firm each layer before spreading the next.
4. Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

715 Loose tipping of topsoil

1. Standard: In accordance with BS 3882.
2. General: Do not firm, consolidate or compact topsoil when laying. Tip and grade to approximate levels in one operation with minimum of trafficking by plant.

718 Final cultivation

1. Compacted topsoil: Break up to full depth.
2. Tilth: Loosen, aerate and break up topsoil to a tilth suitable for blade grading.
3. Depth: 450 mm
4. Particle size (maximum): 20 mm
5. Timing: Within a few days before planting

6. Weather and ground conditions: Suitably dry.
7. Surface: Leave regular and even.
8. Levels: 25 mm above adjoining paving or kerbs
9. Undesirable material brought to the surface
 - 9.1. Remove visible weeds.
 - 9.2. Remove roots and large stones with any dimension exceeding 30 mm.

720 Finished levels of topsoil after settlement

1. In relation to adjoining paving, kerbs or hard surfaces: Flush
2. In relation to dpc of adjoining buildings: Not less than 150 mm below.

845 Applying loose mulch

1. Description: To all planting beds
2. Timing: Immediately after planting
3. Preparation: Clear all weeds, ensure that soil is thoroughly moistened, applying water where necessary
4. Coverage of mulch (minimum)
 - 4.1. Planting beds (depth): 50 mm depth
 - 4.2. Trees: 50 mm depth
 - 4.3. Container planting: 50 mm depth
5. Finished level of mulch: 30 mm below adjacent paved areas

Completion

920 Applying mulch

1. Timing: At end of the rectification period
2. Watering: Ensure that soil is thoroughly moistened prior to mulching, applying water where necessary.
3. Planting beds: Re-mulch.
 - 3.1. Depth (minimum): 50 mm
4. Trees: Remulch.
 - 4.1. Depth (minimum): 50 mm
5. Container planting: Remulch.
 - 5.1. Depth (minimum): 50 mm

Ω End of Section

Q30

Seeding/ turfing

General information/requirements - Not Used

Preparation - Not Used

Seeding - Not Used

Turfing - Not Used

Protecting/cutting

560 Metal edgings Type A

1. Manufacturer: [Kinley](#)
 - 1.1. Contact details
 - 1.1.1. Address: Northpoint, Compass Park
Junction Road
Staplecross
East Sussex
TN32 5BS
 - 1.1.2. Telephone: +44 (0) 1580313124
 - 1.1.3. Web: www.kinley.co.uk
 - 1.1.4. Email: sales@kinley.co.uk
 - 1.2. Product reference: [Urban Bespoke Steel Edging \(154016 - 6 mm Edge/ Untreated\)](#)
2. Material and finish: Steel.
3. Colour: Silver.
4. Edging
 - 4.1. Form: Straight.
 - 4.2. Duty: Heavy.
 - 4.3. Length (minimum): 2.4 m.
 - 4.4. Size: 150-250mm
5. Fixings: To manufacturer's recommendation
6. Thickness: 6 mm.
7. Surface finish: Untreated.

Maintenance - Not Used

Ω End of Section

Q31

External planting

General information/ requirements

112 Site clearance generally

1. **General:** Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil
2. **Stones:** Remove those with any dimension exceeding 50 mm
3. **Contamination:** Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life

118 Soil conditions

1. **Soil for cultivating and planting:** Moist, friable and (except in aquatic/ marginal planting) not waterlogged
2. **Frozen or snow-covered soil:** Give notice before planting. Provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing

120 Climatic conditions

1. **General:** Carry out the work while soil and weather conditions are suitable
 - 1.1. **Strong winds:** Do not plant

125 Times of year for planting

1. **Deciduous trees and shrubs:** Late October to late March
2. **Conifers and evergreens:** September/ October or April/ May
3. **Herbaceous plants (including marginal):** September/ October or March/ April
4. **Container-grown plants:** At any time, if ground and weather conditions are favourable
 - 4.1. **Watering and weed control:** Provide as necessary

130 Mechanical tools

1. **Restrictions:** Do not use within 100 mm of tree and plant stems

145 General watering

1. **Quantity:** Wet full depth of topsoil
2. **Application:** Even, and without damage or displacement of plants or soil
3. **Frequency:** As necessary to ensure that plant is established and continues to thrive

150 Water restrictions

1. **General:** If water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering

160 Notice

1. **Give notice before**
 - 1.1. **Setting out.**
 - 1.2. **Applying herbicide.**
 - 1.3. **Applying fertilizer.**
 - 1.4. **Delivery of plants/ trees.**
 - 1.5. **Planting shrubs.**

- 1.6. Planting trees into previously dug pits.
- 1.7. Watering.
- 1.8. Visiting site during maintenance period.
2. Period of notice: One week

170 Soil requirements

1. Type
 - 1.1. Planted beds: Planting bed soil system, as section Q28
 - 1.2. Tree pits, shrub pits and other backfilling: Plant pit backfilling soil system, as section Q28
 - 1.3. External container planting: Container planting growing media system, as section Q28
 - 1.4. Mulch applied after planting: Mulching and top dressing system, as section Q28

200 Plants/ trees – general

1. Condition: Materially undamaged, sturdy, healthy and vigorous
2. Appearance: Of good shape and without elongated shoots
3. Hardiness: Grown in a suitable environment and hardened off
4. Health: Free from pests, diseases, discoloration, weeds and physiological disorders
5. Budded or grafted plants: Bottom worked.
6. Root system and condition: Balanced with branch system
7. Species: True to name
8. Origin/ provenance: Grown in the United Kingdom for at least one growing season, unless otherwise approved
9. Definition: Origin and provenance have the meaning given in the [National Plant Specification](#)

215 Plants/ trees – specification criteria

1. Name, forms, dimensions, provenance and other criteria: As scheduled and defined in the [National Plant Specification](#).

235 Container-grown plants/ trees

1. Growing medium: With adequate nutrients for plants to thrive until permanently planted
2. Plants: Centred in containers, firmed and well-watered
3. Root growth: Substantially filling containers, but not root-bound, and in a condition conducive to successful transplanting
4. Hardiness: Grown in the open for at least two months before being supplied
5. Containers: With holes adequate for drainage when placed on any substrate commonly used under irrigation systems

245 Labelling to National Plant Specification and other information

1. General: Provide each plant/ tree (or group of plants/ trees) of a single species or cultivar with the supplier's labelling for delivery to site, showing:
 - 1.1. Full botanical name.
 - 1.2. Total number.
 - 1.3. Number of bundles.
 - 1.4. Part bundles.
 - 1.5. The supplier's name.
 - 1.6. The employer's name and project reference.
 - 1.7. Plant specification, in accordance with scheduled [National Plant Specification](#) categories.

2. Additional information: Submit on request: Date supplied and consignment details or reference

260 Plant/ tree substitution

1. Plants/ trees unobtainable, or likely to be unobtainable at time of ordering. Submit alternatives, stating:
 - 1.1. Price.:
 - 1.2. Difference from specified plants/ trees.:
2. Approval: Obtain before making any substitution

265 Plant handling, storage, transport and planting

1. Standard: To Committee of Plant Supply and Establishment (CPSE) [Recommendations for Plant Handling](#).
2. Frost: Protect plants from frost.
3. Handling: Handle plants with care. Protect them from mechanical damage and do not subject them to shock, e.g. by dropping them from a vehicle.
4. Planting: Upright or well balanced, with best side to front.

