

PART TWO

DESCRIPTION OF MATERIALS AND WORKMANSHIP.

GENERALLY

Work On Site

- A. The whole of the work shall be carried out in a workmanlike manner, to the reasonable satisfaction of the Contract Administrator. Any work rejected through non-compliance with the specification without prior agreement shall be removed and replaced at the expense of the contractor.

Avoidance of nuisance

- B. All works of demolition & making good are to be carried out with the minimum of disturbance to occupants & neighbours

Demolition & alterations

- C. All dimensions & particulars shall be verified on site.

Re-use of materials

- D. Clean, sound bricks occurring from the pulling down etc may be re-used in new work where suitable and approved by the Contract Administrator.

Protection of existing buildings

- E. The Contractor must provide for all supports necessary for the protection & safety of existing buildings; should any damage occur due to the inefficiency of support, the damage shall be made good at the Contractor's expense.

Faulty Work

- F. Faulty or damaged work shall be made good at the Contractor's expense.

LINTELS & BEAMS

- A. **All lintels are to have a minimum bearing of 150mm at each end.**
Lintels over door & window openings and structural beams inserted where load bearing walls or partitions have been removed are to be designed by the builder unless otherwise defined in the schedule of works.
- B. Precast proprietary concrete or metal lintels shall be structurally adequate for the loads to be taken and shall be selected to meet the requirements of the Building Inspector. Pre-cast concrete shall comply with BS:CP:116 & have tops clearly marked

BRICKWORK & BLOCKWORK

MATERIALS.

Generally.

- C. Materials generally shall conform to the requirements of CP 121 Part 1. External walls shall be cavity construction comprising facing bricks to the approval of the Employer, tied to a solid blockwork inner skin with suitable stainless steel wall ties. Cavities to be insulated in accordance with Building Regulations requirements. Cavities at eaves & verges to be closed with facing brickwork or slates. All cavities to be kept clear of mortar dropping & other debris. Proprietary stepped cavity tray units to all wall staggers, steps, abutments etc. Penetrations through cavity walls to be closed with blockwork and an insulated damp proof course. Additional wall ties to be inserted around openings.

Cement.

- D. Cement shall be ordinary Portland cement to BS 12 or Sulphate Resisting Portland Cement to BS 4027 where the mortar is likely to be attacked by sulphates in the soil.

Sand.

- E. Sand shall be clean, sharp pit sand to BS 1200, free of loam, dust or organic matter.

Water.

- F. Water shall be clean and free from all harmful matter.

Concrete Blocks

- G. Shall be obtained from an approved manufacturer & comply with BS: 6073 and be solid with an average compressive strength of 3.5N/mm² or 7N/mm² for dense blocks.

Bricks.

- A. Clay bricks are to comply with BS 3921 and are to be hard, sound, square & clean and be well burned and match those in the adjacent area. All bricks are to be clean, true to shape, free from flaws and equal to samples to be submitted. No soft bricks or grizzles will be allowed to be used, nor broken bricks or bats except where required for bond. Bricks for foundation work shall be special purpose bricks defined in the British Standards. Common bricks for general use shall be Fletton bricks as manufactured by the London Brick Co Ltd or other equal and approved local brick.

Facing bricks.

- B. Bricks for use on facings shall match existing facing bricks. Wherever possible making out shall be in second hand matching facings or similar age to the existing. Bricks for facing new walls shall be as defined in the schedule of works.

Flush Up

- C. All bricks shall be well buttered with mortar before being laid and all joints to be flushed up as the work proceeds.

Damp-proof courses.

- D. Damp proof courses, cavity gutters and the like in new walls are to be PVC, or asbestos based bitumen felt to BS 473 type 4C.

Internal Walls & Partitions

- E. Loadbearing partitions to be solid blockwork 90mm thick. Non load-bearing partitions to be either solid blockwork minimum 75mm thick or preservative treated timber studwork min 75mm thick with dry plasterboard linings incorporating sound deadening quilt. Moisture resistant plasterboard to be used for bathroom.

