

PART 1 GENERAL

1.01 RELATED SECTIONS

- .1 Section 08 03 12 – Historic –Doors.
- .2 Section 08 03 52.71 – Historic – Wood Window Rehabilitation.
- .3 Section 08 03 52.81 – Historic – Wood Window Replacement.

1.02 REFERENCES

- .1 American Society for Testing and Materials International (ASTM).
 - .1 ASTM C28/C28M-10. Standard Specification for Gypsum Plasters.
 - .2 ASTM C35-01(2009). Standard Specification for Inorganic Aggregates for Use in Gypsum Plaster.
 - .3 ASTM C61/C61M-00(2011). Standard Specification for Gypsum Keene's Cement.
 - .4 ASTM C206-03(2009). Standard Specification for Finishing Hydrated Lime.
 - .5 ASTM C841-03(2013). Standard Specification for Installation of Interior Lathing and Furring.
 - .6 ASTM C842-05(2010)e1. Standard Specification for Application of Interior Gypsum Plaster.
 - .7 ASTM C1489-01(2008)e1. Standard Specification for Lime Putty for Structural Purposes.
 - .8 ASTM C1002, Specification for Steel Self Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.

1.03 SUBMITTALS

- .1 Provide Submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit Manufacturers Product Data sheets for each product. Describe technical properties, physical and performance characteristics.
- .3 Submit MSDS - Material Safety Data Sheets.
- .4 Submit Manufacturer's installation instructions for each product. Submit Manufacturer's preparation and installation requirements including special procedures and conditions requiring special attention.
- .5 Submit mixing instructions for each plaster coating.

1.04 MOCK-UPS

- .1 Construct Mock-Up as specified in Section 01 45 00 - Quality Control.
- .2 Prepare a mock-up of each of the type of plaster application.
- .3 Notify Departmental Representative 5 working days in advance of mock-up preparation.
- .4 When accepted, mock-up will demonstrate minimum standard of quality required for this work.

- .5 Mock-ups may form part of completed work.

1.05 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Replace defective or damaged materials with new.
 - .2 Ensure bagged materials are delivered to site and stored in original containers.
 - .3 Ensure loose material is delivered, clean, and stored to prevent contamination by foreign material.
 - .4 Store plaster products inside, in dry location, away from heavy traffic areas.
 - .5 Stack plaster bags on planks or platforms away from damp floors and walls.
 - .6 Protect material from damage by moisture and freezing.
- .4 Packaging Waste Management: remove for reuse and return of pallets, crates, padding, and packaging materials in accordance with Section 01 00 10 – General Instructions, Waste Management.

1.06 ENVIRONMENTAL CONDITIONS

- .1 Do plaster work under conditions specified in ASTM C842. Ventilate and heat to facilitate proper application and curing of plaster in accordance with Section 01 51 00 - Temporary Utilities.
- .2 Ventilation:
 - .1 Maintain relative humidity between 30 - 40 % to facilitate proper curing of plaster and minimize cracking. Maintain records of actual air moisture content for a minimum of 21 days after installation.
 - .2 Provide circulation to carry off excess moisture. Mechanically remove moisture laden air in areas lacking normal ventilation. Provide continuous ventilation for a minimum of 72 hours after work has completed.
 - .3 Protect plaster from vent drafts, heaters or windows, to avoid uneven drying.
 - .4 Avoid excessive ventilation or air movement to allow plaster to properly set.
- .3 Temperature:
 - .1 Do not apply plaster to surfaces containing frost.
 - .2 Maintain temperature above 13 degrees C for 48 hours prior to commencing any plaster installation. Maintain minimum interior temperatures of 13 degrees C until building completion.
 - .3 Distribute heat evenly to areas of work. Prevent irregular heat on plaster near source by providing deflection or protective screens.
 - .4 Ensure that high temperatures do not affect plaster drying process when spotlights are used during repair of existing plaster.
- .4 Provide minimum lighting level of 700 Lux on work surfaces.

