

# ST NICHOLAS CHURCH, TOOTING

## TOILETS REORDERING



## SPECIFICATION

**CARDEN & GODFREY** *Architects*  
33 Clerkenwell Close, London EC1R 0AU

**MARCH 2021**



## ***Part 1: Preliminaries***

- 1.1 Location of Project  
St Nicholas Church, Church Lane, Tooting, London SW17 9PP
- 1.2 Scope of the Work  
The work consists of: Refurbishment of existing toilet facilities facilities with the alteration of one existing mezzanine-level toilet into two smaller cubicles, with associated new drainage and water connections.
- 1.3 Client  
The PCC of St Nicholas Church, Tooting.
- 1.4 Design Team  
Architect & Principal Designer:  
Carden & Godfrey Architects  
33 Clerkenwell Close, London EC1R 0AU  
T: 020 7490 0300  
Contact: andy@cardenandgodfrey.co.uk  
          michael@cardenandgodfrey.co.uk
- 1.5 Drawings  
Contract drawings included with tender documents are:  
7066.00 Site Plan  
7066.101 Ground Floor Plan Existing.  
7066.102 Ground Floor & Mezzanine Part Plans As Existing.  
7066.202 Mezzanine Part Plans As Proposed.  
7066.203 Mezzanine Part Section As Proposed  
7066.204 Ground Floor Part Plan As Proposed.
- 1.6 Inspection of Site  
Contractors tendering must visit the site, acquaint themselves with all aspects of the proposed works, problems of access, parking etc, and obtain all necessary information relating to the work.  
  
Arrangements for visiting should be made with: Richard Gurney  
richardgurney69@gmail.com 07914 836519
- 1.7 Conditions of Contract  
Exchange of letters but with contract conditions as the Form of Contract will be: JCT Minor Works Building Contract 2016 with latest amendments  
  
The following conditions will apply:
- |                                |                                |
|--------------------------------|--------------------------------|
| ▪ Base date                    | 1 February 2021                |
| ▪ Construction industry scheme | Employer is not a 'contractor' |
| ▪ CDM Regulations              | The project is not notifiable  |

▪ Framework Agreement	Not Applicable
▪ Supplemental Provisions	
○ Collaborative working	Applies
○ Health & Safety	Applies
○ Cost savings and value improvements	Applies
○ Sustainable development	Applies
○ Performance indicators and monitoring	Does not apply
○ Notification and negotiation of disputes	Applies
▪ Article 7 and Schedule 1 (Arbitration)	Does not apply
▪ CDM Planning period	2 weeks ending on the date of commencement
▪ Date for commencement	<u>26 July 2021</u>
▪ Date for Completion	<u>19 August 2021</u>
▪ Contract Period	<u>4 weeks.</u>
▪ Liquidated Damages	£50/day
▪ Rectification Period	12 months
▪ Retention during the works	5%
▪ Retention after Practical Completion	2.5%
▪ Supply of documents for final account	3 months from PC
▪ Fluctuations	Does not apply
▪ Contractors insurance (clause 5.3.2)	£5m
▪ Insurance of the works	Clause 5.4B applies

#### 1.8 Insurance

The Contractor is to insure and indemnify the employer against claims arising from injury to persons and property in accordance with clauses 5.1 & 5.2.

The Employer will take out Joint Names insurance for the works in accordance with clause 5.4B of the contract.

Current certificates of insurance are to be produced for inspection by the Architect before work starts on site.

#### 1.9 Discrepancies between Documents

This specification is to be read in conjunction with the Contract Drawings. In the event of any discrepancy between the specification and these drawings, or any further drawings issued, the drawing shall prevail. Any such discrepancy is to be brought to the Architect's attention immediately.

#### 1.10 Programme & Health & Safety Plan - See 1.22

Within 2 weeks of the date of acceptance of his tender, the successful Contractor is to provide for agreement a programme covering all activities involved in the works and a Health & Safety Plan in accordance with the CDM Regulations 2015. He is to agree a programme with any subcontractors or suppliers as appropriate, and is to include their work in his programme for agreement with the Architect. During the progress of the works, this programme is to be monitored, and updated as necessary.

### 1.11 Materials & Workmanship

The Contractor is to provide everything necessary for the works specified, including all grounds, packings, fixings etc not specifically mentioned but currently used in good building practice. Where materials and workmanship are not specifically described they are to be suitable for the purpose and in accordance with good building practice.

The standard of workmanship throughout is to be of the highest quality and is to comply with current British Standards, British Standard Codes of Practice, and standards of relevant trade associations, as appropriate. All materials are to comply with the relevant British Standard Specification as a minimum standard, and are to be used in accordance with manufacturers' instructions. The Contractor is deemed to have obtained and comprehended manufacturers' instructions for all products used.

Unless otherwise specified, workmanship shall comply with BS8000.

### 1.12 Samples & Testing

The following will be required to be provided by the Contractor, free of charge:

- Floor finish sample
- Tile sample
- Paint samples (6 no.)

### 1.13 Co-ordination and Checking

The Contractor shall be responsible for co-ordinating the specified or agreed constructional accuracies with any Sub-Contractor or Supplier, and to notify the Architect of any inadequacies or discrepancies before the related work begins on site.

### 1.14 Site Access & Parking

Access to the site is to be obtained via Church Lane and the NW door.

The Contractor is to provide any temporary roads etc & hardstandings required for the works; to abide by all police regulations and requirements in respect of public roads and footpaths; to provide protection for the public adjacent to the site access; to maintain access for emergency vehicles; to obtain all necessary consents for use of public roads for loading and unloading, etc; and to make good any damage sustained to the agreement of the local authority.

### 1.15 Working Area

The contractors working area is to be limited to the interior of the church and more specifically the area where the toilets are located.

### 1.16 Storage

The Contractor is to provide storage facilities for materials etc as necessary. Location of storage facilities is to be agreed with the Architect in advance. The employer can provide additional storage facilities by agreement.

Areas where materials are stored are to be kept tidy and removed at the end of the works; paved and grassed areas are to be fully reinstated to their previous condition.

1.17 Welfare Facilities

The Contractor is to provide accommodation and toilets for his workforce as necessary and in accordance with the requirements of the CDM Regulations 2015. The location of huts and toilets is to be agreed with the Architect before the works start.

All facilities whether provided by the Employer or not are to be kept in clean, tidy and hygienic order.

1.18 Site Services

Water is available on site free of charge. Allow for making any necessary temporary connections and for reinstatement on completion.

Electricity is available on site free of charge. Allow for making temporary connections to existing switchboard and for reinstatement on completion.

1.19 Temporary Works & Plant

The Contractor is to provide all necessary plant and tools for the works; and all necessary scaffolding, hoardings, fans, planked footways, hoists, stagings, guardrails etc necessary to protect the public and others, and for the proper execution of the works.

1.20 Site Safety Etc

The Contractor is to comply in every respect with current Health & Safety at Work legislation.

1.21 Construction (Design & Management) Regulations 2015

The CDM Regulations 2015 apply to all construction projects.

The project is not considered to be a notifiable project under the CDM Regulations because it is expected to require less than 500 person days to complete the work or because it will not take longer than 30 days and have more than 20 people working on site at any one time. If it is found to be so at any stage of the project, the Employer will notify HSE accordingly as required by the Regulations.

Submission of a tender signifies acceptance by the successful contractor of the role of Principal Contractor as defined in the Regulations.

The duties of a Principal Contractor include:

- a) Submitting the Health & Safety Plan to the Principal Designer. This is required within 10 working days of the tender being accepted, and must be developed to an appropriate standard before work can commence on site.
- b) Ensuring all Contractors cooperate and abide by the rules of the Health and Safety Plan.
- c) Providing the Principal Designer with all relevant information for the Health and Safety File.

A Principal Designer has already been appointed (see 1.4).

