

**SPECIFICATION OF WORKMANSHIP AND MATERIALS**

**Appendix B**

**CONTENTS**

[GENERAL 3](#_Toc7611728)

[FENCING AND GATES 6](#_Toc7611729)

[DRAINAGE 10](#_Toc7611730)

[BRICKWORK AND BLOCKWORK 12](#_Toc7611731)

[CARPENTRY AND JOINERY 16](#_Toc7611732)

[PLASTERWORK AND OTHER FLOOR, WALL AND CEILING FINISHES 26](#_Toc7611733)

[PAINTING AND DECORATING 28](#_Toc7611734)

[PLUMBING 44](#_Toc7611735)

# GENERAL

**GENERAL**

**Applicability**

001 This initial general section applies to all subsequent sections of this Specification of Workmanship and Materials **(“this Specification”)**.

002 This Specification is drafted as a series of instructions that the Service Provider must ensure are complied with in relation to the Works. Each instruction includes all tasks necessary to comply fully with the instruction and the Schedule of Rates item(s) to which it relates.

003 The Schedule of Rates payments, as adjusted by the Service Provider’s tendered Rates, include for carrying out all tasks required by this Specification. No further payment is due to the Service Provider in respect of any such tasks beyond the payments provided for in the Schedule of Rates.

004 Specifications across a number of trades may be relevant to each Schedule of Rates item. The Service Provider must comply with all requirements of this Specification applicable to the specific type of Works to be undertaken.

005 References to Paragraphs and Sections in this Specification are to the applicable Paragraph and Section of this Specification. If any contradiction appears within the Specification sections, Schedules of Rates, the Client’s Policy documents etc., the most rigorous standard takes precedent.

005a Where any specific product is indicated or mentioned this is to be read as “or equivalent” in all cases. Where such an “equivalent” product is being suggested by a contractor prior to use this need to be first detailed to the CoW/CA and agreement sought in writing.

**Standards of workmanship and Materials**

006 Carry out and complete all Works:

in accordance with Good Industry Practice;

in accordance with statutory Regulations;

in accordance with the Client’s Policies;

in accordance with the Client’s Codes of Practice;

in accordance with any specific requirements for those Works in this Specification; and

to the satisfaction of the Client (acting reasonably).

007 To the extent that the standard of any Works has not been specified in this Contract, agree the relevant standard for the Works with the Client before their execution. Where particular Works or working methods are to be “Approved by” “Agreed with” or are indicated to be “subject to the Approval of” the Client, give the Client adequate notice when such Approval or Agreement is needed and retain evidence of all Approvals given, and items that have been Agreed, by the Client.

008 To the extent that it is necessary to design any aspect of the Works, in preparing those Designs use the reasonable skill and care to be expected of an experienced maintenance Service Provider that is skilled in undertaking works similar to the Works.

009 Maintain all existing lines and levels at all times and carry through new work to the same lines and levels unless otherwise instructed by the Client.

**European and British Standards & Codes of Practice**

010 Ensure all Works undertaken and all Materials used in those Works comply with all applicable International, European and/or British Standards and Codes of Practice and the Client’s Codes of Practice that are current at the time of their use.

011 References in this Specification of Workmanship and Materials to any International, European and/or British Standard or Code of Practice are to be construed as references to the version current at the time the Order is undertaken.

012 Where a specific International, European and/or British Standard or a Code of Practice is referred to, this sets out the minimum acceptable standard of Materials or workmanship.

013 Any requirement in this Specification of Workmanship and Materials to use material or an article which is defined by reference to a specified Quality Assurance Scheme, Agreement Certificate, British Standard Specification or other approval, may be met by a material or article which has received equivalent approval in another Member State of the European Union or an equivalent international standard recognised but not yet adopted in the UK.

014 A Service Provider offering a product on the basis of compliance with any such approval shall notify the Client of all such substitutions in advance of placing any order and will be required to provide, in English, technical or other details of the approval and its qualifying tests.

**Materials**

015 The Client wishes to standardise the use of Materials across its Properties. This is in order to simplify parts requirements and van stock loads, to improve its repairs processes and to reduce maintenance costs. Wherever possible, match all Materials used to materials currently used in the Properties, particularly in terms of their parts requirements and repair procedures. In this Specification the Client has set out details of its current Materials to which the Service Provider is required to standardise.

016 Where this Specification indicates that Materials are to be “Approved by the Client”, provide samples of the proposed Materials to the Client for Approval. Any Materials that comply with the functionality and compatibility (including aesthetic compatibility) requirements of this Specification may be proposed. No further Approval is required for any Materials listed in this Specification as being the Client’s currently used Materials. The purpose of the Client’s decision on the use and Approval of such Materials is to ensure that they meet the Client’s requirements for functionality and compatibility. The decision of the Client on this is final. No future precedence will be set by individual Client representatives, with exception to those authorised to do so within the Clients Headquarters. A ‘common sense’ and ‘best practice’ approach it is the recommended method of approval.

017 Where this Specification requires Materials to be matched to existing Materials or finishes, this match is subject to the Approval of the Client.

018 Do not use any Prohibited Materials in carrying out the Works. Prohibited Materials are those Materials which are generally accepted or (having regard to Good Industry Practice) are reasonably suspected of:

being harmful in themselves;

being harmful when used in a particular situation or in combination with other Materials;

becoming harmful with the passage of time; or

being damaged by or causing damage to the structure in which they are to be affixed.

019 Materials are to be regarded as harmful if, in the context of their use in the Works (whether alone or in combination with other materials) they:

are prejudicial to health and safety;

may pose a threat to the structural stability or the physical integrity of any Property; or

could materially reduce the normal life expectancy of any part of the Property.

020 Sustainable Timber: In compliance with Public Procurement Policy, all timber and wood derived products referred to throughout this document and which are supplied to the Client, or used by the Service Provider, his agents and Sub-contractor in the performance of any contract to which this document relates, must be procured in accordance with the latest edition of the European Union Timber Regulation (EUTR)

021 CE Marked Products: In compliance with Construction Products Regulation, all products referred to throughout this document and supplied to the Client, or used by the Service Provider, his agents and Sub-contractor in the performance of the works, must be supplied with a Declaration of Performance (DoP) and carry the CE marking (European Conformity marking).

Performance Standards on the CE Mark must comply with relevant Building Regulations as required.

The CE Mark must be fixed visibly, legibly and indelibly either to the product or to a label attached to the product. If this is not possible or not warranted, then it must be fixed to the packaging or within the accompanying documentation.

The DoP must be made available by the manufacture for 10 years after the product was first placed on the EEA market (this may be via a website)

022 Use, fix and apply all Materials strictly in accordance with the manufacturer’s recommendations, directions or instructions.

023 Participate in joint initiatives with the Client and other Service Providers to establish supply chain agreements.

024 Where appropriate suggest (economically viable) amendments to this Specification where those amendments may lead to an improvement in environmental performance or sustainability.

025 At the Client’s request provide all information the Client reasonably requests regarding the environmental impact of the supply and use of any Materials and goods the Service Provider selects for use in the Works.

**FENCING AND GATES**

**FENCING AND GATES**

**MATERIALS**

**Generally**

001 Follow any timber sizes stated in the Schedule of Rates items, in preference to those stated in any European or British Standard.

002 Use only galvanised/sheradised ironmongery and fixings.

003 Where the Schedule of Rates refers to posts “not exceeding” a particular size in Orders and for Valuation use the Schedule of Rates item closest to actual post sizes used in the Works.

004 Use cement, water, aggregates and sand as defined in the “Concrete Work” Section.

005 Note that different fencing& gate types exist amongst the Properties in a variety of heights and with concrete and metal posts set in earth or concrete.

**Timber gates**

006 Construct frames with ledge and bracing joints.

**Pressure impregnating**

008 Where Works are described as ‘pressure impregnated with preservative’ use pressure pretreated timbers for fencing and gates with a copper chrome arsenic preservative treatment Approved by the Client. All timber shall receive a double vacuum treatment in accordance with BS 8417:2011+A1:2014 after machining. This treatment shall be a modern, industrial, organis, solvent based wood preservative containing no “red list” biocides. Application must be by low pressure impregnation, giving highly effective protection against wet rot fungi and having a 30 year warranty

009 Carry out deep cutting, planning and other fabrication before treatment. Where any crosscutting or notching of the pressure impregnated timbers is necessary, liberally treat all new surfaces exposed with a preservative Approved by the Client.

