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Windows/ Doors/ Stairs

External stair, ramps, handrail and balustrades systems

L37 External stair, ramps, handrail and balustrades systems

GENERAL

- 111 CORTEN STEP TO COURTYARDS
- Type: Built in situ as per drawing reference: 1418-062.
 - Base/ Fabric: Concrete blockwork to Engineer's specification.
 - Surface and Face: Coloured Tarmac step with 5mm thick Corten face fixed to blockwork.
 - Accessories: Corten machine head CSK Chem Set bolts to fixed Corten to blockwork as G12.
- 150A HANDRAIL AND BALUSTRADE SYSTEMS TO STEPS TO WESTERN COURTYARD
- System manufacturer: To Architects specification.
 - Material: To Architects specification.
 - Cross section: To Architects specification.
 - Finish: To Architects specification.
 - Height (to upper surface of handrail):
 - Above pitch line: To Architects specification.
 - Above landing: 1100 mm.
 - Accessories: To Architects specification.

PRODUCTS

- 310 PRECAST CONCRETE STEP UNIT TO STEPS
- Manufacturer: Marshalls.
 - Product reference: Concrete Paver Step Treads and Risers.
 - Standard: To BS EN 771-2 and -3.
 - Size:
 - Surface width: As drawing 1418-010.
 - Going: 300mm.
 - Rise: 161mm.
 - Colour: Silver Grey.
 - Finish: Textured.
 - Slip resistance value of integral tread - water wet (minimum): Not applicable.
 - Slip resistance value of integral nosing - water wet (minimum): Not applicable.
 - Colour of integral nosing: Black.
 - Accessories: None.

FABRICATION

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

EXECUTION

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

620B CONCRETE FOUNDATIONS GENERALLY

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

650 INSTALLATION GENERALLY

- Fasteners: To section Z20.
- Structural members: Do not modify, cut, notch or make holes in structural members, except as indicated on drawings.
- Temporary support: Do not use finished work as temporary support or strutting for other work.
- 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.

662 ADVERSE WEATHER

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

M

Surface finishes

M60

Painting/clear finishing

M60 Painting/clear finishing

- 16 DECORATIVE WOODSTAIN/ VARNISH/ PRESERVATIVE TO EXTERNAL TIMBER PLANTERS
- Manufacturer: contractor to provide details.
 - Product reference: contractor to provide details.
 - Surfaces: Timber Planter.
 - Preparation: Provide smooth, even finish with lightly rounded arrises.
 - Initial coats: As recommended by manufacturer.
 - Number of coats: As recommended by manufacturer.
 - Finishing coats: As recommended by manufacturer.
 - Number of coats: As recommended by manufacturer.
- 30 PREPARATION GENERALLY
- Standard: In accordance with BS 6150.
 - Risk assessment and method statement for hazardous materials: Prepare for operations, disposal of waste, containment and reoccupation, and obtain approval before commencing work.
 - Preparation materials: Types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared.
 - Substrates: Sufficiently dry in depth to suit coating.
 - Efflorescence salts, dirt, grease and oil: Remove.
 - Surface irregularities: Provide smooth finish.
 - Organic growths and infected coatings:
 - Remove with assistance of biocidal solution.
 - Apply residual effect biocidal solution to inhibit regrowth.
 - Joints, cracks, holes and other depressions: Fill with stoppers/ fillers. Provide smooth finish.
 - Dust, particles and residues from preparation: Remove and dispose of safely.
 - Doors, opening windows and other moving parts:
 - Ease, if necessary, before coating.
 - Prime resulting bare areas.
- 37 WOOD PREPARATION
- General: Provide smooth, even finish with lightly rounded arrises.
 - Degraded or weathered surface wood: Take back surface to provide suitable substrate.
 - Degraded substrate wood: Repair with sound material of same species.
 - Heads of fasteners: Countersink sufficient to hold stoppers/ fillers.
 - Resinous areas and knots: Apply two coats of knotting.
 - Defective primer: Take back to bare wood and reprime.
- 39 STEEL PREPARATION
- Corrosion and loose scale: Take back to bare metal.
 - Residual rust: Treat with a proprietary removal solution.
 - Bare metal: Apply primer as soon as possible.
- 41 MASONRY AND RENDERING PREPARATION
- Loose and flaking material: Remove.

61 COATING GENERALLY

- Application standard: In accordance with BS 6150, clause 9.
- Conditions: Maintain suitable temperature, humidity and air quality.
- Surfaces: Clean and dry at time of application.
- Thinning and intermixing: Not permitted unless recommended by manufacturer.
- Priming coats: Apply as soon as possible on same day as preparation is completed.
- Finish:
 - Even, smooth and of uniform colour.
 - Free from brush marks, sags, runs and other defects.
 - Cut in neatly.
- Doors, opening windows and other moving parts: Ease before coating and between coats.

68 STAINING WOOD

- Primer: Apply if recommended by stain manufacturer.
- Application: Apply in flowing coats and brush out excess stain to produce uniform appearance.

Q

Paving/Planting/Fencing/Site furniture

Q10

Kerbs/ edgings/ channels/ paving accessories

Q10 Kerbs/ edgings/ channels/ paving accessories

To be read with Preliminaries/General conditions.