The Pre-construction information is as set out below:

**1. Description of the project**

a) The project involves internal re-ordering in St Nicholas' Church, in order to improve the existing toilets and add another one on the ground floor. The minimum time to be allowed between appointment of the principal contractor and instruction to commence work on site is two weeks.

b) Client: PCC of St Nicholas' Church, Tooting.  
Architect & Principal Designer: Carden & Godfrey Architects

c) The structure will not be used as a workplace; it is used as a place of worship.

d) There is a surveyed part ground floor plan showing the toilets and corridor. There is also an overall plan drawing of the whole building which was traced from prints and may not be to scale. Exact dimensions to be checked on site. There are no as built records or building services.

**2. Client's considerations and management requirements**

a) The health and safety goal for this project is to have no accidents or incidents- for each worker to return home at the end of each day in the same state of health as they arrive in the morning.

b) The Principal Contractor will be responsible for maintaining the security of the site during the works.

c) The Contractor to provide accommodation and toilets for his workforce.

d) The Church will be open to the public during the works and especially on Sundays for service. In addition there are various activities which take place in the church throughout the week, including in the upper hall for which access must be maintained, however during the proposed contract period there are no midweek activities planned and the only requirement is maintain one working toilet on the ground floor for Sunday services.

e) Should the work not be completed within the contract period, the contractor should be aware that there will be activities in the building throughout the week including an after school club which meets from 3pm every day, and the contractor will need to work around such activities

f) The extent of the Contractor's site area at ground and mezzanine floor level will be agreed and demarcated to clearly identify the limit of responsibility (i.e. around messing and storage areas and access routes).

g) No smoking is permitted on site.

h) There is limited parking space to the front of the Church; exact number of parking spaces allocated to be agreed.

### 3. **Environmental restrictions and existing on-site risks**

a) An asbestos survey was undertaken in Feb. 2016 and asbestos material was *presumed* to be present at the toilet cistern of the first floor toilet. The potential for fibre release was found to be very low. This cistern will be removed prior to starting on site. The asbestos register will be made available to the contractor for him to manage.

b) The area of the ground floor and mezzanine level toilets and corridor is the only one that has been measured surveyed. The overall plan has not been surveyed; the Contractor to check dimensions on site.

c) Site set-up should avoid blocking the exit route from the crypt space and upper hall during the works

### 4. **Significant design and construction hazards**

a) The works are to take place in a stairwell including construction over the stairs and therefore pose a significant falling risk.

### 5. **The health and safety file**

A Health & Safety file is to be prepared and handed to the Principal Designer prior to Practical Completion. The File will contain information on the materials used in the construction, details of subcontractors, as built specification and drawings (provided by the Architect), any residual risks which the client needs to be aware of as well as operation and maintenance manuals. The file should be provided in digital format.

All Contractor's & Sub Contractor's design is to be submitted to the Principal Designer at the same time as it is submitted to other designers for approval, and not less than 10 working days before it is intended to commence that aspect of the work.

#### 1.22 Fire Precautions

The Contractor is to comply with the requirements of the latest edition of 'Fire Prevention on Construction Sites', the Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation published by the BEC and the Loss Prevention Council. In particular a site fire safety plan is to be created implemented and updated as work proceeds in accordance with the Code.

All reasonable precautions are to be taken to prevent loss or damage by fire.

There is to be no smoking on site.

Where hot works (such as lead burning or use of blow torches) is to be undertaken, an approved system of "hot work permits" must be instituted to police these precautions. There must always be at least two working fire extinguishers (one H<sub>2</sub>O, one CO<sub>2</sub>) available to hand. Hot work must cease at least two hours before the end of the working day and the site of hot work checked for any sign of residual heat or smouldering immediately prior to leaving the site.



1.23 Site Rules & Restrictions

The contractor should note that the site is a place of worship and swearing or other inappropriate behaviour will not be tolerated.

1.24 Noise

Noise and disturbance is to be kept to a minimum.

The playing of transistor radios or similar instruments will not be allowed.

1.25 Working Hours

Working hours are to be:

From 08.00 to 17.00hrs weekdays

From 08.00 to 13.00hrs Saturdays

No work outside these hours may be carried out without the Client's prior approval.

The Contractor may be asked to make the church available for a funeral at relatively short notice. This may require getting the church tidy and safe, helping with cleaning and stopping work during the service.

The contractor must make one working toilet available on the ground floor for use by the congregation on every Sunday through the contract.

If the contract works are not complete within the available contract period, the contractor should be aware that the building is used for a number of mid-week activities including an after school club from 3pm every day and any remaining works will need to accommodate these building users.

1.26 Foreman

The Contractor is to keep on site during all working hours a competent foreman (who may be a working foreman) capable of co-ordinating the work and taking and implementing the architect's instructions.

1.27 Damage

All possible care is to be taken to avoid damage to services, roads, paths; to trees, shrubs, lawns etc, to be retained; and any existing buildings within the site area, and protection is to be provided to the architect's approval as appropriate; any damage caused will be made good at the Contractor's expense and to the satisfaction of the Architect.

1.28 Adjoining & Occupied Properties

The Contractor is to ensure that adjoining properties are protected at all times, and that his labour keeps within the curtilage of the site and does not cause nuisance to the occupants. All work to be carried out adjacent to such properties must be carried out taking due regard for the health and safety needs of the occupants. Any damage to adjoining properties is to be made good at the Contractor's expense.

The Contractor is to ensure when the project premises are occupied or partially occupied during the works that his labour keeps within the agreed working area and does not cause nuisance to the occupants. All work must be carried

out taking due regard for the health and safety needs of the occupants, particularly in relation to noise and dirt.

1.29 Sign & Nameboards

The contractor may at his own expense erect boards bearing the names of his company, sub-contractors, consultants, etc, in positions and in a form approved by the Architect.

1.30 Drying the Works

The Contractor is at his own expense to dry out the works as necessary, including using industrial type heaters where appropriate, to facilitate progress in line with his programme and satisfactory completion.

1.31 Protection of the Works

The contractor is to cover up and protect all new work as necessary from the weather or damage from any other cause. He is to maintain this protection throughout the contract, and to clear away on completion. Any damage sustained is to be made good at the contractor's expense.

The contractor is to cover up, protect, and make secure any elements of the existing building which are liable to be damaged by the carrying out of the works and is to protect all floors, stairways, joinery, etc to the Architect's approval.

All materials brought to site are to be properly stacked and protected from the weather, as appropriate.

1.32 Disposal of Spoil & Surplus Materials

The contractor is to remove all spoil, rubbish and surplus material from the site as they accumulate, unless otherwise specified. Waste materials should be sorted and recycled wherever possible to minimise landfill.

1.33 Prime Cost & Provisional Sums

Prime cost (PC) Sums are to cover the purchase cost of the goods or services specified, and the contractor is to price additionally and separately for profit and attendance.

Provisional Sums are deemed to include profit and attendance if relevant. Failure by the contractor to state the sums or percentages required for profit and attendance will be taken to mean that no payment for profit and attendance is required.

1.34 Subcontractors

The Contractor is to use domestic sub-contractors for specialist work for which he himself does not have appropriate tradesmen.

1.35 Attendance on Subcontractors & Suppliers

The contractor is to provide general attendance on suppliers as required, which will include provision of access to the site, taking delivery, unloading material and disposal of refuse.

The contractor is to provide general attendance on sub-contractors as required, which may normally include provision of access to the site and their area of working, including scaffoldings, stagings, etc; provision of site accommodation and storage; provision of site services; protection, and removal of rubbish.

1.36 Statutory Authorities

The contractor is to allow for complying with all statutory requirements, and is to submit all notices relating to Building Regulation inspections to the Local Authority, and is to indemnify the Employer against his failure to do so. He is to allow for attendance at inspections, provision of access, and carrying out of tests as requested by representatives of the statutory authorities. If inspections call for additional work not covered by the specification, the Contractor is to bring this immediately to the Architect's notice and await the necessary instructions before proceeding.

The contractor is to pay all local authority charges relating to opening of the footpath and highway, connections to drains, skip and scaffolding licences etc, as applicable.

1.37 Security

The Contractor is to provide adequate security arrangements to protect his site, temporary works, site accommodation etc.

The contractor is to maintain the existing security of the building at the end of each working day, providing all necessary temporary doors, hoardings, locks, etc, to prevent unlawful access and vandalism.