Damp Proof Membranes.

- F. Damp proof membranes shall be polythene sheeting of a minimum of 0.25mm (100 guage) in thickness.
Damp-proof membranes at perimeter where next to walls shall be turned up 100 mm above the top of the concrete floor slabs. Joins between sheets shall be made by double welted folds

WORKMANSHIP

Generally.

- A. Workmanship shall be in accordance with CP 121 Part 1.

Storage of materials.

- B. Cement and lime shall be delivered in bags & stored clear of the ground in a dry weathertight place & shall be used in order of delivery. Sand shall be stored in a separate stockpile from any other materials and on a hard surface.

Mortar.

- C. Cement mortar shall be composed of cement and sand in the proportions of one to four by volume. Gauged mortar shall be composed of cement, lime and sand in the proportions of one to one to six by volume. Mortar shall be thoroughly mixed on a clean hard surface and thoroughly incorporated with a sufficiency of water added through a fine rose. The surface is to be cleaned after each mix.

Alternatively the mortar may be mixed by machine provided the drum is washed out between mixes. The mortar is to be mixed in small quantities from time to time as required. No mortar which has commenced to set shall be knocked up for re-use. Brickwork and blockwork in foundations below damp-proof course level are to be laid in cement and mortar, all other work is to be laid in gauged mortar unless specifically noted otherwise. The mortar for pointing face shall match existing.

New brickwork and blockwork.

- D. All new brickwork & blockwork is to be set out and built to the respective dimensions, thickness and heights shown on the drawing and/or as defined in the schedule of works (unless otherwise agreed by the Contract Administrator) and to comply with building regulations. No broken bricks or blocks are to be used except where required to maintain the bond. All perpends are to be kept true, square and in facework plumb with the perpends below and above, and joints are to be of uniform thickness. The whole is to be properly bonded and levelled around at floor level and allowance must be made for such selection and wastage on facing bricks as is necessary. All joints are to be thoroughly finished up as the work proceeds. All vertical joints on the face of the walls are to be completely fitted except where otherwise specified in cavity wall work. All bricks are to be wetted before use. Making out existing facework shall be in matching bond. New facing brick walls to be in stretcher bond.

Frost.

- E. No brickwork or blockwork is to be executed in frosty weather or when the temperature is 0 degrees C or below except that the use of an approved anti-freezing liquid in the mortar mix will be permitted provided that in faced work only complete elevations or sections are laid with the use of the liquid.

Bonding new work to old.

- F. Where new brickwork or blockwork is built up to or against existing it shall be properly toothed and bonded and reinforced with galvanised steel straps or other method as approved by the Building Inspector.

Facing up old walls.

- G. Where the old work is to be left fair face then the face of the entire area is to be cut back and refaced in matching bricks or blocks, mortar, pointing and bond as existing.

Quoining up jambs and reveals.

- A. Where new openings are formed or existing openings adapted jambs reveals and the like are to be quoined up with new brick or blocks as appropriate, properly bonding to match existing & cut, toothed and bonded at the junctions with old work.

Building in lintels.

- B. On each side of the opening leave bearing of 150mm or as described by manufacturer. Any packing up and leveling under the bearing ends of lintels shall be in non-crushable material, having regard to the weight of the member.

Building in frames.

- C. Frames are to be built with 5 x 25 x 225mm steel cramps bent and fanged at one end, screwed to back of frame and fanged and built into brick or block courses every 600mm. Frames are to be bedded in guaged mortar and pointed externally in mastic.

Openings for Airbricks.

- D. These are to be formed to the same overall dimensions as the airbrick & are to be rendered all round inside. In cavity walls the cavities are first to be closed on the four sides with slates bedded in mortar. Lintels are to be provided for openings over 225mm wide.

Pointing.