280 Treatment of tree wounds

1. Cutting: Keep wounds as small as possible.
 - 1.1. Cut cleanly back to sound wood using sharp, clean tools.
 - 1.2. Leave branch collars. Do not cut flush with stem or trunk.
 - 1.3. Set cuts so that water will not collect on cut area.
2. Fungicide/ sealant: Do not apply unless instructed.

290 Surplus material

1. Subsoil: Remove.
2. Stones: Remove.
3. Debris: Remove.
4. Wrapping material: Remove.
5. Canes: Remove.
6. Ties: Remove.
7. Temporary labels: Remove.
8. Rubbish: Remove.
9. Prunings and other arisings: Remove.

Plant containers

292 Prefabricated plant containers

1. Description: Plant Pots
2. Manufacturer: Marshalls
 - 2.1. Product reference: Strada Circular Planter
3. Material: Concrete
4. Dimensions/ shape: 710mm diameter
5. Lining: To manufacturer's specification

Preparation of planting beds/ planting materials

305 Weed control

1. Description: All planting beds
2. General: Prevent weeds from seeding and perennial weeds from becoming established: By hand-weeding.

Planting shrubs/ herbaceous plants/ bulbs

400 Random plant layout

1. Description: To all planting beds
2. Spacing: Random groups of 3 to 11 plants of the same species.
3. Density: As plant schedule

405 Shrub planting pits

1. Timing: Excavate One to two days (maximum) before planting.
2. Sizes: 150 mm wider than roots when fully spread and 300 mm deep
3. Pit bottom improvement Break up to a depth of 150 mm, incorporating 25 g of slow-release fertilizer per planting pit.

480 After planting

1. Watering: Immediately after planting, thoroughly, and without damaging or displacing plants or soil
2. Firming: Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows
3. Top dressing: Mulching and top dressing system, as section Q28
 - 3.1. Depth: 50 mm

Planting trees

500 Tree planting

1. Standard: Prepare trees and transplant in accordance with [BS 8545](#)

505 Tree pits

1. Sizes: As 240010-UG-ZZ-XX-D-L-0000212
2. Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout
3. Excavated material: Separate topsoil and subsoil material and stockpile for backfilling
4. Pit bottoms: excavate with slightly raised centre: Break up base to a depth of 150 mm
5. Pit sides: Scarify.
6. Backfilling material: Topsoil, as section Q28

510 Tree pit root barriers Type A

1. Locations: Wherever the installed rootball will be within 3 m of an existing underground service route
2. Manufacturer: [GreenBlue Urban Ltd](#)
 - 2.1. Product reference: ReRoot Root Barriers
3. Barrier depth: 1000 mm
4. Top of root barrier in relation to finished topsoil level: Flush

5. **Installation:** With sides vertical. Remove all sharp objects adjacent to barrier.

512 Tree pit irrigation and ventilation accessories

1. **Locations:** To all tree pits
2. **Manufacturer:** Green blue Urban Ltd
 - 2.1. **Product reference:** RootRain Urban
3. **Type:** Perforated plastics irrigation pipe with inlet
4. **Inlet:** Black plastics, with cap
5. **Installation**
 - 5.1. **Pipe:** Lay in loop above root ball with slight fall away from inlet pipe. Trim length to ensure a close fit in the tree pit. Connect both ends of pipe securely into plastics tee junction on inlet.
 - 5.2. **Top cap of inlet:** Protruding slightly above finished surround level.
 - 5.3. **Backfill material:** Carefully compact in layers.

520 Geocell sheets Type A

1. **Locations:** As per 210002-UG-ZZ-XX-DR-L-101
2. **Manufacturer:** [Geosynthetics Limited](#)
 - 2.1. **Contact details**
 - 2.1.1. **Address:** Unit 3, Avery Way,
Hinckley Park,
Hinckley
Leicestershire
United Kingdom
LE10 3FF
 - 2.1.2. **Telephone:** +44 (0)1455 617139
 - 2.1.3. **Web:** www.geosyn.co.uk
 - 2.1.4. **Email:** sales@geosyn.co.uk
 - 2.2. **Product reference:** [Cellweb - Cellular Confinement System \(TRP\) - Geocells \(100 mm Cell Height\)](#) or similar approved.
3. **Material:** High-density polyethylene (HDPE).
4. **Cell dimensions (expanded)**
 - 4.1. **Cell size (nominal):** 259 x 224 mm.
 - 4.2. **Cell depth:** 100 mm.
5. **Properties**
 - 5.1. **UV resistance:** Carbon Black Content (ASTM D 1603), 1.5% (minimum % by weight).
6. **Recycled content:** None permitted.
7. **Accessories:** J pins.
8. **Underlay:** Treetex™ pollution control geotextile.
9. **Infill:** To manufacturer's recommendation.
10. **Colour:** Black with green fascia strip.
11. **Profile:** Rhomboidal (diamond shape) indentations.
12. **Panel size:** 2560 x 8100 mm.
13. **Peel strength:** 1420 N.
14. **Perforations:** 11 ± 2%.

526 Underground Guying Type A

1. **Description:** Trees planted in ground

Urban Green
25-09-2025

2. Manufacturer: [GreenBlue Urban Ltd](#)

2.1. Contact details

2.1.1. Address: Northpoint
Compass Park
Junction Road
Bodiam
East Sussex
TN32 5BS

2.1.2. Telephone: [+44 \(0\)1580 830800](tel:+441580830800)

2.1.3. Web: www.greenblue.com

2.1.4. Email: hello@greenblueurban.com

2.2. Product reference: Deadman Anchor

3. Anchoring system: Strapped anchor deadman guying system supplied with 3 slip knot ratchet tensioners
4. Installation: Ensure that tree is positioned correctly and vertically, prior to tightening of guy line tensioners

576 Tree pit surfacing – loose-fill

1. Surfacing material: Mulch, as section Q28
2. Area: Full extent of tree pit surface
3. Depth: 75 mm
4. Watering: Water soil thoroughly before laying
5. Installation: Ensure that the base of the tree stem is kept free from loose-filled material

Woodland/ matrix/ buffer zone planting - Not Used

Protecting/ maintaining/ making good defects

710 Maintenance

1. Duration: Carry out the operations in the following clauses from completion of planting until The end of the rectification period.
2. Frequency of maintenance visits: In accordance with the agreed maintenance schedule

720 Failures of planting

1. Defects due to materials or workmanship not in accordance with the contract: Plants/ trees/ shrubs that have failed to thrive
 - 1.1. Exclusions: Theft or malicious damage after completion.
 - 1.2. Rectification: Replace with equivalent plants/ trees/ shrubs.
2. Replacements: To match size of adjacent or nearby plants of the same species or to match the original specification: whichever is the greater
3. Timing of making good: During the next suitable planting season

740 Cleanliness

1. Soil and arisings: Remove from hard surfaces and grassed areas
2. General: Leave the works in a clean, tidy condition at completion and after any maintenance operations

750 Planting maintenance generally

1. Weed control: Maintain weed-free area around each tree and shrub

- 1.1. **Diameter (minimum):** The surface of original planting pit
- 1.2. **Keep planting beds clear of weeds:** By maintaining full thickness of mulch, by hoeing
2. **Planted areas:** Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch
3. **Precautions:** Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools
4. **Firming up:** Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs
5. **Trees:** Spray crown when in leaf during warm weather.
 - 5.1. **Timing:** After dusk.
6. **Tree accessories:** Check condition of stakes, ties, guys, guards, and irrigation and ventilation systems
 - 6.1. **Broken or missing items:** Replace.
 - 6.2. **Loose stakes:** Re-firm in the ground or replace as necessary to provide support to the tree.
 - 6.3. **Loose guys:** Re-firm anchor points and adjust as necessary to provide support to the tree.
 - 6.4. **Ties:** Adjust to accommodate growth and prevent constriction or abrasion.
 - 6.5. **Damage to bark:** Cut back neatly with sharp knife. Prevent further damage.
 - 6.6. **Frequency of checks:** At each scheduled maintenance visit
7. **Watering:** As required for healthy establishment, depending on weather conditions

760 Planting maintenance – pruning

1. **General:** Prune to promote healthy growth and natural shape
 - 1.1. **Dead, dying, diseased wood and suckers:** Remove.
 - 1.2. **Timing:** In accordance with the agreed maintenance schedule
 - 1.3. **Trees:** Favour a single central leading shoot
2. **Arisings:** Remove.