PART 2 PRODUCTS

2.01 MATERIALS

- .1 Lime:
 - .1 Single Hydrated Finish Lime: to ASTM C206. Type N or Type S.
 - .2 Lime putty: ASTM C1489.
- .2 Gypsum Plaster: Gypsum neat hardwall plaster to ASTM C28.
- .3 Gauging plaster: to ASTM C842.
- .4 Gypsum Keene's Cement (anhydrous calcined gypsum): to ASTM C61.
- .5 Sand: to ASTM C35. Clean, sharp, free from deleterious matter. Natural sand, graded aggregates in accordance with "TABLE 1", except sand for Keene's Cement Finish Coat, 100 percent passing a No. 30 sieve.
- .6 Water: potable, free of substances that would affect set of plaster.
- .7 Admixtures: use only with written approval of Departmental Representative.
- .8 Provide all materials from one source.
- .9 Accessories:
 - .1 Provide metallic accessories as required and as per manufacturer's recommendations.
 - .2 Metal or wood lath as per existing materials.
 - .3 Screws: screws and washers, galvanized steel to ASTM C1002.

2.02 MIXES

- .1 Plaster Mix: proportion mix by volume. Mix and prepare plaster in accordance with ASTM C28 and ASTM C842 and in accordance with plaster manufacturer's written recommendations unless otherwise specified.
 - .1 Traditional Historic Plaster Scratch Coat and Brown coat: gypsum neat plaster mixed with sand aggregate. Add water as required to achieve proper consistency. Proportion and blend scratch coat and brown coat in accordance with Manufacturer's instructions to be stiff to ensure good key with existing substrate. Minimize water content of the mix to keep it stiff and reduce shrinkage.
 - .2 Traditional Historic Plaster Finish coat: Keenes cement and lime putty. 1 portion of lime putty to 2 portions of Keenes cement. Hard finish. Blend and prepare finish plaster to match the existing plaster coating as closely as possible in colour and texture.

PART 3 EXECUTION

3.01 PLASTER REPAIRS

- .1 Perform plaster repairs at location where existing plaster is disturbed due to interior work related to this contract.
- .2 Prior work start, review existing surfaces and report by writing to Departmental Representative any unforeseen condition.

- .3 Repair plaster surfaces damaged during work as per Departmental Representative's instructions.
- .4 Remove all loose, damaged plaster to solid substrate. Brush out loose debris. Ensure that the plaster around the repair is sound and well adhered to substrate. If required use an adhesive approved by Departmental Representative to glue plaster edges.
- .5 Clean and shape surface defect edges to a minimum 2mm depth. Widen holes and cracks to permit adequate patching plaster penetration to sufficiently bond. Shape edges of gouges and dents to receive patching plaster of sufficient thickness (minimum 2mm deep) without feathering.
- .6 Where plaster repairs are performed in existing plaster with lath substrate, install plastering screeds and trim; attach to adjacent lath. Form true surfaces, straight or in uniform curves where indicated, without sags or buckles.
- .7 Replace in kind damaged existing lath, if required.
- .8 Apply bevel stepped edge detail at edge of existing plaster to accept new plaster repair.
- .9 Obtain approval from Departmental Representative of preparation work prior to proceeding with installation.
- .10 Degree of preparation to be sufficient so that patches and repairs to be invisible in final assembly.
- .11 Do plaster work to ASTM C842, unless otherwise specified
- .12 Apply scratch coat and brown coat to a maximum thickness of 9.5 mm each. Leave the brown coat rough to receive finish coat
- .13 Finish coat:
 - .1 Wet brown coat thoroughly as per manufacturer's recommendations. Eliminate standing water from surface.
 - .2 Apply finish coat to a uniform thickness of approximately 1.6 mm to 2.4 mm, and not more than 3.0 mm maximum thickness.
 - .3 Smooth finish coat to achieve desired texture and appearance. Surface of repairs should be flush with adjacent surfaces.
 - .4 Cure as recommended by manufacturer.
- .14 Ensure that plaster finish follows original methods to maintain appearance of original work.
- .15 Paint in accordance to Section 09 03 91 – Historic Painting.

