

- 545 LEVELLING OF SEPARATE LEAVES USING CEMENT GAUGED OR HYDRAULIC LIME MORTAR
- Locations for equal levelling of cavity wall leaves: As follows:
    - Every course containing vertical twist type ties or other rigid ties.
    - Every third tie course for double triangle/ butterfly ties.
    - Courses in which lintels are to be bedded.
- 560 COURSING BRICKWORK
- Gauge: Four brick courses including bed joints to 300 mm.
- 610 SUPPORT OF EXISTING WORK
- Joint above inserted lintel or masonry: Fully consolidated with semidry mortar to support existing structure.
- 635 JOINTING
- Profile: Consistent in appearance.
- 665 POINTING TO ALL BRICK WALLS
- Joint preparation: Remove debris. Dampen surface.
  - Mortar: As section Z21.
    - Standard: To BS EN 998-2.
    - Mix: To match architects specification.
    - Additional requirements: Refer to architects specification .
  - Profile: To match architects specification.
- 690 ADVERSE WEATHER
- General: Do not use frozen materials or lay on frozen surfaces.
  - Air temperature requirements: Do not lay bricks/ blocks:
    - In cement gauged mortars when at or below 3°C and falling or unless it is at least 1°C and rising.
    - In hydraulic lime:sand mortars when at or below 5°C and falling or below 3°C and rising.
    - In thin joint mortar glue when outside the limits set by the mortar manufacturer.
  - Temperature of walling during curing: Above freezing until hardened.
  - Newly erected walling: Protect at all times from:
    - Rain and snow.
    - Drying out too rapidly in hot conditions and in drying winds.

#### **ADDITIONAL REQUIREMENTS FOR FACEWORK**

- 710 THE TERM FACEWORK
- Definition: Applicable in this specification to all brick/ block walling finished fair.
    - Painted facework: The only requirement to be waived is that relating to colour.
- 750 COLOUR CONSISTENCY OF MASONRY UNITS
- Colour range: Submit proposals of methods taken to ensure that units are of consistent and even appearance within deliveries.
  - Conformity: Check each delivery for consistency of appearance with previous deliveries and with approved reference panels; do not use if variation is excessive.
  - Finished work: Free from patches, horizontal stripes and racking back marks.

## 760 APPEARANCE

- Brick/ block selection: Do not use units with damaged faces or arrises.
- Cut masonry units: Where cut faces or edges are exposed cut with table masonry saw.
- Quality control: Lay masonry units to match relevant reference panels.
  - Setting out: To produce satisfactory junctions and joints with built-in elements and components.
  - Coursing: Evenly spaced using gauge rods.
- Lifts: Complete in one operation.
- Methods of protecting facework: Submit proposals.

## 780 GROUND LEVEL

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

## 830 CLEANLINESS

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

**F31**

**Precast concrete sills/lintels/copings/features**

### F31 Precast concrete sills/lintels/copings/features

- 6 DESIGNATED CONCRETE PRECAST TERRAZZO SEAT TOPS ADJACENT TO WATER FEATURE
- Concrete: Designated to BS 8500-2: 75mm Thick, bull knowed Terrazzo seating units formed from PCC concrete units including:
    - Black liquid colouring;
    - Microfibers allowed
    - min 65% mixed grey and white granite chippings 6-12 mm in diameter;
 Polished Concrete .
  - Finish to visible faces: Polished .
  - Other requirements: Dowel fitting and drip lines as per drawings - final drawings to be provided by contractor for approval .
- 11 CONCEALED PRECAST CONCRETE RING MILTON RING TO WATER FEATURE  
 Manufacturer: Milton Precast or similar as approved  
 Milton Pipes Limited, Milton Regis, Sittingbourne, Kent. ME10 2QF  
 Tel: (01795) 425191  
 Fax: (01795) 420360  
 E-Mail: sales@miltonprecast.com  
 Size: 2680mm dia, wall thickness approx 140mm. Support tree 2700mm tree grill support and tree grill with 8mm return on the edge.
- 20 MOULDS
- Permissible fabrication and operating tolerances: Length 0 to +6 mm, other dimensions  $\pm 3$  mm.
- 25 REINFORCEMENT
- Carbon steel reinforcement: As appropriate to BS 4449, BS 4482 and BS 4483.
    - Cutting and bending: To BS 8666.
  - Fixing: Accurate and secure.
    - Method: Wire tying, approved steel clips or tack welding if permitted.
    - Concrete cover: Maintain free of tying wire or clips.
    - Cover spacers on visible faces: Not permitted.
- 30 CASTING AND CURING
- Placement of concrete: Thoroughly compact.
  - Immature components: Avoid movement, vibration, overloading, physical shock, rapid cooling and thermal shock.
  - Protection from weather: Do not expose panels to direct sunlight and drying winds until at least five days after casting.
- 40 LAYING
- Mortar for bedding and jointing: As section Z21.
    - Type: Site batched and mixed.
    - Mix: As used for adjacent work.
  - Bedding components: On full bed of mortar.
  - Bedding one piece sills/ thresholds: Leave clear of mortar except at end bearings and beneath masonry mullions.
    - On completion: Point with mortar to match adjacent work.