780 Maintenance instructions

1. **General:** Before end of the maintenance period, submit printed instructions recommending procedures to be established by the employer for the maintenance of the planting work for one full year: Provide a schedule of any ongoing maintenance problems experienced during the rectification period.

790 Final mulching

1. **Timing:** At end of the maintenance period
2. **Watering:** Ensure that soil is thoroughly moistened prior to re-mulching, applying water where necessary
3. **Planting beds:** Re-mulch
4. **Depth (minimum):** 50 mm
5. **Trees:** Re-mulch
6. **Depth (minimum):** 75 mm

Ω End of Section

Q35 Landscape maintenance

Generally

105 Maintenance objectives

1. Aims: Enhanced landscape quality, provide wildlife habitat and increase biodiversity

110 Notice

1. Give notice before
 - 1.1. Application of herbicide.
 - 1.2. Application of fertilizer.
 - 1.3. Watering.
 - 1.4. Each site maintenance visit.
2. Period of notice: Seven days

155 Watering

1. Supply: Potable mains water
2. Quantity: Wet full depth of topsoil
3. Application: Do not damage or loosen plants.
4. Compacted soil: Loosen or scoop out, to direct water to rootzone.
5. Frequency:

160 Water restrictions

1. General: If water supply is, or is likely to be, restricted by emergency legislation, submit proposals for an alternative suitable source of water. Obtain instructions before proceeding.

170 Disposal of arisings

1. General: Unless specified otherwise, dispose of arisings as follows:
 - 1.1. Biodegradable arisings: Remove to recycling facility
 - 1.2. Grass cuttings: Remove to recycling facility
 - 1.3. Tree roots and stumps: Remove from site
 - 1.4. Shrub and tree prunings: Remove to recycling facility
 - 1.5. Litter and nonbiodegradable arisings: Remove from site

190 Litter

1. Extraneous rubbish not arising from the contract work: Collect and remove from site.

197 Cleanliness

1. Soil and arisings: Remove from hard surfaces.
2. General: Leave the works in a clean, tidy condition at completion and after any maintenance operations.

Grassed areas - Not Used

Flower beds/ seasonal beddings - Not Used

Shrubs/ trees/ hedges

500 Establishment of new planting

1. Duration: Two full growing seasons from the date of planting
2. Weed control
 - 2.1. Method: Keep planting beds clear of weeds by Maintaining full thickness of mulch.
 - 2.2. Area: Maintain a weed-free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of the original planting pit.
3. Soil condition: Fork over beds to keep soil loose, with gentle cambers and no hollows. Do not reduce depth or effect of mulch.
4. Watering: As schedule and when instructed

502 Establishment of new planting – fertilizer

1. Time of year: March or April.
2. Type: Slow-release
3. Spreading: Spread evenly.
 - 3.1. Application rate: As manufacturer's recommendations

515 Tree guy wires

1. Inspection/ maintenance times: Immediately after strong winds
2. Operations
 - 2.1. Replace or resecure loose or missing guy wires.
 - 2.2. Adjust to suit stem growth and to provide correct and uniform tension.
3. Removal: When instructed

520 Refirming of trees and shrubs

1. Timing: After strong winds, frost heave and other disturbances.
2. Refirming: Tread around the base until firmly bedded.
3. Collars in soil at base of tree stems, created by tree movement: Break up by fork, avoiding damage to roots. Backfill with topsoil and refirm.

537 Nesting wild birds

1. Survey: Before starting hedge or tree work during the period of February to August (inclusive), carry out a survey by a qualified ecologist and submit report
2. Accidental disturbance: Report immediately.

540 Pruning generally

1. Pruning: In accordance with good horticultural and arboricultural practice.
 - 1.1. Removing branches: Do not damage or tear the stem or bark.
 - 1.2. Wounds: Keep as small as possible and cut cleanly back to sound wood.
 - 1.3. Cutting: Make cuts above and sloping away from an outward-facing healthy bud, angled so that water will not collect on cut area.
 - 1.4. Larger branches: Prune neither flush nor leaving a stub, but using the branch bark ridge or branch collar as a pruning guide.

2. **Appearance:** Thin, trim and shape each specimen appropriately to species, location, season, and stage of growth, leaving a well-balanced natural appearance.
3. **Tools:** Use clean sharp secateurs, hand saws or other approved tools. Trim off ragged edges of bark or wood with a sharp knife.
4. **Disease or infection:** Give notice if detected.
5. **Growth retardants, fungicide or pruning sealant:** Do not use unless instructed.

545 Pruning of excessive overhang

1. **Timing:** As instructed
2. **Operations:** Remove growth encroaching onto grassed areas, paths, roads, signs, sightlines and road lighting luminaires.
3. **Special requirements:** Allow ground cover plants to partially overlap paths and lawns

550 Pruning of excessive height

1. **Timing:** As instructed
2. **Operations:** Remove excessive height As instructed.

555 Pruning trees and shrubs

1. **Standard:** To BS 7370-4.

570 Formative pruning of young trees

1. **Standard:** Type and timing of pruning operations to suit the plant species.
2. **Time of year:** Do not prune during the late winter/ early spring sap flow period.
3. **Young trees up to 4 m high**
 - 3.1. Crown prune by removing dead branches and reducing selected side branches by one third to preserve a well-balanced head and ensure the development of a single strong leader.
 - 3.2. Remove duplicated branches and potentially weak or tight forks. In each case, cut back to live wood.
4. **Whips or feathered trees:** Do not prune.
5. **Operatives:** Approved specialist contractor

575 Pruning ornamental shrubs

1. **General:** Prune to encourage healthy and bushy growth and desirable ornamental features, e.g. flowers, fruit, autumn colour, stem colour.
2. **Suckers:** Remove by cutting back level with the source stem or root.

620 Removal of dead plant material

1. **Operations:** At the end of the growing season, check all shrubs and remove all dead foliage, dead wood, and broken or damaged branches and stems.

630 Dead and diseased plants

1. **Removal:** Within one week of notification
2. **Replacement:** In the next suitable planting season

635 Reinstatement of shrub/ herbaceous areas

1. **Dead and damaged plants:** Remove.
2. **Mulch/ matting materials**
 - 2.1. Carefully move to one side and dig over the soil, leaving it fit for replanting.