3.02 CLEANING

- .1 Remove droppings and splashings, immediately, using clean sponge and water.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 – Cleaning.
- .3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 00 10 – General Instructions, Waste Management.

3.03 PROTECTION

- .1 Protect finished adjoining work, during execution of plaster work, with polyethylene sheets or building paper.

- .2 Remove surplus material, tools, equipment and debris from work area on completion of work.
- .3 Protect installed products and components from damage during construction.
- .4 Repair damage to adjacent materials caused by window installation.

END OF SECTION

PART 1 GENERAL

1.01 RELATED SECTIONS

- .1 Section 06 03 40 – Historic - Wood Repair.
- .2 Section 07 03 46 – Historic - Wood Siding.
- .3 Section 08 03 12 – Historic –Doors.
- .4 Section 08 03 52.71 – Historic – Wood Window Rehabilitation.
- .5 Section 08 03 52.81 – Historic – Wood Window Replacement.
- .6 Section 08 03 80 – Historic - Glazing.

1.02 REFERENCES

- .1 Canadian General Standards Board (CGSB)
 - .1 CGSB 1-GP-2M-80 Oil, Linseed, Boiled.
 - .2 CGSB 1-GP-16M-79 Shellac Varnish.
 - .3 CGSB 1-GP-55M-82 Primer, Wood Exterior.
 - .4 CGSB 1-GP-138M-78 Paint, Exterior, Latex Type.
- .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .3 The Master Painters Institute (MPI)
 - .1 Maintenance Repainting Manual 2004, Master Painters Institute (MPI), including Identifiers, Evaluation, Systems, Preparation and Approved Product List.
- .4 National Fire Code of Canada.

1.03 SCHEDULING

- .1 Submit work schedule for various stages of painting to Departmental Representative for approval review. Submit schedule minimum of 48 hours in advance of proposed operations.
- .2 Obtain written authorization from Departmental Representative for changes in work schedule.
- .3 Schedule repainting operations to prevent disruption by other trades if applicable.

1.04 ACTION AND INFORMATION SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for paints and coating products and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Samples:

- .1 Submit triplicate 100 x 200 mm "draw-downs" of each paint/varnish formula type and colour specified on applicable materials for Departmental Representative's review prior to commencement of the work.
- .2 Colours and finishes to be selected by Departmental Representative.
- .3 When approved, samples shall become acceptable standard of quality for appropriate on-site surface with one of each sample retained on-site.
- .4 Provide WHMIS Material Safety Data Sheets (MSDS) in accordance with Section 01 35 29.06 - Health and Safety Requirements for paints and coating materials to be used.
- .5 Photographic Documentation:
 - .1 Submit photographs for each stage of work and each mock-up in accordance with Section 07 03 46 – Historic - Wood Siding and Section 08 03 52.71 – Wood Window Rehabilitation.

1.05 CLOSEOUT SUBMITTALS

- .1 Provide maintenance data for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.
- .2 Provide records of products used. List products in relation to finish system and include following:
 - .1 Product name, type and use (i.e. materials and location).
 - .2 Manufacturer's product number.
 - .3 Colour code numbers.
 - .4 MPI Environmentally Friendly classification system rating.
 - .5 Manufacturer's Material Safety Data Sheets.
- .3 Record Documentation: Submit assembled documentation in the form of a Conservation Report to document every step of the restoration process from examination of existing conditions to reinstallation.

1.06 QUALITY ASSURANCE

- .1 Qualifications: in accordance with Section 08 03 52.71 – Historic - Wood Window Rehabilitation for painting of doors and windows supplemented as follows.
 - .1 Carry out painting work in this section using skilled tradespersons trained and experienced in removal and installation of specified paint systems.
- .2 Conform to latest MPI requirements for exterior repainting work including cleaning, preparation and priming.
- .3 Materials (primers, paints, coatings, varnishes, stains, lacquers, fillers, thinners, glazing putty, linseed oil and solvents) to be from a single manufacturer for each system used.
- .4 Paint materials such as linseed oil, shellac, and turpentine, to be the highest quality product and shall be compatible with other coating materials as required.
- .5 Mock ups:
 - .1 Provide mock-up in accordance with Section 01 45 00 - Quality Control.
 - .2 Prepare and repaint designated surface or item to requirements specified herein, with specified paint or coating showing selected colours, number of coats,

gloss/sheen, textures and workmanship to MPI Maintenance Repainting Manual standards for review and approval.