- E. Any exposed brickwork shall be pointed to match existing colour form & texture. Repointing old facework shall include raking out joints of all loose mortar & repointing in matching mortar with the same style of pointing. Any broken bricks, old pipe fixings, cemented up holes etc shall be cut out and new bricks inserted. Any efflorescence, paint splashes, moss or other blemishes shall be removed by wire brushing.

Damp-Proof Courses.

- F. Damp proof courses shall be provided in the base of walls at ground level and in external cavity walls over lintels and at sides of openings & to chimney stacks. The material shall extend the full width of walls and be lapped at least 150mm at joints & intersections.

UNDERGROUND DRAINAGE

- G. The whole of the system shall be carried out in accordance with BS8301 and completed to the satisfaction of the Local Authority. Before works commence, the contractor is to contact all statutory authorities to obtain positions & depths of services.
- H. Pipework to be either clayware or UPVC (Osma or similar approved) and laid strictly in accordance with the manufacturers instructions.
- J. The cement, sand & concrete shall be as described in "Concrete".
- K. Manholes to be brickwork or concrete rings to BS 3921 table 6, or approved manufactured plastic, on concrete base (1:2:4) with lightweight metal cover. Gullies to have rodding access. Pipes & fittings to be laid in straight lines to true & regular falls. Pipes generally to be bedded & surrounded in pea shingle. Gradients to be agreed with Local Authority. Final connection to surface & foul sewers to be executed under supervision of the Local Authority.

- A. Testing to be carried out until passed by local Authority as laid down in BS Codes 801 & 304. Any faults & defects revealed are to be located and made

good at the Contractor's expense.

SURFACE WATER DRAINAGE

n/a

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JOINERY/ WOODWORK.

MATERIALS.

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Timber.

- B. All timber shall be well seasoned, bright, sound, cut square and straight grained and shall be free from discoloured sapwood, wane, snakes, dry, loose or dead knots or any other defects which will render it unsuitable for its intended use.
- Timber for carpentry work shall be in accordance with BS 4978, BS 4471 and CP 112 and shall have a moisture content of not more than 20 % and not less than 15 % of the dry weight at the time of fixing. The timber for structural use shall be graded in accordance with BS 4978.
- Timber for joiners work shall be in accordance with BS 1186 Part 1 class IS for hardwood and clear finished softwood, and class 2 for softwood which is not concealed. Timber shall be used in accordance with the uses permitted in tables A & B. Timber for flooring shall be graded and sized in accordance with BS 1297 & shall be in accordance with CP 201 Part 2.

Plywood.

- C. Plywood shall be in accordance with BS 1455 bonded with MR adhesive to BS 1203 for internal use and WBP adhesive to BS 1203 for external use.

Hardboard.

- D. Hardboard shall be used in accordance with BS 1142 type TN and shall have a flame spread classification of class 1A.

Wood Chipboard.

- E. Wood chip board shall be in accordance with BS 5669.

Blockboard & Laminboard

- F. Shall be in accordance with BS 3444.

Treated timber.

- G. Treated timber shall be pressure impregnated with an approved preservative complying with the requirements of BS 3452 or BS 3453 in areas subject to insect attack and BS 4072 in conditions subject to fungal decay. Constructional timber shall be treated in accordance with BS 5268 Part 5. All cut surfaces and notches made on site shall be treated with a suitable brush applied preservative.

Windows & External Doors

- H. Windows shall be set back min. 20mm from the external face of the wall and shall be double glazed with hermetically sealed units (obscure glass to bathroom), and screwed glazing beads.
- Window sills to project for sufficient drip clearance. Front entrance to have 44 mm thick door & frame.

16.

Decoration

- A. Windows, front door and all external timbers shall be decorated with a high build stain to the Employer's choice.