1.38 Defects

A defect is an item which is not in accordance either with the Specification, or with good building practice where not covered in the Specification. Any defects notified, either during the Contract Period or the Defects Liability Period, are to be remedied immediately at the contractor's own expense, to the satisfaction of the Architect.

Any work which the Architect judges to be inferior to an approved sample or trial panel, or to be unacceptably different from parts of the works already constructed, or which is subsequently stained or damaged will not be accepted and is to be remedied immediately at the contractor's own expense to the satisfaction of the Architect.

Normal drying shrinkage is not regarded as a defect except where particularly specified. Shrinkage on joinery is regarded as a defect, as it will imply that the contractor has not programmed the works and maintained appropriate temperature and moisture content levels to ensure that this does not take place. Cracking of plaster fixed to timber studwork or ceiling joists will be considered as a defect for the same reason.

1.39 Cleaning the Works

Before Practical Completion, the contractor is to thoroughly “sparkle” clean the works and areas to which he has been allowed access, remove all splashes, dust, dirt and debris and polish clean all surfaces.

## ***Part 2: Materials & Workmanship***

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**G20 Carpentry/ timber framing/ first fixing****2 TIMBER PROCUREMENT**

All timber to be procured from sustainably managed sources, in accordance with British & International standards. Contractor to provide documentary evidence.

**5 STRUCTURAL SOFTWOOD FOR STRUCTURAL USE GENERALLY**

Graded to BS 4978, BS EN 14081-1, or equivalent. To be treated with flame retardant and wood protection. Strength class to BS EN 338: C24.

**10 UNGRADED SOFTWOOD FOR INTERNAL NON-STRUCTURAL USE**

To be free from decay and insect attack, and with no large knots. To be treated with an approved fire retardant. To have a regularized surface finish.

**30 SELECTION AND USE OF TIMBER**

Use only undamaged timber, with no splits or cracks.

**32 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.

**35 PROCESSING TREATED TIMBER**

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

**40 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%.

**43 BOLTED JOINTS**

Bolt spacings as shown on drawings and as per BS EN 1995-1-1, section 8.5.

Holes for bolts: Located accurately and drilled to diameters as close as practical to the nominal bolt diameter and not more than 2 mm larger.

Washers placed when bearing on timber. Bolts tightened and checked in accordance with good general practice.

**50 ADDITIONAL SUPPORTS**

Position additional studs as noggings as required to permit the fixing of additional sheathing, as shown in the drawings. Timber to be of adequate size and have the same treatment as adjacent timber supports.

**55 JOISTS GENERALLY**

Centres: Equal, and not exceeding designed spacing. Bowed joists: Installed with positive camber. End joists: Positioned about 50 mm from masonry walls.

**70 TRIMMING OPENINGS**

Trimmers and trimming joists: Not less than 25 mm wider than general joists.

**K10 Gypsum board dry linings/ partitions/ ceilings****65 DRY LINING GENERALLY**

Plasterboard to be Gypsum plasterboard, in accordance with British standards. Boards to be cut neatly without damaging core or tearing paper. Joints on 2-layer boarding should be staggered.

**69 INSTALLING BEADS/ STOPS**

Cut beads neatly using mitres at return angles. Fix securely using longest length possible, and plumb level. Remove surplus material while still wet.

**70 ADDITIONAL SUPPORTS**

Framing to be accurately positioned and securely fixed to give support.

**87 SEALING GAPS AND AIR PATHS**

Apply sealant to perimeter abutments and around openings as a continuous bead with no gaps. Gaps between floor and underside of gypsum board to be filled with joint compound.

**K11 Rigid sheet flooring/ sheathing/ decking/ sarking/ linings/ casings****10 WOOD-BASED SHEETS GENERALLY**

Standard: To BS EN 13986. Evidence of compliance to be provided.

**40 PLYWOOD LININGS TO PARTITIONS**

Plywood linings to be 12mm WBP Plywood. Use 38mm x 8-gauge wood screw into pilot holes. Fixing at 150mm centres, 300mm along intermediate supports.

**67 ADDITIONAL SUPPORTS**

Additional studs, noggings, and battens to be provided in accordance with the manufacturer's recommendations. Not less than 50 mm wide and of adequate thickness. Treat as adjacent timber.

**72 BOARD MOISTURE CONTENT AND CONDITIONING**

Moisture content of boards at time of fixing: Appropriate to end use. Conditioning regime: Submit proposals.

**85 FIXING GENERALLY**

Moisture content of timber supports (maximum): 18%. Fasteners: Evenly spaced in straight lines and in pairs across joints, with sufficient distance to edge of the board to prevent damage.

**L20 Doors****10 TIMBER PROCUREMENT**

All timber to be procured from sustainably managed sources, in accordance with British & International standards. Contractor to provide documentary evidence.

**20 WOOD DOORS DG10 & DG11**

To be flush oak veneered solid door with oak lipping to all edges. Contractor to submit proposals for manufacturer and product reference.

**50 WOOD DOOR FRAMES AND ARCHITRAVES**

Door frames and architraves to be Softwood. To be primed and painted as per clause M60. Fixings at max. 150mm from ends of each jamb, and at 600mm centres max.

**80 SEALANT JOINTS**

Contractor to submit proposals for type of sealant. Colour to match background.

**85 FIXING IRONMONGERY GENERALLY**

Fasteners: Supplied by ironmongery manufacturer.  
Finish/ Corrosion resistance: To match ironmongery.  
Holes for components: No larger than required for satisfactory fit/ operation.  
Adjacent surfaces: Undamaged.  
Moving parts: Adjusted, lubricated, and functioning correctly at completion.

**M20 Plastered/ Rendered coatings****65 MIXING**

Render mortars (site-made):  
Batching: By volume using gauge boxes or buckets.  
Mix proportions: To be agreed. Based on damp sand. Adjust for dry sand.  
Mixes: Of uniform consistence and free from lumps.

**67 COLD WEATHER**

Internal work: Take precautions to prevent damage to internal coatings when air temperature is below 3°C.

**71 SUITABILITY OF SUBSTRATES**

General: Suitable to receive coatings. Sound, free from contamination and loose areas.



**80 PLASTERBOARD BACKINGS**

Additional framing supports:

Fixtures, fittings, and service outlets: Accurately position to suit fasteners.

Board edges and perimeters: To suit type and performance of board.

Joints: Joint widths (maximum): 3 mm.

End joints: Stagger between rows.

Two-layer boarding: Stagger joints between layers.

Joint reinforcement tape: Apply to fixing holes, joints and angles except where coincident with metal beads.

**82 BEADS/ STOPS**

Location: External angles and stop ends.

Materials: External render: Stainless steel.

Internal plaster/ render: Galvanized steel.

Fixing: Secure and true to line and level.

Beads/ stops to external render: Fix mechanically.

**87 APPLICATION OF COATINGS**

General: Apply coatings firmly and achieve good adhesion.

Appearance of finished surfaces: Even and consistent. Free from rippling,

hollows, ridges, cracks and crazing. Accuracy: Finish to a true plane with

walls and reveals plumb and square. Drying out: Prevent excessively rapid or

localized drying out. Keying undercoats: Cross scratch (plaster coatings) and

comb (render coatings). Do not penetrate undercoat.

**M40 Ceramic tiling****15 NEW BACKGROUNDS/BASES**

Background drying times (minimum):

Rendering: 2 weeks.

Gypsum plaster: 4 weeks.

**25 NEW PLASTER**

Plaster primer: Apply if recommended by adhesive manufacturer.

**30 FIXING GENERALLY**

Colour/ shade: Avoid unintended variations within tiles for use in each area/ room.

Variiegated tiles: Mix thoroughly.

Adhesive: Compatible with background/ base.

Cut tiles: Neat and accurate.

Fixing: Provide adhesion over entire background/ base and tile backs.

Final appearance: Before bedding material sets, make adjustments necessary to give true, regular appearance to tiles and joints.

Deviation of surface: Measure from underside of a 2 m straightedge with 3 mm thick feet placed anywhere on surface. The straightedge should not be obstructed by the tiles/ mosaics and no gap should be greater than 6 mm, i.e. a

tolerance of  $\pm 3$  mm. Surplus bedding material: Clean from joints and face of tiles/ mosaics.