- .3 When approved, repainted surface and/or item shall become acceptable standard of finish quality and workmanship for similar on-site exterior painting work.
- .4 Agree on location and extent of each mock-up with Departmental Representative.
- .5 Prepare the work described in this section on one sash and one frame selected by the Departmental Representative.
- .6 Prepare the work described in this section on one area of new clapboard, 4 pieces high and 1800 mm long as well as on one area of new shaped wall shingles 4 courses high and 1800 mm long.
- .7 Prepare the work described in this section on one area of original exterior wood trim 1800 mm long.
- .8 Include all aspects of surface preparation including paint removal to bare wood and finish painting.
- .9 Provide additional mock-ups on-site for review by Departmental Representative if initial tests prove unsatisfactory.
- .10 Provide Departmental Representative five working days notice prior to undertaking work.
- .11 Approved mock-up may be incorporated into final work.
- .12 Allow 72 hours for inspection of mock-up by Departmental Representative before proceeding with paint work.

1.07 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store, handle and protect materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Deliver and store materials in manufacturers' original container with labels intact.
- .3 Ensure dry delivery and storage of materials and equipment at site.
- .4 Store materials and equipment in a well-ventilated place between 10 degrees C and 32 degrees C, and protect from direct sun.
- .5 Keep areas used for storage, cleaning and preparation, clean and orderly to approval of Departmental Representative. After completion of operations, return areas to clean condition to approval of Departmental Representative.
- .6 Remove paint materials from storage only in quantities required for same day use.
- .7 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling storage, and disposal of hazardous materials.

1.08 PROJECT CONDITIONS

- .1 Surface preparation work and painting shall be performed in favourable weather conditions as defined herein. Ambient air and substrate temperature shall be between 10 degrees C to 30 degrees C and the manufacturer's prescribed limits.
- .2 Wood being prepared must have a moisture content below 10% by weight. Protect area from moisture until final painting is complete and cured.

- .3 Protect exterior surfaces from moisture and water as necessary from time of preparation until the final coats of paint have sufficiently dried to be unaffected by moisture and/or water.
- .4 Use of a heated enclosure around the work area is acceptable.
- .5 Mask or otherwise protect surrounding or adjacent historic fabric from all activities associated with this work. No fastenings associated with hoarding or other protection shall be installed in historic material without prior approval of Departmental Representative.
- .6 Prevent dust associated with these activities from spreading beyond the immediate work area.
- .7 Do not paint during or immediately following foggy, rainy or frosty weather, nor when the temperature is expected to go below 10 degrees C before the coating is dry, in excessively humid or windy weather, or on damp surfaces (wood maximum 10% moisture).
- .8 Protect until paint is dry or until weather conditions are suitable.
- .9 Schedule painting operations such that surfaces exposed to direct, intense sunlight are scheduled for completion during early morning.
- .10 Remove paint from areas which have been exposed to freezing, excess humidity, rain, snow or condensation. Prepare surface again and repaint.

1.09 EXTENDED WARRANTY

- .1 For the work of this Section, the 12 month warranty period is extended to 24 months for the work performed as per this section.

PART 2 PRODUCTS

2.01 MATERIALS

- .1 Latex, paint.
 - .1 Exterior latex paint.
 - .2 Alkyd primer, by same manufacturer as paint.
- .2 Paint, linseed oil paint, custom colour mixed by manufacturer including zinc white, by same manufacturer as putty compound.
 - .1 Paint shall consist of cold-pressed, cleaned, filtered, sterilized, well-matured, cooked linseed oil only.
 - .2 At factory, add 15% zinc white by volume.
 - .3 Pigments shall be made from titanium oxide, iron oxides, chromium oxide green and ultramarine blue.
 - .1 Tinting: as recommended by paint manufacturer.
 - .4 Wood primer: Boiled linseed oil type, by same manufacturer as paint.
- .3 Cleaning solution:
 - .1 For linseed oil paint: linseed oil soap, by same manufacturer as paint.
 - .1 Mix linseed oil soap with boric acid; 1 tablespoon of acid to 1 litre of soap.

