

to blasting and at the start of each shift.

All abrasives and residue shall be removed from all surfaces to be painted with a vacuum cleaner equipped with a brush-type cleaning tool, or by double blowing. All blast cleaned steel shall be kept dust free, dry and shall be prime coated within 24 hours. The QCPS shall perform and record the following test to ensure that the compressed air is not contaminated: blow air from the nozzle for 30 seconds onto a white cloth or blotter held in a rigid frame. If any oil or other contaminants are present on the cloth or blotter, abrasive blasting shall be suspended until the problem is corrected and the operation is verified by a repeated test. This test shall be done prior to blowing and at the start of each shift.

Abrasive blasting and painting may take place simultaneously as long as abrasive blasting debris and/or dust by the blowing operation does not come in contact with freshly painted surfaces. Work areas for blasting and painting shall be physically separated to eliminate contamination of the priming operation.

All fins, tears, slivers and burred or sharp edges that are present on any steel member or that appear after the blasting operation shall be conditioned per ASTM A6 and the area reblasted to provide the specified surface profile.

Shop Prime Coat Application( QCP # 4). The surfaces to be painted shall be clean and dry. Paint shall not be applied in rain, snow, fog or mist, or to frosted or ice-coated surfaces. After QCP #3 has been accepted prime painting shall be completed before the cleaned surfaces have degraded from the prescribed standards, but in every case within 24 hours. The QCPS shall record the time between blasting and priming. Failure to prime coat the within 24 hours will require re-blasting before prime coating. The QCPS shall record that the paint is applied when the ambient temperature and humidity are as specified. Primer shall be applied by spray methods. The paint may be thinned for spraying. The type of thinner and the amount used shall be as recommended by the printed instructions of the manufacturer.

Before the paint is applied, it shall be mixed to a uniform consistency and maintained during its application. Primer shall be spray applied and continuously agitated by a automated agitation system( hand held mixers are not allowed) during application. The paint shall be mixed with a high shear mixer. Paddle mixers or paint shakers shall not be used. Paint shall also not be mixed or kept in suspension by means of an air stream bubbling under the surface.

The primer shall be applied in a neat workmanlike manner as a continuous film of uniform thickness which is free of holidays, pores, runs or sags. Spray application shall produce a wet coat at all times; the deposition of semi-dry particles on the surface shall be avoided. The Fabricator shall take precaution to prevent contamination of surfaces that have been prepared for painting and surfaces freshly painted. The prime coat shall be applied within the shop. The steel shall not be handled unnecessarily or removed from the shop until

paint has dried sufficiently to allow thickness gaging and to resist being marred in handling and shipping.

A prime coat shall coat all surfaces including insides of holes, behind stiffener clips and contact surfaces of connection or splice material which are to be fastened with shop or field bolts. Surfaces which are to be imbedded in concrete and surfaces within 50 mm (2 inches) of field welds other than those attaching intermediate or end cross frames to beams or girders shall only receive a mist coat not less than .5 mils( 12.5 um) nor more than 1.5 mils(37.5 um). Pins, pin holes and contact surfaces of bearing assemblies, except those containing self-lubricating bronze inserts, shall be painted with one coat of prime paint. Erection marks shall be applied after the prime coat is dry, using a thinned paint of a type and color which is completely concealed by and compatible with the second coat.

The QCPS shall record the actual dry film thickness for the prime coat as specified. Thick films shall be reduced by screening, sanding, or sweep blasting. Any re-coating of prime paint that has cured longer than 24 hours with prime paint shall be done as recommended by the paint manufacturer's printed instructions. If "mud cracking" occurs, the affected area shall be scraped to soundly bonded paint and the area re-coated. Uncured paint damaged by rain, snow or condensation shall be permitted to dry; the damaged paint shall then be removed and the surface repainted.

The primed coat shall be adequately cured before the intermediate coat is applied. This curing time shall be not less than that recommended by the paint manufacturer's printed instructions.

Testing Equipment. The Fabricator shall provide the QCSP inspector the following testing equipment in good working order for the duration of the project. When the Fabricator's people are working at different locations simultaneously, additional test equipment shall be provided for each crew for the type of work being performed. When test equipment is not available, no work shall be performed.

1. One Spring micrometer and 3 (unless otherwise specified on plans) rolls of extra-coarse replica tape.
2. One (Positector 2000 or 6000, Quanix 2200, or Elcometer A345FBI1) and the calibration plates, 38-200 mm and 250-625 mm (1.5 -8 mils and 10-25 mils) as per the NBS calibration standards in accordance with ASTM D-1186.
3. One Sling Psychrometer including Psychometric tables - Used to calculate relative humidity and dew point temperature.
4. Two steel surface thermometers accurate within 1° C(2° F) or One portable infrared thermometer available from:  
Model: Raynger ST Series (-18° C to 400°C)