**35** SETTING OUT

Joints: True to line, continuous and without steps.

Joints on walls: Horizontal, vertical and aligned round corners.

Cut tiles: Minimise number, maximise size and locate unobtrusively.

**50** ADHESIVE BED – NOTCHED TROWEL METHOD TO WALLS

Application: By 3 mm floated coat of adhesive to dry background. Comb surface. Tiling: Press tiles firmly onto float coat.

**70** GROUTING

Sequence: Grout when bed/adhesive has set sufficient to prevent disturbance of tiles. Joints: 6 mm deep (or depth of tile if less). Free from dust and debris.

Grouting: Fill joints completely, tool to profile, clean off surface. Leave free from blemishes. Polishing: When grout is hard, polish tiling with dry cloth.

**M50 Lino sheeting**

**65** LAYING COVERINGS

Base/ substrate condition: Rigid, dry, smooth, free from grease, dirt and other contaminants. Use a primer where recommended by adhesive manufacturer.

Allow to dry thoroughly. Adhesive: As specified, as recommended by covering manufacturer or, as approved. Conditioning of materials prior to laying: As recommended by manufacturer.

Environment: Before, during and after laying, provide adequate ventilation and maintain temperature and humidity approximately at levels which will prevail after building is occupied. Finished coverings: Accurately fitted,

tightly jointed, securely bonded, smooth and free from air bubbles, rippling, adhesive marks, stains, trowel ridges and high spots.

**70** EDGINGS AND COVER STRIPS

Manufacturer: Submit proposals. Product reference: Submit proposals.

Material/ finish: Stainless steel. Fixing: Secure (using matching fasteners where exposed to view) with edge of covering gripped.

**M60 Painting/ clear finishing****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.

**35 FIXTURES AND FITTINGS**

Removal: Before commencing work: Ironmongery, coverplates, grilles, wall clocks, and other surface mounted fixtures.  
Replacement: Refurbish as necessary, refit when coating is dry.

**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.

**43 PLASTER PREPARATION**

Nibs, trowel marks and plaster splashes: Scrape off. Over trowelled 'polished' areas: Provide suitable key.

**52 SEALING OF INTERNAL MOVEMENT JOINTS**

General: To junctions of walls and ceilings with architraves, skirtings and other trims.  
Sealant: Water-borne acrylic. Manufacturer: Contractor's choice. Product reference: Contractor's choice. Preparation and application: As section Z22.

**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.

**N13 Sanitary appliances and fittings**

**580 SEALANT POINTING**

Sealant to be High Modulus One Part Silicone Sealant, and to all relevant British Standards. Colour to match background. Contractor to submit proposals of manufacturer & product reference.

**610 INSTALLATION GENERALLY**

Assembly and fixing: Surfaces designed to falls to drain as intended.

Fasteners: Nonferrous or stainless steel.

Supply and discharge pipework: Fix before appliances.

Fixing: Fix appliances securely to structure. Do not support on pipework.

Jointing and bedding compounds: Recommended by manufacturers of appliances, accessories and pipes being jointed or bedded.

Appliances: Do not use. Do not stand on appliances.

On completion: Components and accessories working correctly with no leaks.

Labels and stickers: Remove.

**620 NOGGINGS AND BEARERS**

Noggings, bearers, etc. to support sanitary appliances and fittings: Position accurately. Fix securely.

**630 TILED BACKGROUNDS OTHER THAN SPLASHBACKS**

Timing: Complete before fixing appliances. Fixing appliances: Do not overstress tiles.

**670 INSTALLING CISTERNS**

Cistern operating components: Obtain from cistern manufacturer.

Inlet and flushing valves: Match to pressure of water supply.

Internal overflows: Into pan, to give visible warning of discharge.

External overflows: Fix pipes to falls and locate to give visible warning of discharge. Agree location where not shown on drawings.

**710 INSTALLING TAPS**

Fixing: Secure against twisting.

Seal with appliance: Watertight.

Positioning: Hot tap to left of cold tap as viewed by user of appliance.

**720 INSTALLING WASTES AND OVERFLOWS**

Bedding: Waterproof jointing compound.

Fixing: With resilient washer between appliance and backnut.

**P20 Unframed isolated trims/ skirtings/ sundry items**80 INSTALLATION GENERALLY

Joinery workmanship: As section Z10.

Metal workmanship: As section Z11.

Methods of fixing and fasteners: As section Z20.

Straight runs: To be in one piece, or in long lengths with as few joints as possible. Running joints: Location and method of forming to be agreed where not detailed. Joints at angles: Mitre, unless shown otherwise.

Position and level: To be agreed where not detailed.

**P31 Holes, chases, covers and supports for services**10 HOLES, RECESSES AND CHASES IN MASONRY

Locations: To maintain integrity of strength, stability, and sound resistance of construction.

Sizes: Minimum needed to accommodate services.

Holes (maximum): 300 mm<sup>2</sup>.

Walls of hollow or cellular blocks: Do not chase.

Walls of other materials:

Vertical chases: No deeper than one third of single leaf thickness, excluding finishes.

Horizontal or raking chases: No longer than 1 m. No deeper than one sixth of the single leaf thickness, excluding finishes. Chases and recesses: Do not set back-to-back. Offset by a clear distance at least equal to the wall thicknesses.

Cutting: Do not cut until mortar is fully set. Cut carefully and neatly. Avoid spalling, cracking, and other damage to surrounding structure.

NOTCHES AND HOLES IN STRUCTURAL TIMBER

20 General: Avoid if possible.

Sizes: Minimum needed to accommodate services.

Position: Do not locate near knots or other defects.

Notches and holes in same joist: Minimum 100 mm apart horizontally.

Notches in joists:

Position: Locate at top. Form by sawing down to a drilled hole.

Depth (maximum): 0.15 x joist depth.

Distance from supports: Between 0.1 and 0.2 x span.

Holes in joists:

Position: Locate on neutral axis.

Diameter (maximum): 0.25 x joist depth.

Centres (minimum): 3 x diameter of largest hole.

Distance from supports: Between 0.25 and 0.4 of span.

Holes in struts and columns: Locate on neutral axis.

Diameter (maximum): 0.25 x minimum width of member.

Centres (minimum): 3 x diameter of largest hole.

Distance from ends: Between 0.25 and 0.4 of span.

**40** SEALING AROUND SERVICES

Sealant around Hot & cold-water pipes and electrical cabling and fitting to be expanding foam. To completely fill all gaps and be finished neatly.

**R11 Above ground foul drainage systems****11** PLASTICS BRANCH PIPEWORK

Materials and standards: MUPVC to BS 5255 or PVC-C to BS EN 1566-1, Kitemark certified.

Manufacturer & product reference: Contractor's choice.

Colour: White.

Jointing: Solvent welded.

Fixing: Plastics brackets at 500 mm centres.

Accessories: Access fittings.

**21** PVC-U SOIL/ VENT PIPEWORK AND WC BRANCHES

Standard:

To BS EN 1329-1, Kitemark certified; or

To BS 4514, Kitemark certified.

Manufacturer: Contractor's choice.

Product reference: Submit proposals.

Colour: Grey.

Jointing: Solvent welded.

Fixing: Plastics brackets at 1800 mm centres.

Accessories: Access fittings and Air admittance valves; adaptor to connect to existing Cast Iron pipework

**45** AIR ADMITTANCE VALVES

Standard: To BS EN 12380 or Agrément certified.

Manufacturer: Contractor's choice.

Product reference: Contractor's choice.

Position: Vertical.

Unheated locations: Fit manufacturer's insulating cover.

**50** INSTALLATION GENERALLY

Standards: To BS EN 12056-1, BS EN 12056-2 (including National Annexes NA-NG) and

BS EN 12056-5.

Drainage from appliances: Quick, quiet and complete, without blockage, crossflow, backfall, leakage, odours, noise nuisance or risk to health.

Components: From same manufacturer for each type of pipework.

Access: Provide access fittings in convenient locations to permit cleaning and testing of pipework.

Thermal and building movement: Provide and maintain clearance as fixing and jointing proceeds.