- .2 For latex: mineral spirit.
- .3 For other paint systems: as per manufacturer's recommendations.
- .4 Wood Sealer: Shellac.
 - .1 Shellac flakes, de-waxed.
 - .2 Denatured alcohol (methyl hydrate).
- .5 Glazing Putty in accordance with Section 08 03 80 – Historic – Glazing.
- .6 Mild Steel: Pigmented polyurethane finish over epoxy zinc rich primer and high build epoxy, premium grade.

2.02 COLOURS

- .1 Departmental Representative will provide Colour Schedule after Contract award.
- .2 Colour schedule will be based upon selection of five base colours and three accent colours for exteriors (including all faces of windows and doors). No more than eight colours will be selected for entire project and no more than three colours will be selected in each area.
- .3 Colour schedule will be based upon selection of three base colours and one accent colours for interiors. No more than four colours will be selected for entire project and no more than two colours will be selected in each area.
- .4 Selection of colours will be custom.

2.03 MIXING AND TINTING

- .1 Perform colour tinting operations prior to delivery of paint to site. On-site tinting of painting materials is allowed only with Departmental Representative's written permission.
- .2 Mix paste, powder or catalyzed paint mixes in accordance with manufacturer's written instructions.
- .3 Add thinner to paint manufacturer's recommendations.
- .4 Re-mix paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and colour and gloss uniformity.

2.04 PAINT SYSTEMS

- .1 New exterior woodwork: 1 coat of boiled linseed oil; 3 coats of linseed oil paint.
- .2 Existing woodwork, window frames, screens, storms and exterior portions of sashes: 1 coat raw and 3 coats of boiled linseed oil, 3 coats of linseed oil paint.
- .3 Existing woodwork, verandah: 2 coats of linseed oil paint.
- .4 Existing woodwork, interior face of primary sashes and interior stops: 1 coat of alkyd primer, 2 coats of exterior latex paint.
- .5 Backsides and end grain of all exterior woodwork shall be primed with one coat of boiled linseed oil and one coat of linseed oil paint prior to installation.
- .6 Interior plaster and gypsum board: Use MPI system INT 9.2B. High performance architectural latex.
- .7 Mild Steel: Use MPI system EXT 5.1L.
 - .1 Multi Component Epoxy Zinc Rich primer: MPI product #20;

- .2 Two Component Epoxy, High Build, Gloss: MPI product #98;
- .3 Polyurethane, Two Component, Pigmented, Gloss (MPI Gloss level 6): MPI product #72.
- .8 Existing galvanized metal door and frame: Use MPI system REX 5.3 for existing galvanized metal, products to be included in the latest edition of the MPI Product Listing.
 - .1 Water or latex-acrylic-based primer, compatible with the condition of the existing door. Assume one coat.
 - .2 Acrylic urethane base finish paint, compatible with primer, G5 finish (35 to 70 units at 60 degrees). Assume two coats.

2.05 TOOLS

- .1 Brush: natural bristle brushes of size and shape to suit application.
- .2 Rags: micro fibre rags
- .3 Mechanical tools without sharp edges.
- .4 Scouring pad: plastic mesh.
- .5 Scrub brushes: natural fibre bristle or soft plastic type.

PART 3 EXECUTION

3.01 PROTECTION

- .1 Protect existing building surfaces and adjacent structures from paint spatters, markings and other damage by suitable non-staining covers or masking. If damaged, clean and restore such surfaces as directed by Departmental Representative.
- .2 Protect general public and building occupants about the building.
- .3 Removal of surface hardware, and surface mounted equipment, fittings and fastenings to be done prior to undertaking painting operations. Store items and re-install after painting is completed.
- .4 To avoid spontaneous combustion remove any and all oil soaked rags from the site each day and soak rags in water and discard.