3. Do not disturb roots of adjacent plants.
4. Replacement plants
 - 4.1. Use pits and plants: To original specification or to match the size of adjacent or nearby plants of the same species, whichever is the greater.

645 Weed control generally

1. Weed tolerance: At all times, weed cover less than 5% and no weed to exceed 100 mm high
2. Adjacent plants, trees and grass: Do not damage.

650 Hand-weeding

1. General: Remove weeds entirely, including roots.
2. Disturbance: Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
3. Completion: Rake area to a neat, clean condition.
4. Mulch: Reinstate to original depth.

655 Weed cutting by hand or machine

1. Undesirable grass, brambles and herbaceous growth: Cut down cleanly to a maximum height of 50 mm.

680 Soil aeration

1. Compacted soil surfaces
 - 1.1. Prick up: To aerate the soil of root areas and break surface crust.
 - 1.2. Size of lumps: Reduce to crumb and level off.
 - 1.3. Damage: Do not damage plants and their roots.

685 Soil level adjustment

1. Level of soil/mulch at edges of beds: Reduce to 50 mm below adjacent grass or hard surface.
 - 1.1. Arisings (if any): Spread evenly over the bed.

690 Maintenance of loose mulch

1. Thickness (minimum): 50 mm
 - 1.1. Top up: Annually
2. Mulch spill on adjacent areas: Remove weeds and rubbish and return to planted area.
3. Weeding: Remove weeds growing on or in mulch by Hand-weeding.

Green walls - Not Used

Tree work

810 Tree work generally

1. Identification: Before starting work agree which trees, shrubs and hedges are to be removed or pruned.
2. Protection: Avoid damage to neighbouring trees, plants and property
3. Standard: To BS 3998.
4. Removing branches: Cut vertical branches similarly, with no more slope on the cut surface than is necessary to shed rainwater.
5. Appearance: Leave trees with a well-balanced natural appearance.

6. Chain saw work: Operatives must hold a certificate of competence.
7. Tree work: To be carried out by an approved member of the Arboricultural Association.

815 Additional work

1. Defective, diseased, unsafe or weak parts of trees additional to those scheduled for attention: Give notice if detected.

820 Prevention of wound bleeding

1. Standard: To BS 3998.

825 Prevention of disease transmission

1. Standard: To BS 3998.

830 Cleaning out and deadwooding

1. Remove
 - 1.1. Dead, dying or diseased wood, broken branches and stubs.
 - 1.2. Fungal growths and fruiting bodies.
 - 1.3. Rubbish, windblown or accumulated in branch forks.
 - 1.4. Wires, clamps, boards and metal objects, if removable without causing further damage and not part of a support structure that is to be retained.
 - 1.5. Other unwanted objects, e.g. tree houses, swings.

835 Cutting and pruning generally

1. Tools: Appropriate, well maintained and sharp.
2. Final pruning cuts
 - 2.1. Chainsaws: Do not use on branches of less than 50 mm diameter.
 - 2.2. Hand saws: Form a smooth cut surface.
 - 2.3. Anvil type secateurs: Do not use.
3. Removing branches: Do not damage or tear the stem.
4. Wounds: Keep as small as possible, cut cleanly back to sound wood leaving a smooth surface, and angled so that water will not collect on the cut area.
5. Cutting: Cut at a fork or at the main stem to avoid stumps wherever possible.
6. Large branches: Remove only with prior approval
 - 6.1. Remove in small sections and lower to ground with ropes and slings.
7. Dead branches and stubs: When removing, do not cut into live wood.
8. Unsafe branches: Remove epicormic shoots and potentially weak forks that could fail in adverse weather conditions.
9. Disease or fungus: Give notice if detected. Do not apply fungicide or sealant unless instructed.

840 Crown reduction/ shaping

1. General: Cut back selectively to lateral or sublateral buds or branches to retain flowing branch lines without leaving stumps.

845 Crown lifting

1. Clearances: Remove branch systems to give clearance.
 - 1.1. Height:

2. **Removing branches:** Remove whole branches back to the stem, or cut lower portions of branches back to lateral or sublateral buds or branches. Do not leave stumps.

855 Cutting tree roots

1. **Excavating:** Use hand tools only.
2. **Protected area:** Do not cut roots within an area which is the larger of:
 - 2.1. The branch spread of the tree.
 - 2.2. An area with a radius of half the tree's height, measured from the trunk.
3. **Outside protected area:** Give notice of roots exceeding 50 mm in diameter. Do not cut without approval.
4. **Cutting**
 - 4.1. **Cutting:** Make clean smooth cuts with a hand saw.
 - 4.2. **Wounds:** Minimize. Avoid ragged edges.
 - 4.3. **Finishing:** Pare cut surfaces smooth with a sharp knife.
5. **Backfilling**
 - 5.1. **Protection:** Cover cut roots with clean sharp sand.
 - 5.2. **Material:** Backfill with original topsoil.

865 Bark damage

1. **Wounds**
 - 1.1. Do not attempt to stop sap bleeding.
 - 1.2. **Bark:** Remove ragged edges using a sharp knife.
 - 1.3. **Wood:** Remove splintered wood from deep wounds.
 - 1.4. **Size:** Keep wounds as small as possible.
2. **Liquid or flux oozing from apparently healthy bark:** Give notice.

870 Cavities in trees

1. **Investigation:** Remove rubbish and rotten wood. Probe the cavity to find the extent of any decay, and give notice.
2. **Water-filled cavities:** Do not drain.
3. **Sound wood inside cavities:** Do not remove.
4. **Cavity openings:** Do not cover

Water areas - Not Used

Hard landscape areas/ fencing

910 Hard surfaces and gravel areas

1. **Herbicide:** Apply a suitable foliar-acting or residual herbicide. Allow recommended period for herbicide to take effect before clearing arisings.
2. **Hard surfaces:** Remove litter, leaves and other debris.
3. **Surface gutters and channels:** Remove mud, silt and debris.
4. **Drainage gullies:** Empty traps and flush clean.
5. **Gravel areas:** Rake over. Remove weeds, litter, leaves and debris, and level off.
6. **Repairs to flexible bituminous pavings:** In accordance with the original paving specification or BS 7370-2, clause 4.12.
7. **Stain removal:** In accordance with BS 7370-2, Table 4.

Ω End of Section

Q40 Fencing

Fencing systems

125 Open mesh steel panel general-purpose fencing

1. Description: Metal Mesh Fence
2. Manufacturer: Metal Mesh
 - 2.1. Product reference: 50-89 HDG
3. Standard: To [BS 1722-14](#), Category 1.
4. Height: 2440mm
5. Mesh and wire: Expanded metal mesh, 22.58mm vertical x 50.80mm horizontal x 3.00mm thickness, galvanized
6. Posts: Steel rectangular hollow section, powder coated in situ: Dulux MIO Protective coating in Natural Grey
7. Maximum centres of posts: 2472mm
8. Method of setting posts: 300mm square, 400mm deep holes filled to not less than half the depth with concrete
9. Fence Panel Frame: 40mm width, 8mm thick angle steel frame
Powder coated in situ: Dulux MIO Protective coating in Natural Grey

Gates, posts and stiles

560 Steel gates and posts Feature Gate

1. Description: Feature Gate
2. Manufacturer: Bespoke
3. Standard
 - 3.1. Domestic gates: To [BS 4092-1](#).
 - 3.2. Steel palisade gates: To [BS 1722-12](#).
4. Materials and workmanship: TBC
5. Finish: TBC
 - 5.1. Colour: TBC
6. Jointing: Welded.
7. Fittings: TBC