010 Produce a certificate of treatment to cover all timbers processed indicating that the timber has been procured from sources which can independently be verified as being either: from a legal and sustainable source or from a FLEGT licensed or equivalent source.

**Wood preservatives**

011 Thoroughly clean all woodwork to be treated and ensure it is perfectly dry before application. Apply (by brush, coarse spray, low pressure spray, trowel, injection or gravity irrigation treatment) the preservative in two coats and work it into all joints. Follow with the second coat before the first coat has dried out. Use only products registered by the Health and Safety Executive (HSE) and listed on the HSE website under non-agricultural pesticides.

**Concrete mix**

012 Ensure all concrete used for bedding in gate posts is 7N/20mm as defined in the “Concrete Works” Section.

**Fixing gate posts**

017 Fix posts as specified in BS 1722 for the type of fencing involved and in accordance with the following:

in concrete:

use appropriate size and depth for size of post; and

use appropriate size and depth for size of struts;

using holes with vertical sides; and

where using:

concrete in holes: half fill the hole with concrete with earth above, both well rammed;

earth filled holes: keep the hole as small as possible consistent with refilling and compacting with earth; or

driven posts: drive without damaging the posts.

**Maintaining protective treatments**

020 Avoid cutting on site. Make good any damaged protective coatings (e.g. galvanising) to the standard of protection given by the specified coating. Do not cut timber treated with preservative where it will be in the ground. Apply preservative coating to any cuts to treated timber.

**BRICKWORK AND BLOCKWORK**

**BRICKWORK AND BLOCKWORK**

**MATERIALS**

**Cement**

001 Use either normal setting ordinary Portland cement, or sulphate resisting Portland cement.

**Lime**

002 Use Class B hydrated lime.

**Sand**

003 Use only natural sand, crushed stone or crushed gravel for building mortar.

**Cement mortar**

004 Ensure all cement mortar used is composed of one part cement and three parts sand. Use this in brickwork built below ground level, copings, chimneys, parapet walls and any other brickwork in severely exposed situations.

005 In other situations unless otherwise Instructed, use only gauged cement mortar composed of:

* one part masonry cement;
* one part lime; and
* six parts sand.

006 Ensure all mortar used is fresh and made only in quantities sufficient to meet the immediate demand. Do not revive or re-use any mortar which has been partially set.

**Pointing**

041 Match the pointing of new work to that of adjacent work, or to be flush or bucket handle pointing as Instructed by the Client.

042 Match pointing closely to the existing pointing in finish, colour and texture.

**Work to chimneys and fires**

043 Adequately protect the Customer’s finishes, fittings and furnishings from falling debris and soot during Works to chimneys and fires. Take all necessary precautions to protect existing fire appliances from damage. Rectify any damage caused.

044 Ascertain whether any flueways affected by the Works serve a gas appliance. If so, immediately notify the Client of this in writing, so that appropriate safety precautions can be implemented.

045 Remove all debris from flueways and from behind fires and appliances on completion of the Works.

**CARPENTRY AND JOINERY**

**CARPENTRY AND JOINERY**

**GENERAL**

**Generally**

001 Where necessary cut out for butts/hinges when replacing door or window frames/linings or piecing in new timber.

002 Note that all sawn timber sizes quoted in the Schedule of Rates are nominal sizes.

003 Stain or prime and undercoat all prepared timber all round before fixing, as described in the “Painting and Decorating” Section.

004 Comply with the “Painting and Decorating" Section where Works include items being painted, decorated, stained, touched up or prepared for decoration. Match the finish and type to the existing or surrounding finish as appropriate.

005 Where painted skirtings and architraves are specified, at the Service Provider’s option use an MDF equivalent where this is Approved by the Client.

006 Match any purpose made items (when specified) to the existing items as far as possible.

**MATERIALS**

**Timber**

007 Use only suitable, sound, well conditioned, properly seasoned timber that is free from any defects making it unsuitable for its intended purpose.

008 Level and pack all structural timber. Structural timber shall comply with BS 5268: Part 2 and Part 3. The dimensions of a timber floor, ceiling or roof member may be determined by the guidance given in “Eurocode 5 span tables for solid timber members in floors, ceilings and roofs for dwellings” published by TRADA Timber for floors and roofs shall comply with BS 8103-2:2013. Strength classes, species, grades and species combinations referred to be as defined in BS EN 1995-1-1:2004+A2:2014..

009 Cross sectional dimensions are to be either basic sawn or regularised sizes as defined in BS EN 1313 -1. Trussed rafter roofs are to be braced to BS 5628: Part 3. Structural timber shall be C16 or C24 grade timber to comply with loadings and spans as set out in Approved Document A of the Building Regulations~~,~~ 2010 (amended 2013). The section sizes shall be in accordance with tolerance class 1 of BS EN 336, or are CLS/ALS processed sizes in accordance with tolerance class 2 of BS EN 336.

Graded Softwood for Structural Use:

* Stress graded to BS 4978:2007+A1:2011 or other national equivalent and so marked.
* Strength class to BS EN 1995-1-1:2004+A2:2014.

010 Trussed Rafters generally are to be designed and fabricated to BS EN 1995-1-1:2004+A2:2014, truss members shall be 44mm (minimum) finished thickness, ceiling ties and top chord members shall have 97mm finished depth, all trussed rafters shall be nail plate connected

011 Softwood for use with leadwork shall be planed, free from wanes, pitch pockets, decay and insect attack except pinhole borers, with a moisture content of not more than 22% at time of covering.

012 Cross section dimensions of timber shown on drawings are nominal sizes unless stated otherwise. reduction to finished sizes of planed/regularized timber to be to BS EN 1313-1:201.

013 Moisture content of timber at time of erection to be:

* Structural timber 20% + or - 2%, kiln dried.
* Fascias barge boards and the like 18% + or - 2%.

014 Keep timber dry and do not overstress, distort or disfigure sections or components during transit, storage, lifting, erection or fixing. Store timber and components under cover, clear of the ground and with good ventilation. Support on regularly spaced, level bearers on a dry, firm base. Open pile to ensure free movement of air through the stack. Arrange sequence of construction and cover timber as necessary during and after erection to ensure that specified moisture content is not exceeded. Keep trussed rafters vertical during handling and storage

**Preservative treatment of timber**

015 Treat softwood described as "treated" or "impregnated" before delivery to the Property with either:

* + an appropriate preservative under vacuum‑pressure with an average net retention of at least 4kg of dry salts per cubic metre; or
* an organic solvent type preservative giving an overall retention of 16Kg of solution per cubic metre of timber.
* Generally - Structural Timber, Fencing and the like:
* Timber shall be treated by water-based CCA process.
* Where subsequent cross-cutting or boring of the treated timber cannot be avoided all exposed surfaces shall be liberally swabbed with a proprietary and grain timber preservative to maintain the integrity of the protective system.
* All treated timber shall show only negligible dimensional change or distortion, otherwise it will be rejected.
* The end use of timber must be quoted by the Service Provider to the treatment company.
* A certificate of treatment to cover all timbers processed shall be supplied by the treatment company to the Service Provider.
* A certificate of treatment shall be supplied by the Service Provider for each batch of timber treated.

**Fixings**

016 Framing anchors are to be galvanised steel, fixed securely using not less than the number of nails recommended by the anchor manufacturer. Nails to be not less than 30mm x 3.75 mm galvanized or sherardised square twist unless recommended otherwise.

017 Truss clips are to be galvanised steel, fixed securely with 32mm x 3.5mm galvanised square twisted nails in every hole.

018 Anchor straps are to be galvanised steel, fixed securely to timber with three 30mm x 3.75mm galvanized nails and to masonry with four 50 mm x 8 gauge galvanised screws evenly spaced.

019 Lateral restraint straps are to be galvanised steel, ensure that cranked end is in tight contact with cavity face of wall inner leaf and is not pointing upwards. Fix noggings and packs beneath straps which span joists/rafters/ties running parallel to wall, noggins and packs to fit tightly and be not less than three quarters of joist/rafter/tie depth. Notch joists so that straps fit flush with surface. Do not notch rafters/ties. Fix straps to joists/rafters/ties with seven 50 mm x 1½ mm gauge galvanised countersunk screws, evenly spread.