3.02 PREPARATION (PAINT REMOVAL)

- .1 Prepare surfaces as per manufacturer's recommendations unless otherwise specified.
- .2 Epoxy repair work to be completed prior to undertaking the work of this section.
- .3 For sashes, stops and other disassembled and salvaged wood components, remove paint to bare wood in shop by the careful use infrared stripping guns, followed by scraping and sanding.
 - .1 For each window unit, retain a 300 mm long portion of the interior and exterior paint layers on the upper rail to encapsulate existing finish history. Wipe surfaces with tri-sodium phosphate, rinse with potable water prior to painting.
- .4 For exterior wood elements restored in situ including window and door frames, exterior wood trim, sunroom window casing, and soffits at dormer and gables remove paint in situ to bare wood by the use of an infrared stripper, scraping and sanding.

- .5 For recently painted verandah wood elements, remove loose paint by scraping and sand all surfaces thoroughly.
- .6 Neatly remove any existing caulking.
- .7 Scraping and sanding shall be done carefully so as not to gouge or otherwise alter the profiles of mouldings. Orbital sanders are not permitted because of the tendency to tear across the grain.
- .8 Customize blades for scrapers to match the shape of the original profiles.
- .9 Sand elements lightly and ease corners in preparation for painting. Carefully sand to achieve smooth surface without altering profiles, feather edges, remove all dust with vacuum, and wipe clean.
- .10 Apply knot sealer recommended by paint manufacture and in accordance with manufacturer's written instructions.
- .11 Keep all surfaces dry until painting is complete.
- .12 Remove dust, dirt, and surface debris by brushing, wiping with dry, clean cloths or compressed air.
- .13 All surfaces to be painted shall be thoroughly sanded and wiped clean.
 - .1 For verandah soffit, first sand with coarse grit sand paper concentrating on the bleeding knots, prior to sanding with medium grit sand paper.
 - .2 For other recently painted verandah wood elements, sand with medium grit sand paper.
 - .3 Use 120 grit sand paper for all other surfaces to be painted.
- .14 Cleaning:
 - .1 Wipe recently painted verandah wood elements with a solution of tri-sodium phosphate (TSP) in clean potable water 1:20 using scouring pad.
 - .2 Clean all other exterior surfaces with linseed oil soap using scouring pad.
 - .3 Rinse thoroughly with clean potable water as directed by manufacturer taking care not to over soak. Let dry 24 hours.
- .15 Prevent contamination of cleaned surfaces by salts, acids, alkalis, corrosive chemicals, grease, oil and solvents before priming and between applications of remaining coats. Touch-up, spot prime, and apply primer, paint, or pre-treatment as soon as possible after cleaning and before deterioration occurs.
- .16 Do not apply paint until prepared surfaces have been accepted by Departmental Representative.
- .17 Handling: assume all paint layers and wood substrate contain dangerous levels of lead.

3.03 APPLICATION

- .1 Method of application to be as approved by Departmental Representative. Conform to manufacturer's application instructions unless specified otherwise.
- .2 Apply paint by brush on wood elements.
- .3 All exterior wood work to be back primed with oil and to have one application of paint to "all six sides" before assembly. Prime end grain and joinery, including mortice and tenon, with boiled linseed oil.