- Ironmongery
- B. All ironmongery to be Victorian style brass effect to Employer's approval. Doors hung on 100mm brass or stainless steel non-ferrous butt hinges. Front door fitted with a 5 lever mortice deadlock, cylinder nightlatch and letter plate with draught sealed backflap. Brass effect Victorian style door knocker to be provided. Windows, door frames etc shall be either screw fixed, fixed to the frame or proprietary cavity closers/frame ties. All fixings to be non-corrodable.
- Mastic sealants
- C. Doors & windows to be pointed over all round with matching coloured mastic.
- Stairs
- D. The staircase shall be specified by Employer within the sum stated and acquired & installed by the Contractor.

WORKMANSHIP.

- Storage.
- E. Timber shall be stacked clear of the ground & protected from the weather.
- Priming.
- F. All softwood door and window frames and linings are to be delivered to the site treated. Woodstaining shall be carried out as specified under painting/ varnishing to include 1 full coat of woodstain undercoat.
- Jointing, fixing, and assembly.
- G. The workmanship generally shall comply to the requirements of BS 1186 Part 2 and CP 112.

STEELWORK & METALWORK.

MATERIALS.

- Proprietary Steel Lintels.
- H. Proprietary steel lintels shall be structurally adequate for the loads to be taken & shall be selected to meet the approval of the Building Inspector. Lintels over openings to be I.G. Lintels Ltd or similar insulated galvanised steel. Cavity tray damp proof courses over all lintels.

WORKMANSHIP.

- Beams and Lintels.
- A. Lintels over door and window openings and structural beams inserted where load bearing walls or partitions have been moved are to be selected by the builder as approved by the Building Inspector and fit for purpose with

reference to the schedule of works.

Adequate bearings are to be provided at each end & if required special padstones shall be provided to spread the load in the case of large beams. Proprietary steel lintels may be used if suitable, but the builder will still be responsible for their suitability.

GLAZING.

MATERIALS.

Clear Sheet Glass.

- B. Clear sheet glass for glazing generally shall be of double glazed quality to BS952.

WORKMANSHIP.

Glazing.

- C. Standards of workmanship generally shall comply to BS 6262.

PAINING & DECORATING.

MATERIALS.

Knotting.

- D. Knotting is to be in accordance with BS 1336.

Stopping.

- E. Stopping for timber shall be composed of pure white lead and linseed oil putty (1:2) with a small proportion of cold size added or alternatively an approved proprietary stopping may be used.

Generally.

- F. Paints are to be obtained from one approved manufacturer, and any instructions or recommendations strictly followed.

Surfaces to be oil painted or varnished.

- G. Unless otherwise defined in the schedule of works, all new wood, metal or plaster surfaces are to be primed. Timber to be painted one basecoat and one finishing coat externally and previously painted wood, metal or plaster surfaces are to be painted one undercoat and one gloss finishing coat or equivalent varnish/woodstain.

WORKMANSHIP.

Generally.

- H. None other than skilled workmen are to be employed. Standards of workmanship generally shall comply with BS 6150.

18.

Weather

- A. No painting or varnishing of the exterior is to be done during wet or foggy weather, or upon surfaces that are not thoroughly dry.

Dust

- B. Before painting or varnishing are proceeded with, every possible precaution must be taken to keep down dust.

Preparation

- C. All surfaces to be painted shall be properly prepared according to approved practice.

New Internal Woodwork

- D. Abrade to remove sharp edges & raised grain etc. Work in the direction of the grain. Clean to ensure all areas are free from dirt, mould & grease. Ensure surfaces are dry. Treat knots & resinous areas or cut out and replace with sound timber.

Priming & Making Good

- E. One coat of woodstain/ or undercoat. Make good all nail-holes, open joints etc with suitable filler and allow to dry before sanding smooth and dusting off.

Finish

- F. Client to confirm on site.