**G**

**Structural/Carcassing metal/timber**

**G12**

**Isolated structural metal members**

## G12 Isolated structural metal members

To be read with Preliminaries/ General conditions.

### PRODUCTS

- 321 CORTEN TO WATER FEATURE SEAT
- Corten: 3mm Rolled Corten fascia plates.
    - Fixing: As per drawing: 1418-027 & 091.
    - Surface condition: Free from heavy pitting, burrs, sharp edges and flame cutting dross.
- 322 CORTEN TO EASTERN COURTYARD RETAINING WALL SEAT
- Corten: 5mm Rolled Corten fascia plates.
    - Fixing: As per drawing 1418-091.
    - Surface condition: Free from heavy pitting, burrs, sharp edges and flame cutting dross.
- 323 CORTEN TO WESTERN COURTYARD RETAINING WALL AND CORTEN STEP DETAIL
- Corten: 5mm Rolled Corten fascia plates.
- Drawing: 1418-077 & 062
  - Fixing: Fixed to concrete blockwork with Corten machine head CSK Chem Set bolts at 300mm ctrs.
  - Surface condition: Free from heavy pitting, burrs, sharp edges and flame cutting dross.

### FABRICATION

- 510 FABRICATION OF STEEL MEMBERS
- Cuts and holes: Accurate and neat.
  - Welding: Metal arc method to BS EN 1011-2.
    - Welded joints: Fully fused, with mechanical properties not less than those of the parent metal.
    - Site welding: Not permitted.
  - Joints: Location and layout of fastenings as drawing 1418-091.

### EXECUTION

- 610 INSTALLATION
- Accuracy: Members positioned true to line and level using, if necessary, steel packs of sufficient area to allow full transfer of loads to bearing surfaces.
  - Fixing: Use washers under bolt heads and nuts.
    - Tapered washers: Provide under bolt heads and nuts bearing on sloping surfaces. Match taper to slope angle and align correctly.

**G20**

**Carpentry/ timber framing/ first fixing**



## **G20 Carpentry/ timber framing/ first fixing**

To be read with Preliminaries/ General conditions.

### **GENERAL**

#### 105 TIMBER PROCUREMENT

- Timber (including timber for wood based products): Obtained from well managed forests/ plantations in accordance with:
  - The laws governing forest management in the producer country or countries.
  - International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES).
- Documentation: Provide either:
  - Documentary evidence (which has been or can be independently verified) regarding the provenance of all timber supplied, or
  - Evidence that suppliers have adopted and are implementing a formal environmental purchasing policy for timber and wood based products.

#### 150 STRENGTH GRADING OF TIMBER

- Grader: A company currently registered under a third party quality assurance scheme operated by a certification body approved by the UK Timber Grading Committee.

### **WORKMANSHIP GENERALLY**

#### 401 CROSS SECTION DIMENSIONS OF STRUCTURAL SOFTWOOD AND HARDWOOD

- Dimensions: Dimensions in this specification and shown on drawings are target sizes as defined in BS EN 336.
- Tolerances: The tolerance indicators (T1) and (T2) specify the maximum permitted deviations from target sizes as stated in BS EN 336, clause 4.3:
  - Tolerance class 1 (T1) for sawn surfaces.
  - Tolerance class 2 (T2) for further processed surfaces.

#### 403 CROSS SECTION DIMENSIONS OF NONSTRUCTURAL HARDWOOD

- Dimensions: Dimensions in this specification and shown on drawings are finished sizes.
- Maximum permitted deviations from finished sizes: As stated in BS EN 1313-2:
  - Clause 6 for sawn sections.
  - Clause NA.3 for further processed sections.

