

Parks College - Repair Specification

30 June 2020

This document includes:

Code	Section	Revision	Dated
F10	Brick/ block walling	0	29 Jun 2020
G20	Carpentry/ timber framing/ first fixing	0	29 Jun 2020
H62	Natural slating	0	29 Jun 2020
H71	Lead sheet coverings/ flashings	0	29 Jun 2020
K20	Timber board flooring/ sarking/ linings/ casings	0	29 Jun 2020
L10	Windows/ Rooflights/ Screens/ Louvres	0	29 Jun 2020
L40	General glazing	0	29 Jun 2020
M23*	Repairing/Renovating: Plaster/Render (Historic Buildings)	0	29 Jun 2020
M60	Painting/ clear finishing	0	29 Jun 2020
N16	Bird and vermin control systems	0	29 Jun 2020
Z10	Purpose made joinery	0	29 Jun 2020
Z21	Mortars	0	29 Jun 2020

F
Masonry

F10
Brick/ block walling

Section Revision History

No.	Purpose	
0	Initial issue	29th Jun 2020

Clauses amended in Revision 0

This is the first revision stamp for this section. For all future revision stamps, details of all clauses amended at that revision will be included here.

F10 Brick/ block walling

TYPES OF WALLING

116* **HANDMADE CLAY FACING BRICKWORK**

- Bricks: Salvaged second hand from site or new to match existing exactly (to approved sample)
- Sizes: Match existing adjacent bricks
- Colour: To match adjacent/existing brickwork
- Mortar: For Bedding and Jointing External Wall Facing and Chimney Stacks as Section Z21.
- Repointing see Clause F10/491, Jointing and Repointing as Clause F10/496
- Mix: 1 part Hydraulic Lime, 3.5 NHL
1 part pit sand sieved to <2.36 mm.
½ part fine red sand sieved to <600 microns
1 parts silica quartz sand sieved to <1000 microns
- Lime: St Astier, NHL 3.5. Obtained from Setra Marketing Ltd: 01372-465779, (fax: 01372-801302).
- Sands: to CA's approval, Heritage mix to above grading obtained from Tarmac Tilcon as agreed on site.
- Bond: English, to match existing .
- Joints: To match existing .
- Features: Tri-tone brick banding of red, yellow and black brick. Paint to be removed from adjacent areas of brick to determine correct colour banding. Matching colours of brick to be used to repair banding. .

WORKMANSHIP GENERALLY

430 **CONDITIONING OF CLAY AND CALCIUM SILICATE BRICKS AND CLAY BLOCKS**

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

491* **REPOINTING**

- Careful and sympathetic repointing is of the utmost importance in preserving the colour, texture and general character of old brickwork and stonework. Strong cement mortars are dark and harsh in colour; also they shrink and pull away the edges of the bricks. Flush pointing is unsuited to the irregularly shaped edges and faces of early brickwork and stonework and any form of struck pointing gives a hard and mechanical appearance to the wall. The following instructions are to be brought to the notice of every bricklayer and mason employed on the work and are to be carefully and fully carried out.
- Rake out joints to a depth of at least 25mm or more if the old mortar has perished; remove loose particles to make a good key for the new mortar. Press the new mortar well into the joints to assist adhesion and to ensure that no voids are left. When the joints are filled the mortar is to finish slightly recessed from the general face of the brickwork so that the mortar does not encroach upon the irregular arrisses or spread over any worn or rounded edges of the bricks or stone.
- As soon as the mortar has taken the initial set it is to be stippled with a stiff bristle brush to produce a slightly rough surface in keeping with the old work.
- Mortar: As section Z21, mix 1 part St Astier Hydraulic lime NHL 3.5 to 2:5 parts of local well graded sand.

496* **JOINTING AND REPOINTING**

- Unless specified otherwise, all joints in second-hand or repaired brickwork areas, or new work built to match existing.
- Finish joints as the work proceeds.
- Once the mortar has taken its initial set brush over with a Hessian rag, stick or bristle brush to leave slightly recessed joint and to give the mortar a slightly textured surface.

520 ACCURACY

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

561 COURSING BRICKWORK WITH EXISTING

- Gauge: Line up with existing brick courses.

665 POINTING TO ALL MASONRY REPAIRS

- Joint preparation: Remove debris. Dampen surface.
- Mortar: As section Z21.
 - Standard: Not applicable.
 - Mix: 1:2 NHL 3.5 hydraulic lime:sharp well graded sand, colour and texture to match existing.
 - Additional requirements: Submit 3 no. samples of mortar mixed for approval by the conservation architect.
- Profile: Flush (to match existing).

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 brick/ block walling finished fair.
 - Painted facework: The only requirement to be waived is that relating to colour.

730 BRICK/ CONCRETE BLOCK SAMPLES

- General: Before placing orders with suppliers submit for approval of appearance labelled samples of the following: Bricks as in clause F10/116. Allow for 3 no. samples of each brick type (red, yellow and black brick) to suit tri-tone brick banding.
- Selection of samples: Representative of the range in variation of appearance.

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.

790 PUTLOG SCAFFOLDING

- Use: Not permitted in facework.

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.