Fixings: Allow the pipe to slide.

Finish: Plated, sherardized, galvanized, or other nonferrous.

Compatibility: Suitable for the purpose, material being fixed and substrate.

**60** PIPEWORK

Fixing: Securely plumb and/ or true to line. Fix lengths of discharge stack pipes at or just below socket collar or coupling.

Additional supports: Provide as necessary at junctions and changes in direction.

Cut ends of pipes: Clean and square with burrs and swarf removed.

**70** PIPEWORK TEST

Preparation: Temporarily seal open ends of pipework using plugs.

Testing: Connect a 'U' tube water gauge and pump air into pipework until gauge registers 38 mm.

Required performance: Allow a period for temperature stabilisation, after which the pressure of 38 mm is to be maintained without loss for at least 3 minutes.

**S90 Hot and cold-water supply systems – domestic****SYSTEM PERFORMANCE****24** PIPELINE SIZES

Sizing: Calculate sizes to meet simultaneous demand for the building in accordance with

BS 8558. Submit proposals.

Performance: Water velocity (maximum): 1.3 m/s for hot water and 2.0 m/s for cold water. Filling time (maximum) for cold water storage cistern: TBA.

**30** DEZINCIFICATION

Fittings, pipelines, equipment located below ground or in concealed or inaccessible locations: Resistant to dezincification, e.g. gunmetal.

**50** COPPER PIPELINES FOR GENERAL USE

Standard: To BS EN 1057, Kitemark certified.

Temper: Half hard R250.

Finish: Plain.

Colour: Natural.

Wall thickness (nominal):

OD 6, 8, 10 and 12 mm: 0.6 mm.

OD 15 mm: 0.7 mm.

OD 22 and 28 mm: 0.9 mm.

OD 35 and 42 mm: 1.2 mm.

Jointing:

Chromium plated: Type A compression fittings to BS EN 1254-2, chromium plated.

Plain: Integral lead free solder ring capillary fittings to BS EN 1254-1, Kitemark certified.

Plastics coated: Type A compression fittings to BS EN 1254-2.

Connections to appliances and equipment: Select from:

Compression fittings: To BS EN 1254-2, Kitemark certified.

Fittings with threaded ends: To BS EN 1254-4.

Supports: Plastics spacers, single screw fixing.

#### 55 INSULATION TO PIPELINES HOT & COLD WATER

Material: Preformed polyethylene foam.

Function: Protection from freezing.

Thermal conductivity: TBA.

Emissivity: TBA.

Thickness (minimum): To BS 5422, Tables 19 and 20 and in accordance with 'TIMSA guidance for achieving compliance with Part L of the Building Regulations', Table 6.1.1.

Fire performance: Class 1 spread of flame when tested to BS 476-7.

#### 60 VALVES GENERALLY

Types: Approved for the purpose by local water supply undertaker and of appropriate pressure and/ or temperature ratings.

Control of valves: Fit with handwheels for isolation and lockshields for isolation and regulation of circuits or equipment.

#### 62 DRAINING TAPS AS REQUIRED

Standard: Copper alloy to BS 2879, Type 1, hose connection pattern, Kitemark certified.

#### 70 INSTALLATION GENERALLY

Installation: To BS EN 806-4.

Performance: Free from leaks and the audible effects of expansion, vibration and water hammer. Fixing of equipment, components and accessories: Fix securely, parallel or perpendicular to the structure of the building.

Preparation: Immediately before installing tanks and cisterns on a floor or platform, clear the surface completely of debris and projections.

Corrosion resistance: In locations where moisture is present or may occur, provide corrosion resistant fittings/ fixings and avoid contact between dissimilar metals by use of suitable washers, gaskets, etc.

#### 79 PIPELINES INSTALLATION

Appearance: Install pipes straight, and parallel or perpendicular to walls, floors, ceilings, and other building elements.

Pipelines finish: Smooth, consistent bore, clean, free from defects, e.g. external scratching, toolmarks, distortion, wrinkling, and cracks.

Concealment: Generally conceal pipelines within floor, ceiling and/ or roof voids. Access: Locate runs to facilitate installation of equipment, accessories and insulation and allow access for maintenance.

Arrangement of hot and cold pipelines: Run hot pipelines above cold where routed together horizontally. Do not run cold water pipelines near to heating pipelines or through heated spaces. Electrical equipment: Install pipelines clear of electrical equipment. Do not run pipelines through electrical enclosures or above switch gear distribution boards or the like.



Insulation allowance: Provide space around pipelines to fit insulation without compression.

#### 80 PIPELINES FIXING

Fixing: Secure and neat.

Joints, bends and offsets: Minimize.

Pipeline support: Prevent strain, e.g. from the operation of taps or valves.

Drains and vents: Fix pipelines to falls. Fit draining taps at low points and vents at high points. Thermal expansion and contraction: Allow for thermal movement of pipelines. Isolate from structure. Prevent noise or abrasion of pipelines caused by movement. Sleeve pipelines passing through walls, floors or other building elements. Dirt, insects or rodents: Prevent ingress.

#### 82 SUPPORTS FOR PIPELINES

Spacing for copper pipelines: Fix securely and true to line at the following maximum centres:

15 and 22 mm pipe OD: 1200 mm horizontal, 1800 mm vertical.

28 and 35 mm pipe OD: 1800 mm horizontal, 2400 mm vertical.

42 and 54 mm pipe OD: 2400 mm horizontal, 3000 mm vertical.

Spacing for thermoplastics pipelines: Fix securely and true to line at the following maximum centres:

Up to 16 mm pipe OD: 300 mm horizontal, 500 mm vertical.

17-25 mm pipe OD: 500 mm horizontal, 800 mm vertical.

26-32 mm pipe OD: 800 mm horizontal, 1000 mm vertical.

Additional supports: Locate within 150 mm of connections, junctions and changes of direction.

#### 83 PIPELINE SPACING

Clearance (minimum) to face of wall-fixed pipes or pipe insulation:

From floor: 150 mm.

From ceiling: 50 mm.

From wall: 15 mm.

Between pipes: 25 mm.

From electrical conduit, cables, etc: 150 mm.

#### 84 JOINTS IN PIPELINES

Copper pipelines:

Preparation: Cut pipes square. Remove burrs.

Joints: Neat, clean and fully sealed. Install pipe ends into joint fittings to full depth.

Bends: Do not use formed bends on exposed pipework, except for small offsets. Form changes of direction with radius fittings.

Adaptors for connecting dissimilar materials: Purpose designed.

Substrate and plastics pipes and fittings: Do not damage, e.g. by heat when forming soldered joints.

Flux residue: Clean off. Capillary joints in plastics coated pipelines.

Plastics coating: Do not damage, e.g. by direct or indirect heat. Wrap completed joint (when cool) with PVC tape of matching colour, half lapped.

Thermoplastics pipelines: Standard: Fusion jointing in accordance with WIS 4-32-08.

Fittings and accessories for joints: Purpose designed.

Preparation: Cut pipes square. Remove burrs.

Joints: Neat, clean and fully sealed. Install pipe ends into joint fittings to full depth.

Compression fittings: Do not overtighten.

## **86 INSTALLING INSULATION TO PIPELINES**

Standard: In accordance with BS 5970.

Cold water pipelines: Insulate in unheated spaces. Insulate potable cold-water pipelines.

Hot water pipelines: Insulate, except for short lengths in prominent positions next to appliances.

External supply pipelines exposed to air or less than 750 mm below finished ground level: Insulate.

Appearance: Fix securely and neatly. Make continuous over fittings and at supports. Leave no gaps. Locate split on 'blind' side of pipeline.

Timing: Fit insulation after testing.

## **88 INSTALLING VALVES**

Isolation and regulation valves: Provide on equipment and subcircuits.

Access: Locate where valves can be readily operated and maintained and next to equipment which is to be isolated.

Connection to pipework: Fit with joints to suit the pipe material.

## **COMPLETION**

### **90 FLUSHING AND FILLING**

Standard: To BS EN 806-4.

### **91 SYSTEM DISINFECTION**

Disinfection: To BS EN 806-4.

### **92 TESTING**

Standard: To BS EN 806-4.