#### 420 WARPING OF TIMBER

- Bow, spring, twist and cup: Not greater than the limits set down in BS 4978 or BS EN 14081-1 for softwood, or BS 5756 for hardwood.

#### 430 SELECTION AND USE OF TIMBER

- Timber members damaged, crushed or split beyond the limits permitted by their grading: Do not use.

#### 435 NOTCHES, HOLES AND JOINTS IN TIMBER

- Notches and holes: Position in relation to knots or other defects such that the strength of members will not be reduced.
- Scarf joints, finger joints and splice plates: Do not use without approval.

**440 PROCESSING TREATED TIMBER**

- Cutting and machining: Carry out as much as possible before treatment.
- Extensively processed timber: Retreat timber sawn lengthways, thickness, planed, ploughed, etc.
- Surfaces exposed by minor cutting/ drilling: Treat with two flood coats of a solution recommended by main treatment solution manufacturer.

**450 MOISTURE CONTENT**

- Moisture content of wood and wood based products at time of installation: Not more than:
  - Covered in generally unheated spaces: 24%.
  - Covered in generally heated spaces: 20%.
  - Internal in continuously heated spaces: 20%.

**510 PROTECTION**

- Generally: Keep timber dry and do not overstress, distort or disfigure sections or components during transit, storage, lifting, erection or fixing.
- Timber and components: Store under cover, clear of the ground and with good ventilation. Support on regularly spaced, level bearers on a dry, firm base. Open pile to ensure free movement of air through the stack.
- Trussed rafters: Keep vertical during handling and storage.

**550 EXPOSED TIMBER**

- Planed structural timber exposed to view in completed work: Prevent damage to and marking of surfaces and arrises.

**JOINTING TIMBER****570 JOINTING/FIXING GENERALLY**

- Generally: Where not specified precisely, select methods of jointing and fixing and types, sizes and spacings of fasteners in compliance with section Z20.

**J**

**Waterproofing**

**J30**

**Liquid applied tanking/ damp proofing**

### J30 Liquid applied tanking/ damp proofing

- 10 COLD APPLIED DAMP PROOFING FOR RAISED MASONARY PLANTERS
- Substrate: Brickwork and concrete blockwork.
  - Primer: As coating manufacturer's recommendations.
  - Coating: Bituminous.
    - Manufacturer: Contractor's choice.
    - Product reference: Contractor's choice.
    - Application: x2 coats as manufacturer's recommendations.
  - Reinforcement: As coating manufacturer's recommendations.
  - Blinding: As coating manufacturer's recommendations.
- 11 GRP WATER PROOFING FOR TIMBER PLANTERS AND WATER FEATURES
- Substrate: In situ concrete slab as per section E10.
  - Primer: As coating manufacturer's recommendations.
  - Coating: GRP.
    - Manufacturer: Water feature contractor's choice.
    - Product reference: Water feature contractor's choice.
    - Application: x2 coats as coating manufacturer's recommendations.
  - Reinforcement: As coating manufacturer's recommendations.
  - Blinding: As coating manufacturer's recommendations.
- 50 WORKMANSHIP
- Substrates generally: Smooth, even textured, clean, dry and frost free.
  - Curing period for concrete substrates (minimum): 7 days.
  - Moisture content and stability of substrate: Must not impair integrity of finished tanking/ damp proofing.
  - Preliminary work: Complete.
  - Adjacent surfaces exposed to view in finished work: Protect.
  - Primer application: Uniform, continuous coverage.
  - Coatings:
    - Apply in dry atmospheric conditions when substrate is dry.
    - Uniform, continuous coverage. Do not allow to pool in hollows.
    - Firmly adhered to substrate and free from imperfections.
    - Prevent damage to finished coating.
  - Penetrations: Impervious.
  - Final covering: Apply as soon as possible after coating has hardened.
- 60 JUNCTIONS WITH DPCS
- Dpcs: Clean, all edges fully exposed.
  - Application: Fully coat dpc and overlap adjacent surfaces by (minimum) 50 mm .
- 70 BLINDING
- Coatings: Blind whilst wet .
  - Surplus material: Remove when coatings are completely dry.
- 90 BACKFILLING TO EXTERNAL COATINGS
- Timing: Carry out as soon as possible after tanking and protection are complete.