560 Steel gates and posts Mesh Fence

1. Description: To Metal Mesh Fencing
2. Manufacturer: Metal Mesh
 - 2.1. Product reference: 50-89 HDG
3. Standard
 - 3.1. Domestic gates: To [BS 4092-1](#).
 - 3.2. Steel palisade gates: To [BS 1722-12](#).
4. Finish: Polyester powder-coated gate panel frame, as section Z31
 - 4.1. Colour: Natural Grey
5. Jointing: Welded.
6. Fittings: TBC

Accessories - Not Used

Execution

710 Installation generally

1. Set out and erect
 - 1.1. Alignment: Straight lines or smoothly flowing curves
 - 1.2. Tops of posts: Following profile of the ground
 - 1.3. Setting posts: Rigid, plumb and to specified depth, or greater where necessary to ensure adequate support
 - 1.4. Fixings: All components securely fixed

715 Competence

1. Operatives: Contractors must employ competent operatives
2. Qualifications: Submit certification of training

720 Setting posts in concrete

1. Standard: To [BS 8500-2](#).
2. Mix: Designated concrete not less than GEN1 or standard prescribed concrete not less than ST2
3. Alternative mix for small quantities: 50 kg Portland cement to 150 kg fine aggregate to 250 kg 20 mm nominal maximum size coarse aggregate, medium workability.
4. Admixtures: Do not use.
5. Holes: Excavate neatly and with vertical sides
6. Filling: Position post/ strut and fill hole with concrete to not less than the specified depth, well-rammed as filling proceeds and consolidated
7. Backfilling of holes not completely filled with concrete: Excavated material, well-rammed and consolidated

780 Making good galvanized surfaces

1. Treatment of minor damage (including on fasteners and fittings): Low melting point zinc alloy repair rods or powders made for this purpose, or at least two coats of zinc-rich paint to [BS 4652](#)
2. Thickness: Apply sufficient material to provide a zinc coating at least equal in thickness to the original layer

Completion

910 Cleaning

1. General: Leave the works in a clean, tidy condition
2. Surfaces: Clean immediately before handover

920 Fixings

1. All components: Tighten
 - 1.1. Timing: Before handover

930 Gates

1. Hinges, latches and closers: Adjust to provide smooth operation. Lubricate where necessary.
 - 1.1. Timing: Before handover.

Ω End of Section

Q41 Barriers/ guard rails

Types of barriers/ guard rails

110 Pedestrian restraint systems in metal

1. Description: Fall Protection Balustrade
2. Standard: To [BS 7818](#)
3. Height above datum (minimum): 900mm
4. Post and rail
 - 4.1. Material/ protection: Steel, galvanized to [BS EN ISO 1461](#) after fabrication
5. Infill
 - 5.1. Type: Vertical
 - 5.2. Material/ protection: Steel, galvanized to [BS EN ISO 1461](#) after fabrication
6. Surface finish: Powder coating, as section Z31
 - 6.1. Colour/ texture: Natural Grey
7. Foundations: To engineer's specification
8. Fixings: Stainless steel bolts, domed heads and snap-off security nuts, grade A2. Bolted to posts.
 - 8.1. Material for fixings: Similar material or coating to the connected items, or isolating washers/ bushes provided to prevent bimetallic corrosion

240 Handrail systems

1. Description: To External Steps and Ramps
2. Standard: To [BS 8300-1](#)
3. Material: Steel
 - 3.1. Cross section: 50mm wide, 8mm thick steel flatbar handrail frame.
Ø45mm steel tube grippable handrail with 8mm bent solid bar fixing
 - 3.2. Finish: Polyester powder-coated, as section Z31
4. Height above ground surface (to upper surface of handrail)
 - 4.1. Upper handrail: 900mm
 - 4.2. Lower handrail: 590mm
5. Fixings/ foundations: To engineer's specification

Performance/ inspection/ testing - Not Used

Installation

405 Competence

1. Description: Contractors must employ competent operatives.
2. Qualifications: Submit certification of training

420 Alignment

1. Erection: Fences/ barriers to present a flowing alignment. Tops of posts to follow ground profile
2. Tolerance: ±30 mm of prescribed alignment and, within any 10 m length, ±15 mm from the straight or required radius.

430 Erection generally

1. **Protection:** Coat all internal and external surfaces of aluminium and steel posts below and up to 150 mm above ground level with two coats of bituminous paint to [BS 6949](#), Type 2, unless other applied surface finish is specified
2. **Prevention of electrolytic corrosion:** Isolate dissimilar metals
3. **Steel components:** Do not drill, cut or weld after galvanizing

480 Concrete foundations for posts

1. **Standard:** To [BS 8500-2](#).
2. **Excavations:** Excavate neatly and with vertical sides. Dispose of all arisings. Blind excavation bottoms with a 50 mm layer of concrete.
3. **Concrete mix:** Designated concrete not less than GEN 4 or standard mix not less than ST5. Do not use admixtures
4. **Filling:** Position post/ strut and fill hole with concrete to not less than the specified depth, well-rammed as filling proceeds and consolidated
5. **Temporary support to posts:** Provide for a at least four days after placing concrete

490 Making good galvanized surfaces

1. **Standard:** To [BS EN ISO 1461](#).
2. **Areas of repair**
 - 2.1. Total area of repair not to exceed 0.5% of total surface area.
 - 2.2. Each area not to exceed 100 mm².
3. **Treatment of minor damage (including on fasteners and fittings):** Use low-melting-point zinc alloy repair rods or powders made for this purpose, or at least two coats of zinc-rich paint to [BS 4652](#)

510 Preparation for site painting

1. **Timing:** As soon as possible after installation of barriers/ guard rails. Prepare surfaces and apply finishes as soon as possible after fixing

Completion - Not Used

Ω End of Section

Q50

Site/ street furniture/ equipment

Gates, barriers and parking controls

190 Bollards

1. Description: Lighting Bollards
2. Manufacturer: Bega System
 - 2.1. Product reference: Bollard Head: Bega System 84 691 K3 Bollard or equal and approved
Head Bollard Tube: Bega System 84 008 Bollard Tube or equal and approved
3. Material: Stainless steel
 - 3.1. Finish as delivered: Matte, textured powder coat with minimum 3 mil thickness
 - 3.2. Colour: Graphite
4. Height above ground: 1065mm
5. Sectional size: 220x220mm
6. Top: Flat
7. Special features: All necessary accessories
8. Method of fixing: As drawing 240010-UG-ZZ-XX-D-L-0000207

Site and street furniture

220 Benches

1. Description: Wheeled Benches
2. Manufacturer: Weltefree
 - 2.1. Product reference: Wheelbench
3. Material: Oak timber
 - 3.1. Finish: As manufactured
4. Size: Backrest height: 810mm
Seat depth: 395mm
Seat height: 450mm
Seat width: 1300mm
5. Method of fixing: Not required

220 Combined outdoor tables and seating Type A

1. Manufacturer: [Vestre](#)
2. Contact details
 - 2.1. Address: Profile West Suite 2, Floor 1
950 Great West Road
Brentford
TW8 9ES
 - 2.2. Telephone: [+44\(0\)207 846 8725](tel:+44(0)207 846 8725)
 - 2.3. Web: <https://www.vestre.com>
 - 2.4. Email: uk@vestre.com
3. Product reference: [HVILAN Picnic Table \(122-900\)](#)
4. Length: 1522 mm.
5. Base: Free standing.
6. Material: Oiled oak.