020 Bolts and nuts shall be cup square with large washers and nuts, and comply with BS 4190:2014. - Washers shall comply with BS 4320, 1968.

021 Expanding bolts shall be Grade A4 stainless steel and shall be of a type to suit the purpose

for which they are required, Fixed security in position in accordance with manufacturers technical data sheet.

022 Canopy cleats are to be galvanised steel, fixed securely to timber with 50mm x 1½ mm galvanised screws.

023 Retaining strap to be galvanised steel, with site applied bituminous paint coating, and bedded securely in mortar.

024 Expanded metal fixing strip to be galvanised expanded metal lathing to BS EN 13658-1:2005 zinc coated and fixed securely by building into position.

025 Fastenings for materials and components forming part of external construction to be of corrosion resistant material or have a corrosion resistant finish.

026 Fastenings for materials and components, forming part of external construction but not directly exposed to the weather to be of corrosion resistant material or have a corrosion resistant finish, directly exposed to the weather to be of corrosion resistant material.

027 Cartridge operated fixings are not to be used without the permission of the Client. Tools to be manufactured to BS 4078-2:1989 and Kitemark certified. Fasteners, accessories and consumables to be types recommended by the tool manufacturer. Operatives to be trained and certified as competent by tool manufacturer. Ensure that operatives take full precautions against injury to themselves and others. Shot fixing: is to give secure fixing at 750mm centres.

**Nails, etc**

028 Use sheradised nails for fixing joinery having an external exposed face in accordance with BS 1202-1:2002, punched in below the surface and filled with an approved filler.

**Joinery Timber**

029 Softwood planed finish joinery timber which will be exposed to view shall be European Redwood, class J10 of BS EN 942:2007.

The following defects shall not be permitted: pith shown on the surfaces; sloping grain exceeding one in eight; checks, splits and shakes in excess of those permitted by class J10 of BS EN 942:2007; knots, excepting isolated sound tight knots of less than 20 mm diameter; any evidence of beetle attack or decay. Softwood not exposed to view will be accepted with minor defects with the exception of active beetle attack or decay.

030 Where hardwood is specified, use the specified hardwood suitable for the purpose, un-replenishable tropical hardwoods are not to be used

031 Tongued and grooved floorboarding is to comply with BS 1297

032 Ensure the moisture content in:

* internal joinery is no more than 12% (8% if the Property is central heated); and
* external joinery is no more than 18%.

**Plywood, blockboard, particleboard, hardboard etc.,**

033 Plywood panel products for structural use shall conform to BS EN 13986:2004+A1:2015 and BS EN 636:2012+A1:2015. for designs to BS EN 1995 plywood may be selected from those listed in BS EN 1995-1-1:2004+A2:2014 or shall have certification from a suitable body such as the Agrément board.

034 Marine plywood shall comply with BS 1088-1:2003, marine plywood manufactured from selected untreated tropical hardwoods

035 Plywood designed to BS EN 1995-1-1:2004+A2:2014 shall be subject to the quality control procedures of one of the organisations listed in that standard, or to the controls listed by the certification body.

036 The specification for plywood shall state the following information where appropriate:

* type
* Standard
* grade
* Species
* nominal thickness
* number of plies
* finish (sanded/un-sanded)

037 Plywood exposed to the weather shall have no open defects (e.g. checks, knots, holes, splits) on the exposed face(s) unless it is used only for a temporary application such as hoarding.

038 Prior to receiving a painted finish, plywood shall be adequately sanded.

039 All cut edges that may be subject to weather exposure shall be sealed with a suitable sealant or applied finish; typically these shall be one of the following:

* + - Special sealing compounds, such as pitch epoxy
* non-setting mastic, where the plywood is set in frames.
* timber beading bonded with suitable adhesives.

040 In construction the following procedures shall be observed:

* lower edges of boards shall be bevelled to promote shedding of water.
* plywood used as infill panels shall be fully painted before installation and/or assembly.
* cavities behind boards shall be adequately ventilated and drained to allow dispersal of moisture.
* clearance shall be allowed at selected joints to allow free drainage of water.
* plywood junctions with masonry shall provide adequate clearance to allow drainage, prevent capillary absorption of water and provide enough space for maintenance of edge sealing.
* the bottom edges of boards shall stand well clear of flashings, roof coverings, sills, and the ground.
* exposed and/or inadequately protected fixings shall be of non-ferrous metals and have adequate corrosion resistance.

041 WBP sanded and un-sanded finished plywood is to be in accordance with BS EN 635-1-1:1995

042 Oriented strand boards shall be in accordance with BS EN 300:2006

043 Particleboards shall be in accordance with BS EN 312:2010, for chipboard flooring, use the appropriate waterproof moisture resistant grade suitable for the purpose.

044 Hardboard shall be to BS EN 622-2:2004. Ensure hardboard used to form bath panels has an enamelled surface.

045 Ensure all blockboard is to be to a standard and quality Approved by the Client, laminboard used is five‑ply and veneer is of the specified species of timber (but where none is specified, it is an appropriate species of timber).

**Priming**

046 Prime timber in accordance with the finish coat specification. Use a primer recommended by the manufacturer of the surface coating.

**Preservative treatment of timber**

047 Treat softwood described as "treated" or "impregnated" before delivery to the Property with either:

* an appropriate preservative under vacuum‑pressure with an average net retention of at least 4kg of dry salts per cubic metre; or
* an organic solvent type preservative giving an overall retention of 16Kg of solution per cubic metre of timber.

048 Generally - Structural Timber, Fencing and the like, shall be treated by water-based CCA process,

* Where subsequent cross-cutting or boring of the treated timber cannot be avoided all exposed surfaces shall be liberally swabbed with a proprietary and grain timber preservative to maintain the integrity of the protective system. All treated timber shall show only negligible dimensional change or distortion, otherwise it will be rejected. The end use of timber must be quoted by the Service Provider to the treatment company.
* A certificate of treatment to cover all timbers processed shall be supplied by the treatment company to the Service Provider. A certificate of treatment shall be supplied by the Service Provider for each batch of timber treated.

Generally - Joinery Components, Fascias and the like, shall be treated by spirit based double vacuum process and shall be machined to it's final dimensions before treatment and then assembled. All treated timber shall show only negligible dimensional change or distortion, otherwise it will be rejected.

049 Treat ground contact timber before delivery to the Property with an appropriate preservative under vacuum pressure with an average net retention of at least 5.4Kg dry salts per cubic metre of timber.

050 Cut timbers to their final dimensions before impregnation. Where this is not possible, liberally swab any sawn or cut faces or borings with an appropriate preservative from the impregnation plants.

051 After treatment, carefully open‑stack the timber in a well ventilated covered space to enable surplus solvent in the preservative to dry out by evaporation. Ensure all treated timber is dry before incorporation in the Works.

052 Allow items of carpentry timber treated with an appropriate preservative a minimum of 3 weeks air drying period following treatment and before fixing. Allow joinery timbers similarly treated a minimum of 6 weeks air drying following treatment and before fixing.

053 Provide a copy of the relevant Preservation Treatment Certificate to the Client.

**Adhesives**

054 Ensure adhesives for:

* exterior use are synthetic resin type WBP; and
* interior use are synthetic resin type of moisture resistant durability (“MR”).

**Timber fillers for rotted woods**

055 Ensure timber fillers for rotted softwoods and hardwoods are a complete system appropriate for the type of wood.

**Storage of material**

056 Protect joinery from the weather during transit. At all times before fixing, both before and after priming, store it under cover and clear of the ground.

**PVCu fascias/soffits/cladding and components**

087 Ensure PVCu fascias, soffits, cladding and components are:

* cellular PVCu with a low density (closed cell) core and homogeneous skin;
* with self coloured, smooth, semi-matt finish;
* of sections and profiles Approved by the Client.