Notice (minimum): 3 days.

Preparation: Secure and clean pipework and equipment. Fit cistern and tank covers.

Leak testing: Start boiler and run the system until all parts are at normal operating

temperatures and then allow to cool to cold condition for a period of 3 h.

Pressure testing: At both hot and cold conditions joints, fittings and components must be free from leaks and signs of physical distress when tested for at least 1 h as follows:

Systems fed directly from the mains, and systems downstream of a booster pump: Apply a test pressure equal to 1.5 times the maximum pressure to which the installation or relevant part is designed to be subjected in operation.

Systems fed from storage: Apply a test pressure equal to the pressure

produced when the storage cistern is filled to its normal maximum operating level. Inaccessible or buried pipelines: Carry out hydraulic pressure test to twice the working pressure.

93 COMMISSIONING

Standard: To BS EN 806-4.

Equipment: Check and adjust operation of equipment, controls and safety devices. Outlets: Check operation of outlets for satisfactory rate of flow and temperature.

94 TESTING SERVICE PIPES

Test method: Disconnect from the mains, fill with potable water, exclude air, and apply at least twice the working pressure for 1 h. Test criterion: No leakage.

95 DOCUMENTATION

Manufacturers' operating and maintenance instructions: Submit for equipment and controls. System operating and maintenance instructions: Submit for the system as a whole giving optimum settings for controls. Record drawings: Submit drawings showing the location of circuits and operating controls.

96 OPERATING TOOLS

Tools: Supply tools for operation, maintenance, and cleaning purposes. Valve keys: Supply keys for valves and vents.

97 LABELS

Valve labels: Provide labels on isolating and regulating valves on primary circuits, stating their function.

**U90 General ventilation - domestic**

21 DESIGN MULTIPOINT MECHANICAL VENTILATION

Design: Complete the design of the ventilation system.

Proposals: Submit drawings (showing equipment positions and ductwork routes), technical information, calculations and manufacturers' literature.

38 ROOM EXTRACT GRILLES IN GENERAL

Type: Plastics with integral filter. Manufacturer: Submit proposals. Product reference: Submit proposals. Size: Submit proposals. Colour: Submit proposals. Finish: Submit proposals. Accessories: Submit proposals

46 RIGID DUCTWORK AND FITTINGS IN GENERAL

Type: Submit proposals.

Manufacturer: Submit proposals.

Product reference: Submit proposals.

Sizes: Submit proposals.

Fixing: Submit proposals.

Jointing: Submit proposals.  
Sleeves: Sheet metal.  
Gap sealing material: Submit proposals.  
Accessories: Submit proposals.

66 FAN CONTROLLER UNITS IN GENERAL

Manufacturer reference: Submit proposals.  
Product reference: Submit proposals.  
Functions: Basic on/ off connected to lights

72 SENSORS, PROXIMITY FOR W.C'S

Manufacturer: Submit proposals.  
Product reference: Submit proposals.  
Functions: Submit proposals.

83 INSTALLING MULTIPOINT AND WHOLE HOUSE FANS

Mounting: Anti-vibration mountings.

86 RIGID DUCTWORK GENERALLY

Joints: Seal. Provide a robust airtight installation.  
Support: Do not distort ductwork or reduce cross-sectional area. Do not strain joints.  
Falls: Fall away from fans, dampers and other in-line accessories.  
Sleeves: Locate where ducts pass through building fabric. Bed solidly to the surrounding construction. Leave a gap of 10-20 mm between sleeve and duct and fill completely.

**COMPLETION**

91 OPERATION AND MAINTENANCE

Operating and maintenance instructions: Submit copies of manufacturers' operating and maintenance instructions for equipment and controls.  
Tools: Supply tools for operation, maintenance and cleaning purposes, including keys for valves and vents.

**Z10 Purpose made joinery**10 FABRICATION

Standard: To BS 1186-2. Sections: Accurate in profile and length, and free from twist and bowing. Formed out of solid unless shown otherwise.

Machined surfaces: Smooth and free from tearing, wooliness, chip bruising and other machining defects. Joints: Tight and close fitting. Assembled components: Rigid. Free from distortion. Screws: Provide pilot holes. Heads of countersunk screws sunk at least 2 mm below surfaces visible in completed work. Adhesives: Compatible with wood preservatives applied and end uses of timber.

20 CROSS SECTION DIMENSIONS OF TIMBER

Timber dimensioned as per drawings. Maximum permitted deviations from specified size to be in accordance with relevant British standards.

30 PRESERVATIVE TREATED WOOD

Cutting and machining: Completed as far as possible before treatment.

Extensively processed timber: Retreat timber sawn lengthways, thickened, planed, ploughed, etc. Surfaces exposed by minor cutting and/ or drilling:

Treat as recommended by main treatment solution manufacturer.

40 MOISTURE CONTENT

Wood and wood-based products: Maintained within range specified for the component during manufacture and storage.

50 FINISHING

Surfaces: Smooth, even and suitable to receive finishes. Arrises: Eased unless shown otherwise on drawings. End grain in external components: Sealed with primer or sealer as section M60 and allowed to dry before assembly.

**Z20 Fixings and adhesives**10 FIXING AND FASTENERS GENERALLY

Integrity of supported components: Select types, sizes, quantities and spacings of fixings, fasteners and packings to retain supported components without distortion or loss of support. Components, substrates, fixings and fasteners of dissimilar metals: Isolate with washers or sleeves to avoid bimetallic corrosion. General usage: To recommendations of fastener manufacturers and/ or manufacturers of components, products or materials fixed and fixed to. Fixings: To be in straight lines, at regular centres.

25 FASTENER DURABILITY

Materials: To have: Bimetallic corrosion resistance appropriate to items being fixed.

Atmospheric corrosion resistance appropriate to fixing location. Appearance: Submit samples on request.

- 30 FIXINGS THROUGH FINISHES  
Penetration of fasteners and plugs into substrate: To achieve a secure fixing
- 35 PACKINGS  
Materials: Noncompressible, corrosion proof. Area of packings: Sufficient to transfer loads.
- 40 CRAMP FIXINGS  
Fasteners: Fix cramps to frames with screws of same material as cramps.  
Fixings in masonry work: Fully bed in mortar.
- 50 PELLETED COUNTERSUNK SCREW FIXINGS  
Finished level of countersunk screw heads: Minimum 6 mm below timber surface. Pellets: Cut from matching timber, grain matched, glued in to full depth of hole. Finished level of pellets: Flush with surface.
- 55 PLUGGED COUNTERSUNK SCREW FIXINGS  
Finished level of countersunk screw heads: Minimum 6 mm below timber surface. Plugs: Glue into full depth of hole. Finished level of plugs: Projecting above surface.
- 60 APPLYING ADHESIVES  
Surfaces: Clean. Regularity and texture to suit bonding and gap filling characteristics of adhesive. Support and clamping during setting: Provide as necessary. Do not mark surfaces of or distort components being fixed.  
Finished adhesive joints: Fully bonded. Free of surplus adhesive.

## **Z21 Mortars**

- 10 MORTAR MIXES  
Specification: Proportions and additional requirements for mortar materials are specified elsewhere.
- 60 MAKING MORTARS GENERALLY  
Batching: By volume. Use clean and accurate gauge boxes or buckets.  
Mix proportions: Based on dry sand. Allow for bulking of damp sand.  
Mixing: Mix materials thoroughly to uniform consistency, free from lumps.  
Mortars containing air entraining admixtures: Mix mechanically. Do not overmix. Contamination: Prevent intermixing with other materials.

## **Z22 Sealants**

### **61 SUITABILITY OF JOINTS**

Presealing checks:

Joint dimensions: Within limits specified for the sealant.

Substrate quality: Surfaces regular, undamaged, and stable.

Joints not fit to receive sealant: Submit proposals for rectification.

### **62 PREPARING JOINTS**

Surfaces to which sealant must adhere:

Remove temporary coatings, tapes, loosely adhering material, dust, oil, grease, surface water and contaminants that may affect bond.

Clean using materials and methods recommended by sealant manufacturer.