7. Finish as delivered: Hot-dip galvanized and powder-coated steel.
8. Colours: Natural Grey
9. Third-party certification: Intertek certified.
10. Weight: 88 kg.
11. Diameter: Ø52 mm.
12. Corrosion class (grid): C5-M.
13. Width: 1718 mm.
14. Height: 774 mm.

225 Street and site seats Type A

1. Description: Coffee Chairs
2. Manufacturer: [Vestre](#)
 - 2.1. Contact details
 - 2.1.1. Address: Profile West Suite 2, Floor 1
950 Great West Road
Brentford
TW8 9ES
 - 2.1.2. Telephone: [+44\(0\)207 846 8725](tel:+44(0)207 846 8725)
 - 2.1.3. Web: <https://www.vestre.com>
 - 2.1.4. Email: uk@vestre.com
 - 2.2. Product reference: KINN Chair
3. Material: Aluminium and wood
 - 3.1. Finish: Polyester powder-coated, as section Z31
 - 3.2. Colour: Natural Grey
4. Size: L685xD666xH730mm. Seat height 382mm.
5. Method of fixing: Not required.

225 Street and site seats Type B

1. Description: Dining Chairs
2. Manufacturer: [Vestre](#)
 - 2.1. Contact details
 - 2.1.1. Address: Profile West Suite 2, Floor 1
950 Great West Road
Brentford
TW8 9ES
 - 2.1.2. Telephone: [+44\(0\)207 846 8725](tel:+44(0)207 846 8725)
 - 2.1.3. Web: <https://www.vestre.com>
 - 2.1.4. Email: uk@vestre.com
 - 2.2. Product reference: [April Go Chair \(April Go Chair: 7013-900\)](#)
3. Length: 486 mm.
4. Base: Free standing.
5. Material: Steel and wood.
6. Finish as delivered: Hot-dip galvanized and powder-coated.
7. Colours: Natural Grey
8. Accessories: None.
9. Wood species/ Finish: Oiled oak.

- 10. Weight: 11 kg.
- 11. Width: 506 mm.

230 Street and site tables Type A

- 1. Description:: Coffee Tables
- 2. Manufacturer: [Vestre](#)
 - 2.1. Contact details
 - 2.1.1. Address: Profile West Suite 2, Floor 1
950 Great West Road
Brentford
TW8 9ES
 - 2.1.2. Telephone: [+44\(0\)207 846 8725](tel:+44(0)207 846 8725)
 - 2.1.3. Web: <https://www.vestre.com>
 - 2.1.4. Email: uk@vestre.com
 - 2.2. Product reference: Munch Table
- 3. Material: Steel
 - 3.1. Finish: Polyester powder-coated, as section Z31
 - 3.2. Colour: Natural Grey
- 4. Size: 600mm diameter, 730mm height.
- 5. Method of fixing: Not required

230 Street and site tables Type B

- 1. Manufacturer: [Vestre](#)
 - 1.1. Contact details
 - 1.1.1. Address: Profile West Suite 2, Floor 1
950 Great West Road
Brentford
TW8 9ES
 - 1.1.2. Telephone: [+44\(0\)207 846 8725](tel:+44(0)207 846 8725)
 - 1.1.3. Web: <https://www.vestre.com>
 - 1.1.4. Email: uk@vestre.com
 - 1.2. Product reference: [Vroom Table \(Vroom table - 637-900\)](#)
- 2. Dimensions
 - 2.1. Width: 1455 mm.
 - 2.2. Depth: 1403 mm.
 - 2.3. Height: 740 mm.
- 3. Base: Free-standing.
- 4. Material: Steel.
- 5. Finish as delivered: Hot-dip galvanized and powder-coated.
- 6. Colours: Natural Grey
- 7. Film thickness (minimum): 10 mm.
- 8. Wood species/ Finish: Linseed oil proofed Nordic pine.
- 9. Weight: 127 kg.
- 10. Corrosion class (grid): C5-M.

340 Bespoke sculpture/ landscape art

1. Artist: TBC
2. Material: TBC
3. Approximate weight: To artist's specification
4. Approximate size: To artist's specification
5. Delivery/ Handling/ Storage requirements: To artist's specification
6. Method of fixing: TBC.

Installation

510 Concrete foundations generally

1. Standard: To BS 8500-2.
2. Concrete: To engineer's specification
3. Admixtures: Do not use.
4. Foundation holes: Neat vertical sides.
5. Depth of foundations, bedding, haunching: Appropriate to provide adequate support and to receive overlying soft landscape or paving finishes.

515 Setting components in concrete

1. Holes: To engineer's specification
2. Components: Accurately positioned and securely supported.
3. Concrete fill: Fully compacted as filling proceeds.
4. Concrete foundations exposed to view: Compacted until air bubbles cease to appear on the upper surface, then weathered to shed water and trowelled smooth.
5. Temporary component support: Maintain undisturbed for minimum 48 hours.

550 Damage to galvanized surfaces

1. Minor damage in areas up to 40 mm² (including on fixings and fittings): Make good.
 - 1.1. Material: Low melting point zinc alloy repair rods or powders made for this purpose or at least two coats of zinc-rich paint to BS 4652.
 - 1.2. Thickness: Sufficient to provide a zinc coating at least equal to the original layer.

560 Site painting

1. Timing: Prepare surfaces and apply finishes as soon as possible after fixing.

Ω End of Section

V90 Electrical systems

General

110 Low-voltage supply

1. **General Note:** The following specification is for proposed lighting and power points only. Refer to the M&E engineer for full detail lighting and electrical details.

System performance

210 Design of low-voltage electrical installation generally

1. **Design and detailing:** Complete for the electrical installation.
2. **Standards:** In accordance with [BS 7671](#), as [amended](#), and the requirements of the electricity distributor.
3. **Proposals:** Submit drawings, technical information, and manufacturers' literature

265 Design and lighting calculations

1. **Proposals:** Submit drawings, technical information, calculations and manufacturers' literature
2. **Lighting calculations**
 - 2.1. **Type:** Computer-generated point calculations
3. **Submit the following:**
 - Luminaire layout drawings
 - Luminaire photometric data including flux fraction ratios and polar intensity curves
 - Lamp technical information
 - Maintenance factor calculations, including proposals for luminaire maintenance and lamp replacement
 - Reflectance values used for all wall, ceiling and floor surfaces
 - Isolux contour plots for all relevant working planes, horizontal and vertical
 - Schedule of design and calculated maintained average illuminance values
 - Schedule of design and calculated uniformity values

Products

440 Pop Up Power Point Type A

1. **Manufacturer:** Pop Up Power
 - 1.1. **Product reference:** PUPS 05 or equal and approved
2. **Standard:** To [BS 1363-2](#)
3. **Ingress protection (minimum):** To engineer's specification
4. **Cable termination:** To engineer's specification

440 External Power Socket Recessed Type B

1. **Manufacturer:** Pop Up Power
 - 1.1. **Product reference:** SLIM In-Ground Unit or equal and approved
2. **Standard:** To [BS 1363-2](#)
3. **Ingress protection (minimum):** To engineer's specification
4. **Cable termination:** To engineer's specification

