

The contractor shall furnish the shipping invoice for all materials used on the project to the Engineer, prior to use.

816.07 MIXING AND THINNING

All ingredients in any container of paint shall be thoroughly mixed immediately before use and shall be agitated often enough during application to maintain a uniform composition. Paint shall be carefully examined after mixing for uniformity and to verify that no unmixed pigment remains on the bottom of the container. The paint shall be mixed with a high shear mixer (such as a Jiffy Mixer). Paddle mixers or paint shakers are not allowed. Paint shall not be mixed or kept in suspension by means of an air stream bubbling under the paint surface.

All paint shall be strained after mixing. Strainers shall be of a type to remove only skins and undesirable matter, but not the pigment.

No thinner shall be added to the paint without the Engineer's approval, and only if necessary for proper application as recommended by the manufacturer. When the use of thinner is permissible, thinner shall be added slowly to the paint during the mixing process. All thinning shall be done under supervision of the Engineer. In no case shall more thinner be added than that recommended by the manufacturer's printed instructions. Only thinners recommended and supplied by the paint manufacturer may be added to the paint. No other additives shall be added to the paint.

Catalysts, curing agents, or hardeners which are in separate packages shall be added to the base paint only after the base paint has been thoroughly mixed. The proper volume of catalyst shall then be slowly poured into the required volume of base with constant agitation. Liquid which has separated from the pigment shall not be poured off prior to mixing. The mixture shall be used within the pot life specified by the manufacturer. Therefore only enough paint shall be catalyzed for prompt use. Most mixed, catalyzed paints cannot be stored, and unused portions of these shall be discarded at the end of each working day.

816.08 COATING APPLICATION

A. General

All structural steel, expansion joints (except top surfaces), steel railing, drain troughs and other areas (if indicated in the plans) shall be painted. Galvanized or metalized surfaces shall not be painted unless otherwise noted on plans or damaged during erection.

The following methods of application are permitted for use by this specification, as long as they are compatible with the paint being used: brush, spray, or any combination of these methods unless specified differently in the plans. Daubers or sheepskins may be used for places of difficult access when no other method is practical and in all cases shall be used where cross-frame angles are located within 50 mm (2") of the bottom flange and where end cross frames are within 150 mm (6") of the backwall and bottom of bottom flanges around bearings less than 150 mm (6") in height.

Painting shall be so programmed that dust or other contaminants do not fall on wet, newly

painted surfaces. Surfaces not intended to be painted shall be suitably protected from the effects of cleaning and painting operations. Over spray and pigeon droppings shall be removed with a stiff bristle brush, wire screen or a water wash with sufficient pressure to remove over spray without damaging the paint. The over spray must be removed before applying the next coat.

If brush application of the coating is used, it shall produce a smooth coat. Care shall be taken to work the paint into all crevices, corners, and around all bolt heads.

B. Spray Application (General)

All spray application of paint shall be in accordance with the following:

Spray equipment shall be kept clean so that dirt, dried paint and other foreign materials are not deposited in the paint film. Any solvent left in the equipment shall be completely removed before using.

Paint shall be applied in a uniform layer with overlapping at the edges of the spray pattern.

The border of the spray pattern shall be painted first; with the painting of the interior of the spray pattern to follow, before moving to the next spray pattern area. A spray pattern area is such that the gun shall be held perpendicular to the surface and at a distance which will ensure that a wet layer of paint is deposited on the surface. The trigger of the gun should be released at the end of each stroke. All bolts shall be sprayed from at least 2 directions or brushed to insure coverage.

Each spray operator shall demonstrate to the Engineer his ability to apply the paint as specified. Any operator who does not demonstrate this ability shall not spray.

If mud cracking occurs, the affected area shall be cleaned to bare metal in accordance with surface preparation above and repainted.

All spray equipment used shall be suitable for use with the specified paint. Paint manufacturer's equipment recommendations shall be followed to avoid paint application problems.

If air spray is used, traps or separators shall be provided to remove oil and condensed water from the air. The traps or separators must be of adequate size and must be drained periodically during operations. The following test shall be made by the Contractor and verified by the Engineer to insure that the traps or separators are working properly.

"Air shall be blown from the spray gun for 30 seconds onto a white cloth or blotter held in a rigid frame. If any oil, water or other contaminants are present on the cloth or blotter, painting shall be suspended until the problem is corrected and verified by repeating this test".

This test shall be made at the start of each shift and at four (4) hour intervals. This is not required for an airless sprayer.

Spray application of all coats shall not be used unless the operation is totally contained to prevent over spray damage to public and private property, any and all vegetation, streams,