Vulnerable surfaces adjacent to joints: Mask to prevent staining or smearing with primer or sealant. Backing strip and/ or bond breaker installation: Insert into joint to correct depth, without stretching or twisting, leaving no gaps.

Protection: Keep joints clean and protect from damage until sealant is applied.

### **63 APPLYING SEALANTS**

Substrate: Dry (unless recommended otherwise) and unaffected by frost, ice or snow. Environmental conditions: Do not dry or raise temperature of joints by heating. Sealant application: Fill joints completely and neatly, ensuring firm adhesion to substrates. Sealant profiles: Butt and lap joints: Slightly concave. Fillet joints: Flat or slightly convex. Protection: Protect finished joints from contamination or damage until sealant has cured.

### ***Part 3: Schedule of Work***

<i>1. Protection and Scaffolding</i>		
1.1.	Provide all necessary access scaffolding and protection for the duration of the works to the relevant section of the building. Includes the supply and installation of all measures and supplies required to protect the existing fabric and secure the work site. Maintain until the end of the Contract.	£
	<b><u>TOTAL TO SUMMARY PAGE</u></b>	<u>£</u>
<i>2. Stripping Out, Excavation, Demolition and Spot items</i>		
2.1.	1 <sup>st</sup> Floor: Strip out and cart away existing toilet, sink, door, and other fittings. Remove radiator and set aside for reuse.	£
2.2.	Ground Floor: Strip out and cart away existing toilets, sinks, grabrails and associated fittings	£
2.3.	Strip out floor covering in area of works as indicated in drawing 7066.102 ( <i>ground and first floor toilets and ground floor corridor</i> ).	£
2.4.	Demolish walls, door and ceiling and all additional fixtures & fittings of existing mezzanine level toilet as shown on drawing 7066.102. Cart away arisings.	£
2.5.	Remove any redundant pipes on the South wall of the existing cubicle, sealing connection to the existing drainage pipe.	£
2.6.	Remove existing radiator pipes and seal connections, prepare for re-installation of radiator in new location when floor raised.	£
2.7.	Break up and remove redundant sections of stair and handrail.	£
	<b><u>TOTAL TO SUMMARY PAGE</u></b>	<u>£</u>
<i>3. Carpentry</i>		
3.1.	Supply and install new floor joists ex180x50mm and ex100x50mm cross joists and associated noggins to create build-up and new floor. Supply and install 100mm mineral wool insulation between joists. Strap joists to existing floor structure at their West end to form cantilever. Chamfer East end of new joists to provide 2m finished clear headroom to steps below. New pipework to run within the floor void. All the above as shown in Drawing 7066.203, Section AA.	£
3.2.	Supply and fix 18mm tongued and grooved flooring grade chipboard to top of ceiling and top of new floor build-up. Fixing centres max. 200mm around board edge and 400mm along intermediate supports. Joints sealed with wood glue to BS EN 204. As shown in drawing 7066.203.	£
3.3.	Form stud partitions and wall linings on new floor level: studs noggged as necessary, with head and sole plates. DPM layer to be used between studs and existing external walls. Supply and install	£



	100mm mineral wool insulation between studs. New pipework to run within stud wall between the cubicles. Studs at 400mm centres, and as per drawings.	_____
3.4.	Supply and install ex150x50mm ceiling joists, and associated noggins and edge trimmer. Lay 100mm mineral wool insulation between the joists on all ceiling areas.	_____
		£
3.5.	Supply and install timber frame and moisture resistant plasterboard boxing into pipework behind toilets in both WC's.	_____
		£
3.6.	Supply and install additional timber stair treads and handrails as shown in drawing 7066.202 to extend stairs.	_____
		£
	<b><u>TOTAL TO SUMMARY PAGE</u></b>	<b>£</b>
4.	<i>Wall Linings</i>	
4.1.	Supply and fix of 12mm WBP Plywood to both sides of the new partitions. Screws at 230mm centres.	_____
		£
4.2.	Supply and fit one layer of 12.5mm moisture resistant plasterboard to all new partition and to new ceilings within the new cubicles and landing and to the sloped section of ceiling above the new stairs. Screws at 230mm centres.	_____
		£
	<b><u>TOTAL TO SUMMARY PAGE</u></b>	<b>£</b>
5.	<i>Doors</i>	
5.1.	Supply and fit including frames, stops, architraves and ironmongery for DG10 & DG11 – 2 no. W.C. doors, Oak Veneer. 610x1980x35 mm. Rising butt hinges, lever handles, latch, privacy indicator bolt coat hook and unisex toilet sign.	_____
		£
5.2.	All Ironmongery from "Allgood". Includes Rising Butt Hinge CODE: 97525, Heavy Duty Tubular Mortice Latch CODE: 97010 with Mode Lever Handle CODE: 4060; 97874 Alite Disabled WC Turn & Emergency Release Indicator Set with 7518N Allgood Hardware 75 Series Cubicle Deadlock and Modric Emergency Release & Indicator Rose CODE: 779 including spindles; Alite Coat Hook CODE: 98230 and Modric Floor Mounted Door Stop CODE: 2302.	_____
		£
	<b><u>TOTAL TO SUMMARY PAGE</u></b>	<b>£</b>
6.	<i>Sanitary Fittings</i>	
6.1.	WC1, 3 & 4: Supply and install three hand wash basins and taps: Type: Ideal standard Concept Arc 35cm, Reference: E7932(1). White colour. Include Dual lever mixer, reference E0661AA. Includes supply and installation of chrome plated bottle waste traps and accessories. Any exposed pipework to be Chrome plated.	_____
		£
6.2.	WC2: Supply and install one hand wash basin and tap in each bathroom. Type: Ideal standard corner wash hand basin Studio Echo	_____
		£

	range 45cm, Reference: T2906(01). White colour. Include Dual lever mixer, reference E0661AA. Includes supply and installation of chrome plated bottle waste traps and accessories. Any exposed pipework to be Chrome Plated.	
6.3.	WC2, 3 & 4: Supply and install three WC's, Type: Ideal Standard Concept Space Close Coupled WC bowl E1205 with associated connections. Connect drainage to existing SVP within floor void.	£
6.4.	WC1: Supply and install Ideal Standard Concept Back to Wall toilet Bowl (E0509(1)) with Conceala 2 Cistern in void behind, Karisma flush plate and slim slow close lid.	£
6.5.	Supply and install toilet roll holder and soap dispenser for each toilet. Manufacturer: Dolphin. References: Soap dispenser – BC233, Toilet roll holder – BC325W, Paper Towel Dispenser - BC528W (TBC).	£
6.6.	Supply and install one wall mounted bin in each cubicle. Reference: SU200 from JP Lennard. Colour white (TBC).	£
6.7.	Supply and install 4no new mirrors, one in each WCs as shown on drawing 7066.203, sizes 500x700mm. Clear glass with bevelled edges.	£
6.8.	Supply and install Doc M grabrail pack from Nymas Ref 230003 with Dark Grey finish, consisting of one drop-down rail, one 450mm long grabrail and four 600mm long grabrails	£
6.9.	Retain the baby changing unit in the accessible toilet	£
	<b><u>TOTAL TO SUMMARY PAGE</u></b>	<b>£</b>
7.	<i>Plaster</i>	
7.1.	Skim all vertical faces of stud walls. Thickness 2-3mm. Fill and tape all joints and fixing holes and provide plaster beads as required. Thistle board, with smooth finish.	£
7.2.	Skim ceilings in both cubicles and landing. Thickness 2-3mm. Fill and tape all joints and fixing holes. Thistle board, with smooth finish.	£
7.3.	Make good any plaster on the existing walls around the toilets and prepare for painting.	£
	<b><u>TOTAL TO SUMMARY PAGE</u></b>	<b>£</b>
8.	<i>Ceramic Tiling</i>	
8.1.	Half tiled wall as splashback in both 1 <sup>st</sup> Floor W.C.s, as shown in drawing 7066.202. Metro tiles, dimensions 300x100mm. Supplier TBC. Use spacer lugs for joint width. Apply with Ardex F4 grout or equal approved.	£