- .4 Do not prime or paint edges of double hung sash stiles – rub stiles thoroughly with paraffin wax prior to installation.
- .5 Heat boiled linseed oil primer and maintain a temperature of 50-60 degrees C. Also heat the surface of the wood with a hair dryer as application proceeds.
- .6 For sealing knots :
 - .1 Before painting, prime with a mixture of shellac flakes and alcohol to seal knots.
 - .1 Mix shellac flakes and methyl hydrate in a glass jar to the consistency of motor oil. Mix only enough for one day's use.
 - .2 Brush shellac mixture onto surfaces. Let dry for 2 hours before applying second coat or paint.
 - .3 Apply 2 coats of shellac mixture.
 - .2 Apply paint in a uniform layer using brush of types suitable for application.
 - .3 Work paint into cracks, crevices and corners.
 - .4 Use dipping, sheepskins or daubers when no other method is practical in places of difficult access and when specifically authorized by Departmental Representative.
 - .5 Paint surfaces and corners not accessible to brush using daubers and/or sheepskins.
 - .6 Use a soft brush to paint over putty so as to not disturb fresh putty. Lap paint neatly 2 mm onto the glass surface.
 - .7 Brush out runs and sags, and over-lap marks. Rolled surfaces shall be free of roller tracking and heavy stipple unless approved by Departmental Representative.
- .7 Interior plaster and gypsum board:
 - .1 Prime and paint as per manufacturer's recommendations.
 - .2 Clean and prepare surfaces as per MPI's Maintenance Repainting Manual.
 - .3 Paint the complete surface of all walls where plaster repairs were performed.
- .8 Exterior paint application:
 - .1 Before painting the verandah ceiling seal all knots with two coats of a mixture of shellac flakes and alcohol.
 - .2 Prior to mixing paint, remove any skin from the surface. As some settling of pigment may have occurred during shipping, stir the paint thoroughly with a hand-blender before painting.
 - .3 Do not dilute paint with solvents. Where necessary, thin linseed oil based paint with a maximum 5% boiled linseed oil.
 - .4 Apply warmed paint in thin coats with a brush and/or micro fibre rags. Note that linseed oil paints are to be applied much more thinly, but in multiple coats, compared to conventional paints.
 - .5 Finish and number of coats specified are intended to cover surfaces completely. If they do not, apply further coats until complete coverage and even appearance is achieved to Departmental Representative's approval.
 - .1 On recently painted verandah wood elements, apply a minimum of two thin finish coats of paint.

- .2 Apply a minimum of three thin finish coats of paint on all other locations.
- .6 After first coat on wood, fill any minor holes or small checks on vertical surfaces with linseed oil based glazing putty and rub smooth.
- .7 Use a soft brush to paint over putty so as to not disturb fresh putty. Lap paint neatly 2 mm onto the glass surface.
- .8 Upon completion apply one coat of boiled linseed oil to even appearance. Spread the paint well in several directions before the final long brushstroke, spreading the paint as thinly as possible.
- .9 Remove runs, sags and brush marks from finished work and repaint.
- .10 Apply coats of paint as continuous film of uniform thickness. Repaint thin spots or bare areas before next coat of paint is applied.
- .11 Allow surfaces to dry and properly cure after cleaning and between subsequent coats for minimum time period as recommended by manufacturer.
- .12 Sand and dust between coats to remove visible defects.

3.04 CLEANING

- .1 Proceed in accordance with Section 01 74 11 – Cleaning.
- .2 Remove paint where spilled, splashed, splattered or sprayed as work progresses using means and materials that are not detrimental to affected surfaces.
- .3 Keep work area free from unnecessary accumulation of tools, equipment, surplus materials and debris.
- .4 Clean equipment and dispose of wash water used for water borne materials, solvents used for oil based materials as well as cleaning and protective materials (e.g. rags, drop cloths, and masking papers), paints, thinners, paint removers/strippers in accordance with the safety requirements of authorities having jurisdiction and as specified.
- .1 Clean brushes and tools with soap from same line as paint manufacturer.

3.05 RESTORATION

- .1 Clean and re-install hardware items removed before undertaken painting operations.
- .2 Remove protective coverings and warning signs as soon as practical after operations cease.
- .3 Remove paint splashings on affected exposed surfaces. Remove smears and spatter immediately as operations progress, using compatible solvent.
- .4 Protect freshly completed surfaces from paint droppings and dust to approval of Departmental Representative. Avoid scuffing newly applied paint.
- .5 Restore areas used for storage, cleaning, mixing and handling of paint to clean condition as approved by Departmental Representative.

3.06 PROTECTION OF COMPLETED WORK

- .1 Protect area where paint has been applied.
- .2 On completion of specified work remove surplus materials, tools and equipment and debris on work area; leave clean and tidy to complete satisfaction of Departmental Representative.

END OF SECTION