TYPES OF KERBS/EDGINGS AND CHANNELS**120 STONE GRANITE ROAD KERB**

- Standard: To BS EN 1343.
- Supplier: Marshalls or similar approved
Marshalls Mono Ltd, Landscape House,
Premier Way, Lowfields Business Park,
Elland HX5 9HT
01422 312000
customeradvice@marshalls.co.uk .
- Types: To match kerbs in surrounding area.
 - Tolerances on batter: No requirement.
- Stone type: Granite.
- Size (width x height): 1200x300x200mm.
 - Tolerances on overall width and height (nominal): Class 2.
- Freeze/ Thaw resistance: Resistant.
- Special shapes: External radius and transition kerbs.
- Finish: To match kerbs in surrounding area.
- Arrises: None.
- Bedding: Mortar bedded to Engineers specification.
- Joints generally: Narrow mortar.
- Sealant movement joints: To Engineers specification.
- Accessories: Flush and transition kerbs at pedestrian crossings, specification to match road kerb, refer to drawing reference 1418-044.

170 LINEAR SLOT DRAINAGE CHANNEL SYSTEMS

- Manufacturer: Marshalls.
 - Product reference: Mono Slot Drain.
- Bore: 100 mm.
- Finish: As cast.
- Colour: Galvanised, as supplied.
- Accessories: Inspection Unit Chambers at intervals recommended by the supplier. Engineer to confirm any connection requirements and end caps etc..
- Bedding: To Engineers specification.
- Joints generally: To Manufacturers recommendations.

200 SPECIAL METAL EDGING TYPE 01 - ROOF TERRACES - DRAWING: 1418-062

- Manufacturer: Kinley Systems.
 - Product reference: AE25M.
- Size: 45mmx25mmx2500mm.
- Type/ Material: Aluminium.
 - Finish: Flexi, mill.
 - Colour: Natural.
- Accessories: Casting-in anchors.
- Bedding: Concrete to Engineers specification.
- Joints: To Manufacturers recommendations.

- 201 SPECIAL METAL EDGING TYPE 02 - COURTYARDS - DRAWING1418-061
- Manufacturer: Kinley Systems.
 - Product reference: AE40M.
 - Size: 45mmx40mmx2.5mm.
 - Type/ Material: Aluminium.
 - Finish: Flexi, mill.
 - Colour: Natural.
 - Accessories: Manufacturer supplied connector strip and shop bought multi fix 60mm masonry bolts.
 - Bedding: Concrete to Engineers specification.
 - Joints: Connector Strip.
- 202 SPECIAL METAL EDGING TYPE 03 - PUBLIC REALM PLANTING BEDS - DRAWING1418-061
- Manufacturer: Kinley Systems.
 - Product reference: AE75RM.
 - Size: 45mmx75mmx2.5mm.
 - Type/ Material: Aluminium.
 - Finish: Flexi, mill.
 - Colour: Natural.
 - Accessories: Manufacturer supplied connector strip and shop bought multi fix 60mm masonry bolts.
 - Bedding: Concrete to Engineers specification.
 - Joints: Connector Strip.

ROADS/PAVING ACCESSORIES/MARKING/DEMARCATIION

- 415 DEMARCATIION UNITS PAVING TYPE 06: TO CROSSING POINTS WITHIN PUBLIC REALM AREA ADJOINING CONCRETE PAVING
- Manufacturer: Marshalls or similar approved.
 - Product reference: Blister Concrete Tactile Paving.
 - Material/ Standard: Concrete blocks to BS EN 1338.
 - Recycled content: As supplied.
 - Shape: Square.
 - Size (width x height x length): 400 x 65 x 400.
 - Finish: Standard.
 - Colour: Buff.
 - Bedding: Cement mortar.
 - Joints generally: Narrow mortar.
 - Sealant movement joints: To Engineers specification.
- 415A DEMARCATIION UNITS PAVING TYPE 06A: TO TOP AND BOTTOM OF STEPS
- Manufacturer: Marshalls or similar approved.
 - Product reference: Hazard Warning Concrete Tactile Paving.
 - Material/ Standard: Concrete blocks to BS EN 1338.
 - Recycled content: As supplied.
 - Shape: Square.
 - Size (width x height x length): 400 x 50 x 400.
 - Finish: Standard.
 - Colour: Charcoal.
 - Bedding: As adjoining paving.
 - Joints generally: As adjoining paving.
 - Sealant movement joints: To Engineers specification.

415B DEMARCATION UNITS TO CROSSING POINTS WITHIN PUBLIC REALM AREA ADJOINING STONE PAVING

- Manufacturer: Charcon or similar approved.
 - Product reference: Charcon Blister Yorkstone Tactile Paving.
- Material/ Standard: Natural stone to BS EN 1342.
- Recycled content: As supplied.
- Shape: Square.
- Size (width x height x length): 400 x 50 x 400.
- Finish: Standard.
- Colour: Natural.
- Bedding: Cement mortar.
- Joints generally: Narrow mortar.
- Sealant movement joints: To Engineers specification.

LAYING

510 LAYING KERBS, EDGINGS AND CHANNELS

- Cutting: Neat, accurate and without spalling. Form neat junctions.
 - Long units (450 mm and over) minimum length after cutting: 300 mm.
 - Short units minimum length after cutting: The lower of one third of their original length or 50 mm.
- 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.
- 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

- 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

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

540 CEMENT MORTAR BEDDING

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

547 BEDDING/BACKING OF UNITS ON FRESH CONCRETE RACES

- Standard: To BS 7533-6.

570 CHANNELS

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

580 DRAINAGE CHANNEL SYSTEMS

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