**Repairs to Timber External Door and Window Frames:**

127 Cut out decayed timber along the grain for a distance of 300mm (min) beyond the last visible sign of attack.

The joint of new and existing timber shall be formed by means of 45° - 60° splice. The new timber shall be redwood to BS EN 942:2007, Classes 2 and 3 or hardwood to BS EN 942:2007, Class 1 preservative treated in accordance with section Z12.110 and all cut ends shall be dipped in similar preservative fluid before fixing in position. New timber to be jointed to existing by means of galvanised screws or nails and adhesive and plugged and screwed to wall. New timber members shall match profile of existing. ‘’Dry Flex System’’ or other equal and approved may also be used as a viable alternative to new timber section. Dispose of defective timber immediately.

**Repairs to Hardwood Sills of Timber Windows**:

128 Cut out decayed timber along the grain for a distance of 300mm (min) beyond the last visible sign of attack.

The joint of new and existing timber shall be formed by means of 45o - 60o splice. The new timber shall be hardwood to BS EN 942:2007, Class 1 and all cut ends shall be dipped in similar preservative fluid before fixing in position. New timber to be jointed to existing by means of galvanised screws or nails and plugged and screwed to wall. New timber members shall match profile of existing. ‘’Dry Flex System’’ or other equal and approved may be used as a viable alternative to new timber section. Dispose of defective timber immediately.

136 Fix existing door frames or linings which have become loose through the frame using proprietary sleeved screw fixing devices Approved by the Client.

137 Sink the heads of fixings below the surface of the frame and the recess and fill them with an approved filler.

**Softwood window frames**

138 Fix softwood windows and softwood window surrounds in the same way as for fixing door frames and lining legs.

**Metal window frames**

139 Bed metal windows in a butyl rubber sealant and fix them to wood window surrounds which have been treated to BS EN 351-1:2007 with galvanised or cadmium plated screws or alternatively by stainless steel fixing clamps or brackets and proprietary plastic plugs and approved rust proof screws.

**Window/door replacement**

140 All replacement windows and doors in repairs and ad-hoc renewals are to be to BS 6375-2: 2009. Undertake window/door replacements that involve removal of the primary frame from the building and associated glazing in accordance with the current Building Regulations, Approved Document L.

**Sealant**

141 Before pointing around existing window and door frames, pick out all loose materials and insert a cellular backing appropriate to the type of sealant in the joint between the frame and wall. Use a sealant as specified, inserted by pressure gun to form a neat uniform beaded finish.

**Cleaning PVC-U window frames**

171 Sash frames and window frames are to be fully cleaned of all paint, dirt, dust etc. and left in an operational state.

172 Dirty marks on frames can be easily removed by using cleaning materials as indicated on the following table.

Cleaning cloths should be unbleached cotton. Do not use cloths containing synthetic fibres.

Heavy stains and deep scratching can be removed from white profiles only by sanding with a 320/400 grit sanding disc and by polishing using a sisal rotary brush to restore surface finish.

On wood grain surfaces care must be taken when cleaning. Seek manufacturer’s advice on damaged wood grain surfaces.

**CHECK LIST B**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **COMTAMINATION** | **CLEANINGMETHOD** | | | |
| **Scrapeoff andPolish withDry Cloth** | **Cleanwith waterand mild detergent** | **Clean Offwith non-abrasive detergentand water** | **Manufacturers specified cleaning agent1** |
| **Bitumen** |  |  |  |  |
| **Pencil** |  |  |  |  |
| **Emulsion Paint** |  |  |  |  |
| **Felt Pen** |  |  |  |  |
| **Inorganic Grease** |  |  |  |  |
| **Plaster** |  |  |  |  |
| **Woodstain** |  |  |  |  |
| **BallPen** |  |  |  |  |
| **Cellulose Paint** |  |  |  |  |
| **Rust** |  |  |  |  |
| **Soot** |  |  |  |  |
| **Cement Mortar** |  |  |  |  |
| **Wax Pen** |  |  |  |  |

181 Manufacturers specified cleaning agents should only be used by authorised Service Providers and with extreme care.

**PLASTERWORK AND OTHER FLOOR, WALL AND CEILING FINISHES**

**PLASTERWORK AND OTHER FLOOR, WALL AND CEILING FINISHES**

**MATERIALS**

**Cement and water**

001 Cement is to be to BS EN197-1:2011

002 Use water as described in the "Concrete Work" Section.

**Sand**

003 Sand is to be to BS EN13139:2002 (BS1199 Table 1)

**Metal lathing, beads and stops**

009 Ensure steel lathing is of the plain expanded type having a minimum weight of 1.6Kg/m2.

010 Ensure beads and stops are of an appropriate profile and:

* for internal use are galvanised; and
* for external use are manufactured from stainless steel.

**WORKMANSHIP**

**Steel lathing beads and stops**

017 Securely fix lathing to:

* timber backgrounds with galvanised staples; or
* steelwork with 1.2mm galvanised tie wire.

018 Ensure all joints have a 75mm lap and are wired at centres not exceeding 75mm.

019 Fix beads and stops with rustproof hardened steel pins or mortar dabs.

031 **Dissimilar Solid Backgrounds For Rendering:**

Where rendering is to be continued without break across joints between dissimilar solid backgrounds which are in the same plane and rigidly bonded or tied together, cover joints with a 150 mm wide strip of building paper to BS 1521:1972 overlaid with 300 mm wide stainless steel lathing fixed at not more than 600 mm centres along both edges, unless specified otherwise.

032

**Cement beds, backings and renderings generally**

033 Unless the Client Instructs otherwise, ensure all beds, backings and renderings are composed of one part Portland Cement to three parts sand, by volume. Keep the water content as low as possible and ensure it does not exceed 18 litres per 50 Kg of cement (including the moisture content in the sand).

034 Brush sub-bases and backgrounds free of all dust. Well wet them and coat them with cement slurry before applying the screeds. Alternatively, use 1:10 EVA bonding adhesive instead of cement slurry.

035 Where the beds, backings or renderings are specified as waterproof, incorporate waterproofer to BS EN1199:2005 in the mix.

036 Expansion joints should be placed to form bays not exceeding 3.50m x 3.50m. Finish off the surfaces of beds and backings to receive the appropriate tiling, paving or other finishing.

037 External rendering is to be to BS EN 13914-1:2005. Ensure external renderings have a surface finish to match the existing renderings.

046 **Suitability of Backgrounds/Bases**:

Before starting work ensure that backgrounds/bases:

* Are sufficiently flat to permit specified flatness of finished surfaces, bearing in
* mind the permissible minimum and maximum thicknesses of the bedding material.
* Have been allowed to dry out by exposure to the air for not less than the following:
* Concrete slabs: 6 weeks.
* Cement:sand screeds: 4 weeks.
* Rendering: 2 weeks.
* Gypsum plaster: 4 weeks.

**PAINTING AND DECORATING**

**PAINTING AND DECORATING**

**GENERAL**

**Redecorate/touch up/make good**

001 Note that “redecorate/touch up” or “make good decoration” includes preparation, priming, one undercoat and either one gloss coat to previously painted surfaces or reinstating any stain or clear finish for previously stained or clear finish surfaces.

**MATERIALS**

**Generally**

002 Obtain undercoats and finishing coats for an individual surface from the same manufacturer.

003 Ensure paints are delivered to the Property in sealed containers as received from the manufacturer and no labels are removed or painted out. Use the paint without adulteration.

004 Under no circumstances thin paint supplied by the manufacturer unless Approved by the Client. When such Approval has been granted, carry out thinning with thinners of the type stated in the manufacturer’s technical data sheet.

005 Execute painting in shades Approved by the Client. Submit samples of tints before ordering Materials. Ensure each coat of paint matches the finished shade, and where tint types are required by the manufacturer’s technical data sheet, they are used.

006 Provide samples of Materials to the Client for Approval in sample tins filled 7/8 full after the contents of the container or kettle have been thoroughly stirred and mixed. Record all relevant details of the Materials sampled.

007 Immediately remove any unsatisfactory Materials from the Property and make good any Works executed with such defective Materials.

008 Note that the Rates include for the use of varied colours in the Works and for the execution of sample patches, as required by the Client.