Previously Painted Joinery

Preparation

- G. Thoroughly clean down surfaces to remove dirt & grease etc. Remove defective coatings and damaged glazing compounds. Any defective or decayed wood to be cut out and remaining timbers sprayed with wet rot treatment as necessary. Sand down degraded, discoloured wood and remaining coatings. Dust off and ensure surfaces are clean & dry. Treat knots and resinous areas by removing resin and applying a thin coat of Dulux Patent Knotting. Cut out serious knots and replace with sound timber.

Priming and Making good

- H. Prime bare areas with Dulux Weathershield Preservative Primer. Pay particular attention to joints and end grain. Make good nail holes, open joints, and holes where decayed timber has been cut out with Dulux Exterior Stopper filler. Allow making good to dry before sandpapering smooth and dusting off. Bring forward made good areas with one coat Weathershield Exterior Undercoat. Repair any damaged glazing and allow to harden

Finish

- J. One coat Weathershield Undercoat. One coat Weathershield Exterior gloss.

Pointing Up Reveals

- K. Where gaps exist at joints between window/door frames and surrounding brickwork, fully point up with suitable mortar .

New External Timber

Preparation & Making Good

- A. Make good all nail-holes, open joints etc with suitable filler and allow to dry before sanding smooth and dusting off. Treat knots and resinous areas by removing resin and applying a thin coat of Dulux Patent Knotting. Cut out serious knots and replace with sound timber. Apply one coat of woodstain/

varnish undercoat. Ensure all end grain is coated.

Finish

- B. Apply one coat high performance woodstain or varnish

New Plasterwork

Preparation

- C. Carefully scrape & rub off to remove plaster splashes and mortar droppings. Remove efflorescence. Brush to remove any aggregate.

Priming & Making Good

- D. Prime with Dulux Trade Primer Sealer Undercoat. Make good any cracks, holes and imperfections with plaster filler. Rub down & dust off. Bring forward areas made good with Primer Sealer undercoat.

Finish

- E. Two coats approved matt finish emulsion .

KITCHEN FITTINGS

MATERIALS

- F. Kitchen units, worktops & appliances etc shall be specified by Employer within sum stated and acquired & fitted by the Contractor.

WORKMANSHIP

- G. All units shall be professionally assembled, fitted and hung plumb & true. Junctions of worktops shall be either scribed and sealed or have aluminium joining strips bedded in sealant. All cut or exposed edges shall be finished to match.

PLASTERING & BOARDING

MATERIALS & WORKMANSHIP

Generally

- H. The plastering contractor shall commence work when instructed and shall clear all unused materials & waste when the work is complete.
- J. Access of water & damp must be prevented to all materials, especially to cement, plasters, plasterboard, metal lathing etc. by ensuring effective dry storage conditions.
- K. Ceiling & stud wall finishes to timber joisting backgrounds generally to comprise 9.5mm or 12.5mm Gyproc plasterboard.

20.

Labour

- A. The plastering contractor shall supply all necessary labour, materials, tools & scaffolding for completion of the work without delays.
- B. Plasterboard may be fixed parallel to, or across studs for partitions, and across joists for ceilings. Nails along edges of adjacent boards should be opposite one another and not staggered; boards to be nailed from the centre working out.

All edges shall be lightly butted & properly supported by studs.
Nails shall be 30mm for 9.5mm boards, galvanised steel (no. 14) flat headed driven at right angles to face, well home without breaking paper cover & not closer than 13mm from board edges & 100 -150mm apart. End joints shall be staggered.

SANITARY FITTINGS

MATERIALS:

- C. Bathroom sanitary fittings shall be specified by Employer within sum stated and acquired and fitted by the Contractor.

WORKMANSHIP

- D. All works to comply with CP 310 & B.S. 5572. The whole of the plumbing installation is to comply with Building Regulations & Water Authority Regulations.
- E. A combined sink & washing machine trap shall be provided. Access holes for washing machine waste to be cut through any adjacent base unit.