561 Wall-Mounted Lighting

1. Description: Wall- / Pergola- Mounted Lighting
2. Manufacturer: iGuzzini
 - 2.1. Product reference: MaxiWoody Compact
3. Standards: To [BS EN IEC 60598-1](#) and [BS EN 60598-2-5](#)
4. Photometric performance: To [BS EN 13032-1](#)
5. Mounting: To manufacturer's specification
6. Ingress protection (minimum): To engineer's specification
7. Impact protection (minimum): To engineer's specification
8. Lamp: Light-emitting diode (LED)
 - 8.1. Wattage: To engineer's specification
 - 8.2. Colour temperature: TBC

562 Ground level luminaires

1. Description: Tree Uplighters
2. Manufacturer: iGuzzini
 - 2.1. Product reference: MiniWoody or equal and approved
3. Standards: To [BS EN IEC 60598-1](#) and [BS EN 60598-2-13](#)
4. Photometric performance: To [BS EN 13032-1](#)
5. Voltage source: To engineer's specification
6. Ingress protection (minimum): To engineer's specification
7. Impact protection (minimum): To engineer's specification
8. Lamp: Light-emitting diode (LED)
 - 8.1. Wattage: To engineer's specification
 - 8.2. Colour temperature: TBC

575 Lighting columns

1. Manufacturer: iGuzzini
 - 1.1. Product reference: Round pole with MaxiWoody Compact or equal and approved
2. Material and type: Aluminium
3. Nominal column height: 5000
4. Base arrangement: Root planted set in concrete foundation
5. Corrosion protection: Submit proposals
6. Electrical cut outs: To [BS 7654](#)

Execution

610 Electrical installation generally

1. Standard:

615 Installing connection to incoming supply

1. Main switchboard/ distribution board:
2. Nature of connection:

620 Installing photovoltaic systems

1. Standards:
2. Installer:
3. Location of collector modules:
4. Location of inverter and controls:
5. Connection to building installation:

625 Installing small-scale wind generating systems

1. Installer:
2. Location of turbine:
3. Turbine support poles and fixings:
4. Location of inverter and controls:
5. Connection to building installation:

630 Installing switchgear

1. Orientation:
2. Clearance in front of switchgear (minimum):
3. Labelling:
4. Padlock identification:

635 Installing cables directly in the ground

1. Cables:
2. Cable bedding:
3. Cable pulling:
4. Installation method:
5. Cable formation within trench:
6. Cables below roads and hard-standings:
7. Cable marker tape:
8. Backfilling:

636 Installing above-ground warning markers

1. Installation:
2. Locations:

640 Installing cables entering buildings from below ground

1. Pipe ducts:
2. Proposals:

645 Installing cable tray

1. Support:
2. Access:
3. Supports and fasteners:
4. Cutting:
5. Earth protection:

650 Installing cable basket

1. Support:
2. Access:
3. Supports and fasteners:
4. Earth protection:

655 Installing steel conduit and fittings

1. Fixing:
2. Conduit drainage:
3. Location:
4. Jointing
 - 4.1. Number of joints:
 - 4.2. Lengths of conduit:
 - 4.3. Cut ends:
 - 4.4. Movement joints in structure:
 - 4.5. Threaded steel conduits:
 - 4.6. Conduit connections to boxes and items of equipment, other than those with threaded entries:
 - 4.7. Changes of direction:
5. Connections to boxes, trunking, equipment and accessories: Screwed couplings, adaptors, connectors and glands:
6. Mounting and support:
7. Earth protection:

660 Installing PVC conduit and fittings

1. Fixing
 - 1.1. Spacing of conduit saddles (maximum):
 - 1.2. Fix boxes independently of conduit.
 - 1.3. At fittings and changes of direction:
 - 1.4. Thermal expansion:
2. Conduit drainage:
3. Location:
4. Jointing
 - 4.1. Number of joints:
 - 4.2. Lengths of conduit:
 - 4.3. Cut ends:
 - 4.4. Movement joints in structure:
 - 4.5. Adhesive:
5. Changes of direction:
6. Connections to boxes, trunking, equipment and accessories:
7. Mounting and support:

665 Installing conduit in concrete

1. Fixing:
2. Concrete cover to conduit (minimum):

3. Draw wires:

670 Installing trunking/ ducting systems

1. Positioning:
2. Access:
3. Jointing
 - 3.1. Number of joints:
 - 3.2. Lengths of trunking/ ducting:
 - 3.3. Steel systems:
4. Movement:
5. Junctions and changes of direction:
6. Cable entries:
7. Internal fire barriers:
8. Protection:
9. Service outlet units:

675 Partial installation

1. Equipment to be installed only:
2. Provide power supplies and final connections to the following equipment:
3. Containment: Provide for the following:
 - 3.1. Draw cords:
 - 3.2. Proposals:

680 Cable routes

1. Cables generally:
 - 1.1. Concealed cable runs to wall switches and outlets:
2. Exposed cable runs:
 - 2.1. Orientation:
3. Distance from other services running parallel:
 - 3.1. Heating pipes:

685 Installing cables

1. General:
2. Timing:
3. Jointing:
4. Cables passing through walls:
5. Cables surrounded or covered by thermal insulation:
6. Cable guards:

690 Installing cables in plaster

1. Protection:

695 Installing cables in vertical trunking/ ducts

1. Support:
2. Heat barrier centres (maximum):
3. Heat barriers:

700 Installing cables in accessible roof spaces

1. Cables running across ceiling joists:

705 Installing armoured cable

1. Temperature:
2. Joints and terminations:
3. Earthing:
4. Connections to apparatus:

710 Installing PVC-sheathed cable

1. Temperature:

715 Installing MICC cable

1. Bending:
2. Sealing cable ends:
3. Testing:
4. Terminations:
5. Connection to equipment and boxes:

720 Installing electrical accessories and equipment

1. Location:
2. Arrangement:
3. Positioning:
4. Alignment:
5. Mounting:
6. Mounting heights (finished floor level to underside of equipment/ accessory):
7. Accessory face plates:

725 Final connections

1. Size:
2. Cable:
3. Length:

730 Installing multigang switches

1. General:
2. Segregation:

735 Installing luminaires

1. Location:
2. Orientation:
3. Supports:

740 Installing emergency luminaires

1. Permanent electrical supplies:
2. Charge indicator:

745 Installing external luminaires

1. Locations:
2. Seals:

746 Installing luminaire controlgear

1. Location:
2. Labelling of controlgear enclosures:

750 Installing lighting columns generally

1. Standard:
2. Position:
3. Hinged columns:
4. Access door:
5. Location marking for inspection and maintenance purposes:

751 Setting components in concrete foundations and bases

1. Foundation holes:
2. Locating components:
3. Cable ducts:
4. Concrete surround:
5. Concrete foundations
 - 5.1. Concrete
 - 5.1.1. Standards:
 - 5.1.2. Mix:
 - 5.1.3. Admixtures:
 - 5.1.4. Concealed:
 - 5.1.5. Exposed:

752 Setting components in earth

1. Foundation holes:
2. Locating components:
3. Cable ducts:
4. Earth for backfilling:
5. Backfilling:

753 Site-painting of columns

1. Timing:

755 Installing earth bars

1. Location:
2. Mounting:

760 Equipment labelling

1. Electrical equipment:
2. Voltage warning notices

- 2.1. Location:
- 2.2. Format:
- 3. Distribution boards:
- 4. Sub-main cables:

765 Engraving

- 1. Metal and plastic accessories:
- 2. Emergency lighting test key switches:
- 3. Multigang light switches:

Completion

810 Final fix

- 1. Accessory faceplates, luminaires and other equipment:

820 Cleaning

- 1. Electrical equipment:
- 2. Equipment not supplied but installed under the electrical works:

830 Inspection and testing generally

- 1. Standard:
- 2. Notice before commencing tests (minimum):
- 3. Labels and signs:
- 4. Certificates:
 - 4.1. Number of copies:

840 Testing and commissioning of photovoltaic systems

- 1. Standards:
- 2. Microgeneration Certification Scheme:
- 3. Documentation:

850 Testing and commissioning of small-scale wind generating systems

- 1. Standards:
- 2. Microgeneration Certification Scheme:

860 Inspection and testing of emergency lighting systems

- 1. Standard:
- 2. Certificate of testing:
 - 2.1. Standard:
 - 2.2. Number of copies:
- 3. System log book:

870 Inspection and testing of external lighting systems

- 1. Switching:
- 2. Orientation:
- 3. Additional requirements:

871 Photometric surveys

1. Standards:
2. Locations:
3. Time of test:
4. Average illuminance measurement method:
5. Measured values:
6. Maintained average illuminance:
7. Illuminance variation:
8. Environmental conditions:
9. Survey photographs:
10. Extraneous light:
11. Test equipment:

880 Documentation

1. Timing:
2. Contents:

886 Spares

1. Type:

890 Maintenance

1. Servicing and maintenance:
 - 1.1. Duration:

895 Verification on completion

1. Requirement:
2. Method:
3. Submittals:
 - 3.1. Format:
 - 3.2. Timing:

Ω End of Section

Z31 Powder coatings

To be read with preliminaries/ general conditions.

120 Powder-coating materials

1. Manufacturer: Dulux
 - 1.1. Product reference: MIO Protective Coating

210 Working procedures

1. Comply with the following standards
 - 1.1. Aluminium components: [BS EN 12206-1](#).
 - 1.2. Steel components: To [BS EN 13438](#).
 - 1.3. Safety standards: [British Coatings Federation](#) publication [Code of safe practice: Powder coating. Application of coating powders by electrostatic spraying](#).
 - 1.4. Health and safety guidance: [Health and Safety Executive](#) publication [Reducing risk associated with using coating powders - employers](#).

220 Powder-coating applicators

1. Applicator requirements
 - 1.1. Approved by powder-coating manufacturer
 - 1.2. Currently certified to [BS EN ISO 9001](#)
 - 1.3. Comply with quality procedures, guarantee conditions, standards and tests required by powder-coating manufacturer
 - 1.4. Selected applicator: Submit details before commencement of powder coating, including:
 - Name and contact details.
 - Details of accreditation schemes.

225 Guarantees

1. Powder-coating manufacturer and applicator guarantees
 - 1.1. Submit sample copies before commencement of powder-coating
 - 1.2. Submit signed project specific copies on completion of work

230 Control samples

1. Prior to ordering materials for the works, obtain approval of appearance for
 - 1.1. [Powder-coated samples](#): Of various grades and forms of background metal to be used, showing any colour, texture and gloss variation.
 - 1.2. [Fabrication samples](#): Showing joint assembly, how powder-coating is affected and how any cut metal edges are finished and protected.
 - 1.3. Where manual application is required, controlled samples should be coated and inspected for colour and gloss stability
2. Samples to include the following information:
 - Product reference.
 - Colour.
 - Reference number.
 - Name.
 - Gloss level.

250 Component design

1. Condition of components to be powder-coated
 - 1.1. To comply with relevant recommendations of [BS 4479-1](#), [BS 4479-3](#) and [BS 4479-4](#)
 - 1.2. Of suitable size to fit plant capacity
 - 1.3. Of suitable thickness to withstand oven curing

310 Pretreatment of aluminium components

1. Condition of components to be pretreated
 - 1.1. Free from corrosion and damage
 - 1.2. All welding and jointing completed and finish off as specified
 - 1.3. Free from impurities including soil, grease and oil
 - 1.4. Suitable for and compatible with the pretreatment process
2. Conversion coating requirements
 - 2.1. Chromate system: [BS EN 12206-1](#).
 - 2.2. Chromate-free system: To [BS EN 12206-1](#). Submit details before using.
3. Rinsing requirements: Use demineralized water. Drain and dry.

320 Pretreatment of steel components

1. Condition of components to be pretreated
 - 1.1. Free from corrosion and damage
 - 1.2. All welding and jointing completed and finish off as specified
 - 1.3. Free from impurities including soil, grease and oil
 - 1.4. Suitable for and compatible with the pretreatment process
2. Conversion coating requirements: To [BS EN 13438](#).
3. Rinsing requirements: Use demineralized water. Drain and dry.

430 Extent of powder coatings

1. **Application:** To visible component surfaces, and concealed surfaces requiring protection. Coated surfaces will be deemed 'significant surfaces' for relevant [BS EN 13438](#) performance requirements.

435 Application of powder coatings

1. Surfaces to receive powder coatings: Free from dust or powder deposits.
2. Powder colours: Obtain from one batch of one manufacturer.
3. **Commencement of powder-coating:** To be continuous from pretreatment.
4. Components to be installed on site in order of application.
5. **Jig points:** Not visible on coated components.
6. **Curing:** Controlled to attain metal temperatures and hold periods recommended by powder-coating manufacturer.
7. **Stripping and recoating of components:** Only acceptable by prior agreement of powder-coating manufacturer. Stripping, pretreatment and powder-coating are to be in accordance with manufacturer's requirements.
8. Overcoating of components: Not acceptable.

440 Performance and appearance of powder coatings

1. For aluminium components: [BS EN 12206-1](#)

2. For steel components:
3. Visual inspection after powder-coating: Significant surface viewing distances to be as specified in the relevant Standard, unless specified otherwise.
4. Colour and gloss levels: To conform with approved samples.

460 Steel fabrications

1. Unit assembly: Wherever practical, before powder-coating.
2. Exposure of uncoated background metal: Not acceptable.
3. Assembly sealants: Compatible with powder coatings. Obtain approval of colour if sealants are visible after fabrication.

470 Fixings

1. Exposed metal fixings: Powder-coat together with components, or coat with matching repair paint system applied in accordance with the powder-coating manufacturer's recommendations.

480 Damaged components – repair or replacement

1. Before delivery to site: Check all components for damage to powder coatings. Replace damaged components.
2. Site damage: Submit proposals for repair or replacement.

510 Protection

1. Powder-coated surfaces of components: Protect from damage during handling and installation, or by subsequent site operations.
2. Protective coverings must be
 - 2.1. Resistant to weather conditions
 - 2.2. Partially removable to suit building in and access to fixing points
3. Protective tapes in contact with powder coatings must be
 - 3.1. Low tack, self adhesive and light in colour
 - 3.2. Applied and removed in accordance with tape and powder-coating manufacturers' recommendations. Do not use solvents to remove residues as these are detrimental to the coating
4. Inspection of protection: Carry out monthly. Promptly repair any deterioration or deficiency.

540 Completion

1. Protection: Remove any protective coverings.
2. Cleaning and maintenance of powder coatings: Carry out in accordance with procedures detailed in powder-coating manufacturer and applicator guarantees.

Ω End of Section



Specification created using NBS Chorus