009 Use water based paints where appropriate.

**Knotting**

010 Use a best quality shellac knotting compound, dissolved in methylated spirits. Cover all knots and resinous parts.

**Stopping**

011 Ensure stopping/filler for:

* plasterwork - is a plaster based filler applied to a PVA solution primed surface, or a proprietary filler suitable for plaster repairs;
* internal woodwork, hardboard, fireboard and plywood - is a proprietary wood filler either suitably pre-coloured to match the base material or of a neutral colour and capable of being stained to match the required colour when stain is applied;
* external woodwork – is a proprietary filler recommended for external use Approved by the Client, (and tinted to match the colour of the stained/varnished finish where appropriate); and
* clear finished woodwork - is tinted to match the surrounding woodwork.

**Primer for alkaline surfaces**

012 For alkaline surfaces use an alkali resistant sealer/primer and finish with a top coat of the type stated in the manufacturer’s technical data sheet.

**Primer for iron and steelwork**

013 Prime iron and steelwork with a primer of the type stated in the manufacturer’s technical data sheet for the subsequent finish coats.

**Primer for galvanised iron and steelwork**

014 Prime galvanised iron and steelwork with a primer that is compatible with the subsequent finish coats. Pre-treat new galvanised surfaces with a mordant solution before priming.

**Primer for hardboard**

015 Where hardboard is not factory primed or sealed, use a suitable primer of the type stated in the manufacturer’s technical data sheet for the subsequent finish coats.

**Primer for woodwork**

016 For woodwork, use a finishing ready‑mix primer obtained from the maker of the undercoat and finishing coats.

**Primer for oily or resinous timbers**

017 For British Columbia pine (Douglas fir) or other oily or resinous timber, use an aluminium based priming paint not darker than BS 4800:2011 Colour 00A01 Approved by the Client which is compatible with the subsequent coats of the type stated in the manufacturer’s technical data sheet.

**Primer for stains**

018 For stain finishes, ensure surfaces are clean, rubbed down to an even finish and lightly keyed to every coat except the top coat.

**Stabilising sealer**

019 Use a type and make of stabilising sealer recommended by the manufacturer of the undercoat and finishing coat.

**Chemical stripper**

020 Ensure chemical paint stripper is water soluble.

**Anti fungal solution**

021 Ensure an anti-fungal solution is appropriate to the surface being treated and is used in accordance with The Control of Pesticides Regulations 1986 (amended 1997)and The Pesticides Act 1998.

**PREPARATION OF SURFACES**

**Preparations**

022 Thoroughly prepare all surfaces to a high standard of preparatory work. Note that "prepare" used in the Schedule of Rates includes all Works described below including washing down, priming and painting extra coats but excluding paint removal.

023 Report any necessary paint removal to the Client and agree the extent of this with the Client before starting this Work. Note that no payment will be made for paint removal unless this is done.

024 Apply a liberal brush coat of timber preservative conforming to Building Establishment Technical Note No. 24 (or European equivalent) to existing bare non-durable timber surfaces. Allow adequate time for this to dry before over coating.

025 Rub down previously painted surfaces in good condition with abrasive paper. Fill cracks as described in Paragraph 011. Subject to Paragraph 023, remove existing paint in poor condition completely using a non‑caustic paint remover.

026 Treat stains on the ceiling before decoration to prevent them bleeding through subsequent decorative coatings with a proprietary stain stop or blocker appropriate to the substrate and in keeping with the requirements of the finish to be applied.

027 Use tinted undercoats if the Client so Instructs.

**Approval**

028 Where specified, obtain the Approval of the Client to the preparation of surfaces before applying any coating.

**Stopping**

029 Where stopping/filling is referred to in this Section, use the appropriate stopping as described in the Materials Section.

**Burning off**

030 Burn off and rub down to remove paint from wooden surfaces. Note, naked flame devices are not permissible under any circumstance. Fill in cracks, knot, prime and stop woodwork so exposed all as described for new work, rub down with fine abrasive paper and apply one additional undercoat before painting as specified. Burning off is not permitted indoors without the express written permission of the Client.

**Plaster, render, concrete and brickwork**

031 Remove plaster or mortar splashes from the decorated surfaces by scraping. Stop all holes, cracks, etc. Brush down the whole surface to remove dust and loose material. Remove all traces of mould oil by scrubbing with water and detergent and rinsing with clean water to remove all detergent.

033 Remove efflorescence first by wiping dry with a dry course cloth and then with a damp cloth. Leave the surfaces for 48 hours to see if efflorescence has ceased and clean the surfaces to remove dirt, dust, etc. Allow the surfaces to dry out thoroughly before painting is commenced. When efflorescence has occurred or is suspected, defer painting as Instructed by the Client. New plaster/render should be allowed to dry for a minimum of 28 calendar days before decorating.

034 Cut out loose and defective rendering and make good before redecoration. Stabilise existing surfaces to be redecorated with an stabilising agent of 1:10 PVA solution or 1:3PVA solution to soffits.

**Iron and steel**

036 Remove rust, mill scale, welding slag and flux residue from iron and steel surfaces by wire brushing, scraping, hammering, flame cleaning, etc.

**Previously painted metalwork**

037 Thoroughly clean down all paintwork which is in sound condition and rub down with abrasive paper. Remove small areas of defective paint and all rust and loose scale by chipping, scraping and wire brushing back to clean metal. Prime the metal so exposed immediately after preparation with one coat of primer and apply one additional undercoat before painting.

038 Remove large areas of defective paint by using a non-caustic stripper appropriate to the substrate and in accordance with the technical data sheet for the subsequent coats or by chipping, scraping and wire brushing back to clean metal. In all cases where rust is apparent, scrape the rusting section and a sufficient area around it clean of all paint and rust and coat it with a rust inhibiting primer Approved by the Client in addition to the priming coat described.

**Defective putties**

039 Hack out defective, cracked or uneven putties to glazing, prepare and prime the rebates as required and make good the putties before any painting is carried out. Allow putties to form a hard skin before painting with an oil based paint or allow for no less than 14 calendar days drying time where water based paint/stain is to be applied.

**Plywood**

041 Fill as required with a plastic based filler before priming/staining. Prime surfaces of internal plywood before painting with one coat of primer, filled as required with a plastic based filler. Rub and dust down and apply a second coat of primer/stain.

042 Before final priming/staining ensure that all imperfections are stopped, rubbed down and brushed off. Prime/stain surfaces of external plywood before painting with one coat of primer/stain. Where stain is to be applied use a stainable filler, or a filler pre-coloured to match the stain finish. Rub and dust down and apply a second coat of primer/stain.

**Woodwork to be painted**

043 Before fixing woodwork, rub down surfaces that will be visible after fixing. Scorch back excess resin from live knots and resin pockets. Coat all knots and resinous areas with fresh knotting. Prime all surfaces, ensure all nail holes and other imperfections are stopped/filled. Rub down the whole surface and brush off all dust before the undercoat is applied.

**Previously painted woodwork**

044 Wash down thoroughly with sugar soap or white spirit solution all paintwork which is in sound condition and allow to dry. Rub down to a smooth surface with an abrasive paper, achieving the final pre-paint finish with a fine grain abrasive paper to achieve a finish free from abrasive marks. Rinse well with clean water and allow to dry. Fill in cracks, etc., as described for new woodwork.

045 Remove small areas of cracked or defective paint by carefully scraping back to a firm edge. Knot, prime and stop woodwork so exposed as described for new work. Sand with fine abrasive paper and apply one additional undercoat before painting if required.

046 Apply a liberal coat of brush applied water repellent timber preservative conforming to the recommendations of BS 8417:2011+A1:2014 to bare existing non-durable timber surfaces or surfaces with defective areas of paint film. Allow adequate time to dry before over coating.

047 On existing coated timber, remove any degraded surface timber by sanding down to clean sound timber. Remove resinous exudations by heat using hot air gun. Apply 2 coats of knotting to affected areas and any exposed knots and allow to dry.

048 On existing coated timber, remove dirt, algae and dead fibre by means of high pressure power hosing, apply one coat fungicide and leave for 72 hours.

**Woodwork to receive a clear finish**

049 Stop/fill holes and other imperfections in surfaces that are to receive a clear finish. Rub down the whole surface and brush off all dust.

050 Prepare existing varnished surfaces in sound condition by cleaning down with a suitable detergent and thoroughly rinsing them. Lightly key sound existing finishes to an even finish over the entire surface ensuring that all existing finish sheen is removed.