SERVICES

GENERALLY

- F. **The Employer will be responsible for any mains supply charges for Water, Gas & Electricity Authority concerning services outside the boundary .**

The Contractor will be responsible for all works for gas, water & electricity within the boundary.

WATER INSTALLATION

- G. The Contractor shall serve relevant Notices to the Water Authority for fixing the meters and connecting their mains. The contractor shall be responsible for all arrangements with the Water Authority, but NOT payment of their connection fee, which will be undertaken by the Employer.
- H. All internal water services to be in copper tube with capillary fittings. Hot, cold & waste water connections to be provided for kitchen sink, bathroom basin & bath and for a washing machine in the kitchen, with washing machine taps. Ventilation in accordance with Building Regulations must be provided to kitchens & bathrooms. Any pipework within floors shall be located at the perimeters of rooms in fully accessible ducts. Ducts or pipework within ducts to be insulated to prevent condensation & noise.

21.

GAS & HEATING INSTALLATION

WORKMANSHIP

- A. To comply with British Gas requirements and to be carried out by a CORGI registered contractor. The dwelling shall have an independent supply and separate installation & meter, with supplies to the CH boiler and to the cooker hob. All pipework ducting shall be adequately ventilated.

MATERIALS

- B. A wet central heating system shall be provided using a gas fired electronic ignition wall mounted gas combination boiler and radiators. **Microbore systems shall not be permitted.** All pipework to be copper 15mm & 22mm to BS standard. Boiler to be located in kitchen as per Employer's instructions. The system shall be controlled by a programmer situated near or within the boiler (ie. above the kitchen worktop). TRV's shall be provided to all bar one radiator. Radiators shall be pressed steel or other agreed, pre-painted with heat resistant white paint. Sufficient radiator sizes must be provided to achieve recommended BTU levels. The position of radiators shall be agreed with the Employer. An appropriate corrosion inhibitor to be added to the system. The system shall be fully set-up and commissioned prior to hand-over.

ELECTRICAL INSTALLATION

Generally

- C. The electrical work shall be installed by a qualified electrician. The installation must comply with NICEIC and the 'Regulations for the Electrical Equipment in Buildings' issued by the IEE. Also to comply with Building Regulations and all materials, equipment or work employed throughout the installation to comply with the relevant BS spec & codes of practice and requirements of London Electricity.

Notices

- D. The contractor shall be responsible for all arrangements with the Electricity Authority but NOT for any payment of their connection fees which will be undertaken by the Employer.

MATERIALS

- E. All materials shall be MK or Crabtree of one colour approved. Cable shall be PVC insulated & sheathed multicore to BS: 6500. Consumer units shall have RCD protection and MCB's clearly labelled. Earthing throughout the installation shall be in accordance with IEE Regulations.
- F. Socket outlets shall be double switched flush complying with BS:1363, with galvanised steel boxes. Lampholders shall comply to BS:52 and ceiling roses to BS:67. Light switches shall be flush rocker to BS:3676 to galvanised steel boxes. All unless specified otherwise.
The electrical supply to boilers to be fused spur outlets.
Mains operated smoke detectors to be provided. The position of all electrical socket outlets, switches etc are to be agreed with the Employer.

22.

WORKMANSHIP

- A. The electrical work shall be installed in accordance with the latest edition of I.E.E. Regulations and any additional requirements of the Electricity Authority.
- B. All wiring shall be concealed & protected from damage with capping or hidden conduit.
- C. Socket outlets shall be fixed not less than 250mm above floor level or at suitable heights for practical use, (eg within kitchen).
Power sockets to be wired on a ring main system. Light switches to be

approx 1.45m above floor level.

Completion

- D. The whole installation shall be tested as the work proceeds and at completion and an NICEIC Test Certificate provided to the Electricity Authority and to the Contract Administrator in time to ensure connection by the Supply Authority prior to Practical Completion.

TOTAL MATERIALS & WORKMANSHIP: £.....