Each container of paint and thinner shall be clearly marked or labeled to show paint identification, component, color, lot number, stock number, date of manufacture, and information and warnings as may be required by Federal and State laws. The QCPS shall record the lot number, stock number and date of manufacture.

All containers of paint and thinner shall remain unopened until required for use. The label information shall be legible and checked at the time of use. Solvent used for cleaning equipment is exempt from the above requirements.

Paint which has livered, gelled or otherwise deteriorated during storage shall not be used. However, thixotropic materials which can be stirred to attain normal consistency may be used. The oldest paint of each kind shall be used first. No paint shall be used which has surpassed its shelf life.

The Fabricator shall provide thermometers capable of monitoring the maximum high and low temperatures within the storage facility. The Fabricator is responsible for properly disposing of all unused paint and paint containers.

The Fabricator shall furnish TE-24 and the QCPS records for all materials used on the project to the QA Inspector.

## MIXING AND THINNING

All ingredients in any container of paint shall be thoroughly mixed immediately before use and the primer shall be continuously mixed by an automated agitation system (hand held mixers not allowed). 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. The QCPS shall record that all equipment is working correctly.

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

No thinner shall be added to the paint without the QCPS'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 QCPS. 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

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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.

## **COATING APPLICATION**

## **General**

Galvanized or metallized surfaces shall not be painted. All new structural steel shall be painted. The following methods of application are permitted for use by this specification, as long as they are compatible with the paint being used: Air-less or Conventional spray. Brushes Daubers, small diameter rollers or sheepskins may be used for places of difficult access when no other method is practical.

Cleaning and 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 shall be removed with a stiff bristle brush or wire screen. Remove overspray without damaging the paint. The Over spray must be removed. No visible abrasives from adjacent work shall be left on the prime. Abrasives on the prime coat shall be removed.

## Spray Application (General)

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

Spray equipment shall be kept clean so 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. The QCPS shall record that each spray operator demonstrated to the QCPS the ability to apply the paint as specified. Any operator who does not demonstrate this ability shall not spray.

The QCPS shall document that all spray equipment used follows the paint manufacturer's equipment recommendations. Equipment shall be suitable for use with the specified paint, 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 Fabricator and verified by the QCPS to insure that the traps or separators are working properly.

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