051 Strip and re-varnish existing varnished surfaces in unsound condition.

**Woodwork to receive stain finish**

052 Prepare previously treated and untreated surfaces that are to receive a proprietary stain finish in accordance with the manufacturer’s technical data sheet.

**WORKMANSHIP**

**Paint**

053 In order to eradicate any unauthorised addition of thinners or driers, or other adulteration of paint:

* give adequate supervision during the painting work to ensure that paint is not adulterated;
* note that if cases of unauthorised or excessive thinning or other adulterations are discovered, the Client will usually exercise the power contained in this Contract to require the removal of the Staff members concerned;
* ensure a notice is exhibited drawing the attention of Staff to the Client's requirement to use paint as supplied by the manufacturer and the consequences of a breach of this requirement; and
* note that similar requirements will apply to Sub-Service Providers.

**Stirring of Materials**

054 Thoroughly stir the contents of all cans and containers of Materials before and during use. Suitably strain them as and when necessary.

**Application**

055 Apply coatings by brush or roller. Use sprays only with the prior Approval of the Client. Where spray application is Approved it shall be applied as directed by the manufacturer, including thinning with thinners of a type and to a ratio that complies with the manufacturer’s technical data sheet.

**Priming of glazing beads**

056 Prime/stain glazing beads, rebates and the backs of beads at the same time as priming/staining the window frames.

**Condition of priming**

057 If the priming/staining has in any way deteriorated or has been damaged by the time of the first coat, rub down and re-prime/re-stain the affected portions, or the whole if necessary. Where required, touch up with the same primer/stain or equivalent all articles, such as the windows, that were primed by their manufacturers.

**Coatings to be dry**

058 Allow coatings to dry thoroughly for the time specified by the manufacturer before applying succeeding coats.

**Painting windows/doors**

059 Do not paint windows or doors in the closed position.

**Rubbing down**

060 Rub down and de-nib undercoats for paints and clear finishes to a smooth surface with abrasive paper. Remove all dust before the succeeding coat is applied. Protect all glazing from scratching whilst rubbing down.

**Differing colours of undercoats**

061 Ensure each succeeding coat of priming and undercoating paint is sufficiently different in colour to be readily distinguishable.

**Unsuitable conditions**

062 Do not apply coating:

* to surfaces affected by wet, damp, foggy or frosty weather or other unsuitable conditions;
* to any damp surface; or
* in temperatures below 50 Centigrade.
* when heat is likely to cause blistering or wrinkling.

Take all necessary precautions including restrictions on working hours, providing temporary protection and allowing extra drying time, to ensure that coatings are not adversely affected by climatic conditions before, during and after application.

**Protection of wet surfaces**

063 Take adequate care to protect surfaces whilst still wet, by the use of screens and 'wet paint' signs where necessary. Take responsibility for any damage which may be caused by or through wet paint.

**Damage to adjoining surfaces**

064 Take care not to damage or stain other Works when storing Materials, preparing surfaces, or applying paint or stains. Remove all such stains, making good the stained surface and touching up any paintwork disturbed.

**Cleanliness**

065 Keep surfaces clean and free from dust during the painting processes. Do not carry out painting in the vicinity of other operations which might cause dust. Provide a suitable movable receptacle into which all liquids (including slop washings) are placed. Ensure this is not tipped down any of the gullies, manholes, sinks, basins, water closets or any other sanitary fittings. Remove all solid refuse or inflammable residues from the Property.

**Removal of ironmongery**

066 Remove surface fixed ironmongery, fittings and door/window furniture (except hinges) before painting and re-fix them on completion.

**Protection:**

069 Adequately protect both internal and external surfaces which are not to be coated, by covering with dust sheets or other suitable materials. Exhibit 'Wet paint' signs and provide barriers where necessary to prevent damage to freshly applied coatings.

**Painting Existing Concrete:**

071 Preparation: - Remove surface salts and other loose material with stiff brush. Leave for 48 hours and repeat process if necessary. Apply one coat of fungicide solution and leave for 72 hours, apply one coat proprietary sealer/primer, carefully remove all loose or defective areas of coating to a firm edge. Thoroughly clean by wiping down with white spirit or washing with water containing detergent. Remove heavy deposits of oil, grease, etc. with a suitable proprietary cleaning solution, sand down surfaces while still wet to provide a key, rinse off and allow to dry, patch prime as specified. fill joints, cracks, holes and other depressions with filler worked well in and finished off flush with surface. Sand smooth and remove dust, apply additional coats to areas where paint has been removed to restore the original coating thickness (Bring forward). Sand down junctions to give a flush surface.

Apply initial coat of exterior quality water based masonry paint and one finishing coat of exterior quality water based masonry paint.

**Painting Existing Render:**

073 Preparation: Take back to a firm edge all areas of poorly adhering or defective coatings. Remove all loose or powdery material by vigorously brushing down with suitable stiff brushes and dust off. Where appropriate on smooth surfaces, rub down sound areas to produce the necessary key for good adhesion and dust off. Cut out and make good all cracks, holes, open joints and other imperfections etc., with an approved proprietary filler, rub down smooth and dust off. Prime all sound bare areas exposed by the removal of coatings with one coat of exterior quality water based masonry paint, thinned as necessary in accordance with the manufacturer’s technical data sheet. Apply stabilising primer to all areas. Bring forward all areas which during preparation were taken back to bare substrate or disfigured/exposed by the removal of the previous coating with one coat of exterior quality water based masonry paint of the selected shade.

Apply initial coat of exterior quality water based masonry paint and one finishing coat of exterior quality water based masonry paint.

**Painting New Render:**

074 Preparation: Thoroughly clean down to remove all surface contamination, mortar splashes, nibs etc. Allow to fully dry. Cut out and make good all cracks, holes, open joints and other imperfections etc., with an approved proprietary filler, rub down smooth and dust off. Apply one coat of exterior quality water based masonry paint, thinned as necessary in accordance with the manufacturer’s technical data sheet. .

Apply initial coat of exterior quality water based masonry paint and one finishing coat of exterior quality water based masonry paint.

**Painting Existing Concrete / Render with Anti-Graffiti Paint:**

075 Preparation: Carefully remove all loose or defective areas of coating to a firm edge. Thoroughly clean by wiping down with white spirit or washing with water containing detergent. Remove heavy deposits of oil, grease, etc. with a suitable proprietary cleaning solution. - Sand down surfaces while still wet to provide a key. Rinse off and allow to dry, patch prime as specified, fill joints, cracks, holes and other depressions with filler worked well in and finished off flush with surface. Sand smooth and remove dust. Apply additional coats to areas where paint has been removed to restore the original coating thickness (Bring forward). Sand down junctions to give a flush surface.

Apply initial coat of two pack water based epoxy anti-graffiti paint and one finishing coat of two pack water based epoxy anti-graffiti paint.

**Painting New Concrete / Render with Anti-Graffiti Paint:**

076 Preparation: Remove surface salts and other loose material with stiff brush. Leave for 48 hours and repeat process if necessary. Apply one coat of fungicide solution and leave for 72 hours, fill joints, cracks, holes and other depressions with filler worked well in and finished off flush with surface. Sand smooth and remove dust. Apply one coat proprietary sealer/primer. Sand down junctions to give a flush surface.

Apply initial coat of two pack water based epoxy anti-graffiti paint and one finishing coat of two pack water based epoxy anti-graffiti paint.

**Painting Existing Coated Brickwork/Blockwork:**

077 Preparation: Carefully remove all loose or defective areas of coating to a firm edge. Thoroughly clean by wiping down with white spirit or washing with water containing detergent. Remove heavy deposits of oil, grease, etc. with a suitable proprietary cleaning solution. Sand down surfaces while still wet to provide a key. Rinse off and allow to dry, patch prime as specified. Fill joints, cracks, holes and other depressions with filler worked well in and finished off flush with surface. Sand smooth and remove dust. Apply additional coats to areas where paint has been removed to restore the original coating thickness (Bring forward). Sand down junctions to give a flush surface.

Apply one initial coat of exterior quality Pliolite based masonry paint, and one finishing coat of exterior quality Pliolite based masonry paint.