8.2.	To WC1, provide a single 600x300mm white tile splashback to basin and in WC2 provide two 300x300mm white tile splashback to the corner basin	£ _____
<b><u>TOTAL TO SUMMARY PAGE</u></b>		<b>£</b> _____
<i>9. Floor Coverings</i>		
9.1.	Clear much adhesive as possible and skim with latex levelling compound to give even surface.	£ _____
9.2.	Supply and lay Linoleum flooring throughout with coved skirting in W.C.'s, corridor, landing and stairs. Product reference: Forbo Marmoleum Concrete, Colour "Fresco Silver Shadow 3860", TBC. Width 2000mm, thickness 2.5mm. Seams hot welded. Coved skirting in toilets and landing. Supply and install rubber trim to coved skirting, securely bonded with mitred corners. Supply step nosings to the steps. Retain offcuts for patching.	£ _____
9.3.	Provisionally allow to reduce the level of the screed inside the door at the top of the ramp to incorporate a matwell with coir matting fitted to finish flush with the adjacent finishes,	£ _____
<b><u>TOTAL TO SUMMARY PAGE</u></b>		<b>£</b> _____
<i>10. Decoration</i>		
10.1.	Prepare and decorate all new stud walls and existing internal walls of the new and existing cubicles, enclosure, landing and corridor in 3 coats of Dulux Trade Diamond Mid sheen vinyl emulsion paint as specified. Colour TBC. Wash down walls and ensure holes are filled prior to painting. Initial coat 30% thinned as a mist coat.	£ _____
10.2.	Prepare and decorate all new and existing ceilings of the cubicles, corridor & landing in 3 coats of Dulux Trade Diamond Matt vinyl emulsion paint as specified. Colour Brilliant White. Wash down ensure holes are filled prior to painting. Initial coat on new plaster 30% thinned as a mist coat.	£ _____
10.3.	Decorate all new and existing joinery including door frames and architraves, trims edges of steps and handrail with primer and 2 coats Eggshell wood paint, including to doors.	£ _____
<b><u>TOTAL TO SUMMARY PAGE</u></b>		<b>£</b> _____
<i>11. Drainage</i>		
11.1.	Connect new drainage pipework to existing system. All pipework to run in floor voids or behind wall linings. Soil waste pipes from toilets to be run floor below toilets, as per drawings. Wastewater pipes from sinks to run vertically downwards within stud wall and then within new floor void to the existing drainage outlet.	£ _____
11.2.	Create new drain connection in existing WC1 for a floor drain under mop bucket taps. Supply and install new piping and drain cover.	£ _____
<b><u>TOTAL TO SUMMARY PAGE</u></b>		<b>£</b> _____

<i>12. Hot &amp; Cold-Water Supply Systems</i>	
12.1.	Design supply and install new cold-water pipework to supply WCs and wash hand basins, connecting to existing water supply pipes within the toilet as appropriate (see also 12.6 below). All new pipework to be concealed within the new ceiling where possible, and the stud wall between the 2 cubicles. To be designed in accordance with relevant BS and HSE publications. Contractor to submit drawings for approval, including manufacturers literature. Include stop-cock valve to permit isolation of new cubicles water supply.
	£
12.2.	Supply and install 3no Zip InLine Instantaneous Hot Water heater 3kW ES3, one in each cubicle WC2, Wc3 & WC4 with associated electrical connections.
	£
12.3.	Supply and install 1no Zip Inline Instantaneous Hot Water Heater 8.8Kw CEX-O or CEX-U in WC1 with associated electrical connection.
	£
12.4.	Supply and install new lockable, wall mounted mixer tap in WC1 for filling mop buckets.
	£
12.5.	Supply and install lockable wall mounted outside cold water tap on the north wall of the modern toilet block, close to the mop bucket tap, with internal isolation valve.
	£
12.6.	Additionally survey to identify any dead legs in the pipework throughout the building and modify pipework to eliminate dead-legs including those which have identified in a Legionella survey as follows: <ul style="list-style-type: none"> <li>• 2<sup>nd</sup> Floor store / tank room – Dead-leg on make up to from decommissioned F&amp;E tank</li> <li>• 1<sup>st</sup> Floor Giraffe room – Dead-leg from old sink location.</li> <li>• Crypt kitchen (unused)</li> </ul>
	£
12.7.	To sink in vestry, remove existing water heater and replace with Zip InLine Instantaneous Hot Water heater 3kW ES3, with associated electrical connection. Change tap to new lever mixer tap.
	£
12.8.	Allow to disconnect and remove cold water storage tank within the tower. Allow to modify existing pipework to reconnect all water appliances to the mains water supply in the existing tank room. (in addition to the toilets, ensure correct water supplies are maintained to the the kitchen, boiler room (in the crypt), sink in the meeting room and outside tap.
	£
12.9.	Allow a provisional sum of £500 for unforeseen plumbing works arising from detailed on-site investigations
	£500
<b><u>TOTAL TO SUMMARY PAGE</u></b>	
	£

**13. Ventilation and Heating Systems**

- 13.1. Supply and fit extract ventilation to first floor W.C.s as per drawings, including all ducting, extract through ceiling and upwards to roof, connection to electrical supply and associated builder's work. Fan to be an inline fan within the roofspace for safer maintenance. £
- 13.2. Supply and install 4no 500x500x40mm healthcare (LST) panel radiators with wireless thermostat - compliant to HSE 43°C standard and ecodesign lot 20 from Ecolec (or equal approved) with remote thermostat and timer control system, one in each toilet, location to be agreed on site. Include for all necessary wiring. £
- 13.3. *Provisional alternative:* Supply and install 4no Standard 500x560x132mm LST radiators from Stelrad (or Equal Approved) and connect to existing heating pipework, modified as necessary (locations to be agreed on site). Each to be fitted with a lockable TRV. State price here but do not include in tender: £
- TOTAL TO SUMMARY PAGE** £

**14. Electrical Installation**

- 14.1. Design, supply and install small power circuit to new WCs and landing, connecting to existing system. All design and cables to be in accordance with all relevant British Standards. Includes, cables and distribution board as required, and all additional components needed to ensure full functionality of new system. All cables to run within new stud walls and ceiling. System to be fully tested and cleaned before handover. £
- 14.2. Allow for PIR sensor in landing and W.C.s, connected to associated lighting and extractor fan. £
- 14.3. Supply and fit ceiling mounted lights in each 1<sup>st</sup> floor W.C. and 1 no. in the landing, as per drawing 7066.202, reflected ceiling plan. Type: Void 55 IP44 LED White Fire Rated Recessed Downlight 1392004 or similar approved. One fitting in each cubicle and one on the landing must be emergency-maintained fittings £
- 14.4. Provide for electrical connections to hot water heaters and fan within roof space. £
- TOTAL TO SUMMARY PAGE** £

**15. Contingency**

- 15.1. Allow a contingency of £3,000 for unforeseen works in connection with this projected, to be expended only on the authority of the Architect. £3,000
- TOTAL TO SUMMARY PAGE** **£3,000**

**TENDER SUMMARY PAGE**

0	Preliminaries	£ _____
1	Protection & Scaffolding	£ _____
2	Stripping Out, Excavation and Spot items	£ _____
3	Carpentry	£ _____
4	Wall Linings	£ _____
5	Doors	£ _____
6	Sanitary Fittings	£ _____
7	Plaster	£ _____
8	Ceramic Tiling	£ _____
9	Floor Coverings	£ _____
10	Decoration	£ _____
11	Drainage	£ _____
12	Hot and Cold-Water Supply systems	£ _____
13	Ventilation System	£ _____
14	Electrical Installation	£ _____
15	Contingency	£ 3000 _____
	<b>TOTAL TENDER SUM</b>	<b>£ _____</b>

**Dayworks**

Should daywork need to be ordered, the work will be paid for at the following rates, such payment being only for the net time worked on site. Rates to include for all overheads and profit and labour on costs.

Labour: Craftsmen £ \_\_\_\_\_ per hour

Labourers £ \_\_\_\_\_ per hour

Materials: Add to net cost for overheads & profit: \_\_\_\_\_ %

Plant: Add to net cost for time and running costs of plant  
for overheads & profit: \_\_\_\_\_ %