

1. Notify the District Representative about anticipated problems using the materials specified over substrates primed by others.

3.1 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations as applicable to substrates and paint systems indicated.
- B. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of the size or weight of the item, provide surface-applied protection before surface preparation and painting.
 1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
 2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 3. To the greatest extent practical, maintain natural ventilation during and after application of coatings.
- C. **Cleaning: Before applying paint** or other surface treatments, **clean the substrates** of substances that could impair the bond of the various coatings. **Remove oil, grease, and incompatible paints before cleaning.**
 1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
 2. **Power wash all exterior surfaces to be painted.**
 3. Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.
- D. Preparation of previously painted surfaces:
 1. Clean surfaces of loose dirt and dust. **Remove loose paint by wet sanding or wet scraping.** Comply with requirements of the Lead and Asbestos abatement specifications and Cal/OSHA requirements for handling lead in Construction. **Failure to protect a school site from lead and/or asbestos contamination will result in the immediate removal of the subcontractor from this Project.** When removing loose and flaking paint, feather all edges by wet sanding and prime within four hours.
 2. **Fill holes and cracks in plaster, stucco, and gypsum board surfaces with a manufactures recommended compound to match existing surrounding surfaces. Correct all previously repaired areas to match surrounding wall surfaces. Re-texture surfaces as required to achieve a uniform finished surface and to conceal cracks, holes and other blemishes. Voids around doors, windows, fixtures, other permanent items shall be caulked with sealant compound specified in Division 7. Spot prime patched and repaired areas with a primer-sealer as recommended by the paint manufacturer for the surfaces to be refinished.**

3. Remove existing foreign items such as nails and staples. Hammer down or tighten loose nails and screws and replace missing nails and screws and other fasteners. Do not paint loose wood, trim, gypsum board or other surfaces until they are properly fastened.
 4. Fill holes and blemished wood surfaces with wood patching compound and spot prime.]
- E. Cementitious Material Substrates: Prepare concrete, concrete masonry, clay masonry, and cement plaster surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation. Fill minor cracks, holes or other imperfections with approved stucco patching mix, and match adjoining surface finish. These repairs shall be made in accordance with the manufacturer's recommendations/directions printed packages or containers. All stucco repairs must be made in a manner that provides a uniform appearance. This may require the use of mechanical application of texture coating. Spot prime.
1. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not paint surfaces where moisture content exceeds that permitted in manufacturer's written instructions.
 2. Clean concrete floors to be painted in a manner as recommended by the paint system manufacturer. Vacuum before painting.
- F. Ferrous Metals: Clean un-galvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, rust, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with the Steel Structures Painting Council's (SSPC) recommendations and with those of the paint manufacturer.
1. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
 2. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by paint manufacturer, and touch up with the same primer as the shop coat.
- G. Galvanized-Metal Substrates: Prepare surfaces as recommended by the paint manufacturer. Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- H. Aluminum Substrates: Remove surface oxidation.
- I. Wood Substrates: Clean surfaces of dirt, oil, and other foreign substances with scrapers and sandpaper as required. Sand surfaces exposed to view smooth and dust off. Unless performed under containment by certified personnel, wet sand and wet scrape only. Perform all painting prep work in accordance with Lead and Asbestos specifications and all requirements of Cal/OSHA "Lead in Construction Special Emphasis Program".

1. Scrape and clean small, dry, seasoned knots, and apply a thin coat of white shellac or other recommended knot sealer before applying primer.
 2. Prime edges, ends, faces, undersides, and backsides of wood.
 3. After priming, fill holes and imperfections in finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- J. Plastic Trim Fabrication Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.
- K. Plaster Substrates: Do not begin paint application until plaster is fully cured and dry.
- L. Exterior Gypsum Board Substrates: Do not begin paint application until finishing compound is dry and sanded smooth.
- M. Materials Preparation: Mix and prepare paint materials according to manufacturer's written instructions.
1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
 2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
 3. Use only thinners approved by paint manufacturer and only within recommended limits.

3.2 APPLICATION

- A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied. The areas to be painted include the exterior stucco, stucco or wood overhangs and stucco or wood breezeways and exterior trim, on main buildings and portable buildings. The contractor shall include all fore mentioned exterior surfaces including attached equipment, sheds and containers as part of his offer. Only those items specifically excluded by these specifications shall be left unpainted. The intent is to include all listed exterior surface areas; any omission shall be the responsibility of the bidder to question prior to bidding.
- B. **The Project Inspector will inspect all phases of the surface preparation and paint application. Each step will be inspected and approved including cleaning, preparation, prime coat, and each finish coat. Do not proceed with any step without the Inspector's approval.** Failure to do so will result in re-work and re-inspection back charges to the Contractor. A checklist, provided by the Contractor and approved by the Inspector will be used for all painting operations.
1. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable smooth paint film.
 2. Provide finish coats that are compatible with primers used.
 3. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, convector covers, covers for finned-tube radiation, grilles, and similar components are in place. Extend coatings in these areas, as required, to maintain the system integrity and provide desired protection.

4. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces.
 5. Paint interior surfaces of ducts with a flat, nonspecular black paint where visible through registers or grilles.
 6. Finish doors on tops, bottoms, and side edges the same as faces.
 7. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
 8. Sand lightly between each succeeding enamel coat.
 9. If undercoats or other conditions show through topcoat, apply additional coats of finish paint as required to achieve a uniform finish, color and appearance, without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- C. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration. **All prime coats will be back rolled.**
1. The number of coats and the film thickness required are the same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
 2. Omit primer on metal surfaces that have been shop primed and touchup painted.
 3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
- D. Application Procedures: Apply 2 coats of finish paint by brush, roller, or spray according to manufacturer's written instructions.
1. Brushes: Use brushes best suited for the type of material applied. Use brush of appropriate size for the surface or item being painted.
 2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.
 3. Spray Equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
- E. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.