**Painting Existing Plaster – Emulsion Paint:**

081 Preparation: - Remove dirt and surface deposits with a stiff brush. Widen cracks sufficiently to receive proprietary filler. Brush cracks to remove any loose plaster and fill with proprietary filler and rub flush with surface. Rub down to remove nibs, trowel marks and plaster and paint splashes, lightly rub over-trowelled glossy plaster with worn abrasive paper, fill all depressions, holes and cracks and lightly rub down flush with surface, apply one coat proprietary sealer/primer.

Apply two finishing coats of emulsion paint.

**Painting Existing Plaster – Eggshell Paint**

083 Preparation: Thoroughly clean down the surfaces to remove all dirt, grease and surface contaminants. Carefully scrape back to a firm edge all areas of poorly adhering or defective coatings. Powdery and friable surface coatings are to be completely removed by scraping, brushing and washing. Allow the surface to fully dry before proceeding. Where appropriate rub down sound areas to produce the necessary key for good adhesion and feather broken edges of existing coating. Dust off. Make good holes, cracks and other imperfections with an approved proprietary filler, rub down and dust off.

Initial coats: Prime all sound bare areas with one coat of eggshell paint thinned in accordance with the manufacturer’s technical data sheet.

Apply two finishing coats of eggshell paint.

**Painting Existing Plaster – Vinyl Matt Paint**

085 Preparation: Thoroughly clean down the surfaces to remove all dirt, grease and surface contaminants. Carefully scrape back to a firm edge all areas of poorly adhering or defective coatings. Powdery and friable surface coatings are to be completely removed by scraping, brushing and washing. Allow the surface to fully dry before proceeding. Where appropriate rub down sound areas to produce the necessary key for good adhesion and feather broken edges of existing coating. Dust off. Make good holes, cracks and other imperfections with an approved proprietary filler, rub down and dust off.

Initial coats: Prime all sound bare areas with one coat of vinyl matt paint thinned in accordance with the manufacturer’s technical data sheet.

Apply two finishing coats of vinyl matt paint.

**Painting Existing Painted Internal Surfaces – Class “O” or “1” Fire Retardant Finish**

089 Preparation: Remove existing graffiti with an approved appropriate graffiti removal system, thoroughly clean down the surfaces to remove all dirt, grease and surface contaminants. Carefully scrape back to a firm edge all areas of poorly adhering or defective coatings. Powdery and friable surface coatings are to be completely removed by scraping, brushing and washing. Allow the surface to fully dry before proceeding. Where appropriate rub down sound areas to produce the necessary key for good adhesion and feather broken edges of existing coating. Dust off. Make good holes, cracks and other imperfections with an approved proprietary filler, rub down and dust off. Seal marks or suspect areas and surfaces that remain powdery and friable after thorough preparation with one coat of stain blocker

Finishing system: Apply three coats of Class “O” or Class “1”as instructed by the Client fire retardant basecoat applied strictly in accordance with the manufacturer’s technical data sheet. Apply two finishing coats of eggshell paint

**Painting Previously Painted Internal Metal– Gloss Paint**

091 Preparation: Thoroughly clean down to remove all surface contamination. Carefully scrape back to a firm edge all areas of damaged paint coatings. Scrape and wire brush corroded steel to produce a clean metal surface. Rub down with a suitable abrasive and dust off. All surfaces should be prepared to the minimum standard recommended in BS 7079:2009 at the time of coating. Prime all bare metal with two coats of zinc phosphate primer, applied in accordance with the manufacturer’s technical data sheet. Bring forward primed areas with one coat of undercoat.

Apply two finishing coats of 8 years all weather protection metal gloss finish paint, applied in accordance with the manufacturer’s technical data sheet.

**Painting Previously Painted External Metal– Gloss Paint**

093 Preparation: Thoroughly clean down to remove all surface contamination. Carefully scrape back to a firm edge all areas of damaged paint coatings. Scrape and wire brush corroded steel to produce a clean metal surface. Rub down with a suitable abrasive and dust off. All surfaces should be prepared to a minimum standard recommended in BS 7079:2009 at the time of coating. Prime all bare metal with two coats of zinc phosphate primer or other equal approved, applied in accordance with the manufacturer’s technical data sheet. Bring forward primed areas with one coat of undercoat.

Apply two finishing coats of 8 years all weather protection metal gloss finish paint, applied in accordance with the manufacturer’s technical data sheet

**Painting Galvanised Steel – Gloss Paint**

095 Preparation: Wash with white spirit to remove dirt and grease then wash with mild detergent solution and rinse off with clean water. Pre-treat with mordant solution. Retreat non-blackened areas to achieve blackening of whole of surface. If galvanizing is defective obtain instructions before proceeding.

Apply one coat zinc phosphate primer, apply one coat of undercoat.

Apply two finishing coats of 8 years all weather protection metal gloss finish paint, applied in accordance with the manufacturer’s technical data sheet.

**Painting Previously Painted Internal Timber – Gloss Oil Paint**

096 Preparation: Carefully scrape back to a firm edge all areas of poorly adhering or defective coatings. Rub down to feather broken edges of existing coating and dust off. Wash down the surfaces with soap and water, detergent solution or suitable solvent to remove all dirt, grease and surface contaminants. Whilst wet, rub down the surfaces with a suitable abrasive, taking care to avoid exposing timber on sharp edges. Finally rinse down and allow to dry. Make good all nail holes, open joints and open grain etc with an approved proprietary filler, rub down smooth and dust off. Apply two thin coats of knotting solution to all knots and resinous areas and allow to harden. Spot prime any bare metal, metal fixings, nail heads etc., with one coat of metal primer; prime all bare areas and areas exposed by the removal of coatings with one coat of wood primer, thinned as manufacturer’s technical data sheet.

Apply one coat of oil based undercoat and one finishing coat of gloss oil based paint.

**Painting Previously Painted Internal Timber – Gloss Water Based Paint**

097 Preparation: Carefully scrape back to a firm edge all areas of poorly adhering or defective coatings. Rub down to feather broken edges of existing coating and dust off. Wash down the surfaces with soap and water, detergent solution or suitable solvent to remove all dirt, grease and surface contaminants. Whilst wet, rub down the surfaces with a suitable abrasive, taking care to avoid exposing timber on sharp edges. Finally rinse down and allow to dry. Make good all nail holes, open joints and open grain etc., with an approved proprietary filler, rub down smooth and dust off. Apply two thin coats of knotting solution to all knots and resinous areas and allow to harden. Spot prime any bare metal, metal fixings, nail heads etc., with one coat of metal primer; prime all bare areas and areas exposed by the removal of coatings with one coat of wood primer, thinned as manufacturer’s technical data sheet.

Apply one coat of water based undercoat and one finishing coat of gloss water based paint.

**Painting Previously Painted External Timber – Exterior Quality Gloss Paint**

100 Preparation: Thoroughly clean down surfaces to remove all dirt, grease and surface contaminants. Remove all areas of blistered, poorly adhering or defective coatings. Where flaking has occurred or coatings are defective, the entire member or section must be stripped back to the nearest joint. Open up all joints which are not tight fitting and rake out thoroughly. Rub down to feather broken edges of existing coating and dust off. Abrade the surfaces in the direction of the grain to remove any grey denatured timber and raised grain, round all sharp edges. Make good all cracks, nail holes, open joints and open grain etc., with an approved proprietary filler, rub down smooth and dust off. Apply two thin coats of knotting to all knots and resinous areas and allow to harden. Spot prime any bare metal, metal fixings, nail heads etc., with one coat of metal primer. Prime all bare areas and areas exposed by the removal of coatings with one coat of exterior preservative primer. Bring forward all primed and/or filled areas to match existing with one coat of 8 years all weather protection exterior flexible undercoat of appropriate shade.

Apply one coat of 8 year all weather protection water based undercoats of appropriate shade, and one finishing coat of 8 year all weather protection exterior high gloss paint.

**Painting New External Timber – Exterior Quality Gloss Paint**

101 Preparation: Thoroughly clean down surfaces to remove all dirt, grease and surface contaminants. Abrade the surfaces in the direction of the grain to remove any grey denatured timber and raised grain, round all sharp edges. Make good all cracks, nail holes, open joints and open grain etc., with an approved proprietary filler, rub down smooth and dust off. Apply two thin coats of knotting to all knots and resinous areas and allow to harden. Spot prime any bare metal, metal fixings, nail heads etc., with one coat of metal primer. Apply one coat of exterior preservative primer.

Apply one coat of 8 year all weather protection water based undercoats of appropriate shade, and two finishing coats of 8 year all weather protection exterior high gloss paint.

**Painting Previously Painted Internal Plastic – Gloss**

102 Preparation: Carefully scrape back to a firm edge all areas of poorly adhering or defective coatings. Rub down to feather broken edges of existing coating and dust off. Wash down the surfaces with soap and water, detergent solution or suitable solvent to remove all dirt, grease and surface contaminants. Whilst wet, rub down the surfaces with a suitable abrasive. Finally rinse down and allow to dry. Prime all bare areas with two coats of gloss paint, thinned as manufacturer’s technical data sheet. Bring forward all primed areas with one coat of gloss paint.

Apply one finishing coat of gloss paint.

**Painting Previously Painted External Plastic – Gloss**

103 Preparation and making good: Carefully scrape back to a firm edge all areas of poorly adhering or defective coatings. Rub down to feather broken edges of existing coating and dust off. Wash down the surfaces with soap and water, detergent solution or suitable solvent to remove all dirt, grease and surface contaminants. Whilst wet, rub down the surfaces with a suitable abrasive. Finally rinse down and allow to dry. Prime all bare areas with two coats of 8 year all weather protection exterior gloss, thinned as manufacturer’s Technical data sheet. Bring forward all primed areas with one coat of 8 year all weather protection exterior gloss.

Apply one finishing coat of 8 year all weather protection exterior gloss paint.

**Previously Wood stained Internal Timber – Decorative Protection**

104 104 Preparation: Carefully scrape back to a firm edge all areas of poorly adhering or defective coatings. Rub down to feather broken edges of existing coating and dust off. Wash down the surfaces with soap and water, detergent solution or suitable solvent to remove all dirt, grease and surface contaminants. Whilst wet, rub down the surfaces with a suitable abrasive, taking care to avoid exposing timber on sharp edges. Finally rinse down and allow to dry. Make good all nail holes, open joints and open grain etc., with an approved proprietary filler, rub down smooth and dust off. Touch in any bare areas with one coat of decorative wood stain of appropriate shade, thinned as manufacturer’s technical data sheet.

Apply two finishing coats of decorative wood stain of selected shade, apply stain in flowing coats, redistribute excess material by brushing before stain has set, allow not less than 24 hours between coats.

**Previously Opaque Wood stained External Timber – Decorative Protection**

106 Preparation: Thoroughly clean down surfaces to remove all dirt, grease and surface contaminants. Remove all areas of blistered, poorly adhering or defective coatings. Where flaking has occurred or coatings are defective, the entire member or section must be stripped back to the nearest joint. Open up all joints which are not tight fitting and rake out thoroughly. Rub down to feather broken edges of existing coating and dust off. Abrade the surfaces in the direction of the grain to remove any grey denatured timber and raised grain, round all sharp edges. Make good all cracks, nail holes, open joints and open grain etc., with an approved proprietary stopper/filler designed for use with a woodstain system, rub down smooth and dust off. Apply two thin coats of knotting solution to all knots and resinous areas and allow to harden. Prime all sound bare areas and areas exposed by the removal of coatings with one coat of 8year all weather preservative basecoat. If required, touch in any primed areas with 8 year all weather protection stain to match the surrounding timber for colour and build. Allow to dry.

Apply two finishing coats of opaque 8 year all weather protection wood stain of selected shade, apply stain in flowing coats, redistribute excess material by brushing before stain has set, allow not less than 24 hours between coats.

**Previously Transparent Wood stained External Timber – Decorative Protection**

108 Preparation: Thoroughly clean down surfaces to remove all dirt, grease and surface contaminants. Remove all areas of blistered, poorly adhering or defective coatings. Where flaking has occurred or coatings are defective, the entire member or section must be stripped back to the nearest joint. Open up all joints which are not tight fitting and rake out thoroughly. Rub down to feather broken edges of existing coating and dust off. Abrade the surfaces in the direction of the grain to remove any grey denatured timber and raised grain, round all sharp edges. Make good all cracks, nail holes, open joints and open grain etc., with an approved proprietary stopper/filler designed for use with a wood-stain system, rub down smooth and dust off. Apply two thin coats of knotting solution to all knots and resinous areas and allow to harden. Prime all sound bare areas and areas exposed by the removal of coatings with one coat of 8 year all weather preservative basecoat. If required, touch in any primed areas with 8 year all weather protection stain to match the surrounding timber for colour and build. Allow to dry.

Apply two finishing coats of transparent 8 year all weather protection wood stain of selected shade, apply stain in flowing coats, redistribute excess material by brushing before stain has set, allow not less than 24 hours between coats.

**Previously Varnished Internal Timber** – **Polyurethane Varnish**

110 Preparation: and making good: Carefully scrape back to a firm edge all areas of poorly adhering or defective coatings. Rub down to feather broken edges of existing coating and dust off. Wash down the surfaces with soap and water, detergent solution or suitable solvent to remove all dirt, grease and surface contaminants. Whilst wet, rub down the surfaces with a suitable abrasive, taking care to avoid exposing timber on sharp edges. Finally rinse down and allow to dry. Make good all nail holes, open joints and open grain etc with an approved proprietary filler, rub down smooth and dust off. Touch in any bare areas with one coat of interior polyurethane varnish or other equal approved, thinned as manufacturer’s technical data sheet.

Apply two finishing coats of gloss, satin or matt interior polyurethane varnish as specified, brush well in avoiding aeration and layoff, rub down lightly between coats along the grain.

**Previously Preservative Treated Sawn Timber; External**

111 Preparation: Brush down to remove loose fibres, grey denatured timber and poorly adhering or defective coatings. Thoroughly clean down the surfaces with soap and water, detergent solution or suitable solvent to remove all dirt, grease and surface contaminants. Rinse with clean water and allow to dry. Surfaces which are contaminated with mould and/or vegetable growths should be scraped and treated with an appropriate fungicidal wash applied strictly in accordance with the manufacturer’s technical data sheet. Ensure all surfaces are completely dry. Apply two thin coats of knotting solution to all knots and resinous areas and allow to dry. Spot prime all knots and bare areas with two coats of coloured timber preservative primer.

Apply one or two (as specified by Client) finishing coats of opaque fencing timber preservative of selected shade.

**PLUMBING**

**PLUMBING**

**GENERAL**

**Generally**

001 Ensure all Materials comply with the requirements of the applicable water Utility Provider.

002 Use rust proofed ancillary and fixing Materials. Ensure all Materials in direct or indirect contact are compatible so as to prevent electrolytic or chemical corrosion.

003 Note that the Client’s Properties may contain a variety of disposal systems manufactured from conventional materials and also a wide range of manufacturer’s proprietary systems.

004 Seal any pipework entering a vertical service duct all round with intumescent sealant to prevent the passage of fire or smoke.

**MATERIALS**

**Plastic rainwater gutters and pipes**

005 Match the colour of the systems, the profile of gutters and the rainwater pipe jointing and fixing to the existing systems unless the Client Instructs otherwise.

**Plastic soil and vent pipes**

008 Ensure the colour and jointing and fixing match the existing pipework unless the Client Instructs otherwise.

**Cast iron soil and vent pipes**

009 Ensure the jointing and fixing methods match the existing pipework unless the Client Instructs otherwise.

**Plastic waste pipes, fittings and traps**

010 Use PVC-u plastic to BS EN 1328-1:2014 for soil/ventilating pipework and fittings. Use polypropylene plastic to BS EN 1565-1:2000and BS EN 1451-1:2000 for waste and warning pipework, fittings and traps. Fully protect any external polypropylene and ABS pipes and fittings from sunlight. Ensure waste pipes, fittings and traps match the existing waste systems unless the Client Instructs otherwise.

**Plastic water supply pipes and fittings**

012 Use blue polyethylene pipes with copper fittings for pipework laid underground for potable water supplies.

**Overflow pipes and fittings**

015 Ensure the pipework for overflows complies with the same requirements as for water supply pipework.

**Solder**

016 Do not use lead based solders or solders containing lead in Works associated with potable water supplies. Use tin/copper or tin/silver compositions instead.