

- 4.) Finish coat Check surface cleanliness; apply finish coat; check coating thickness
- 5.) Final Review Visual inspection of system for acceptance and check total system thickness.

Model: Raynger ST Series (-18° C to 400 ° C)
 Manufacturer: Raytek Inc.
 Santa Cruz, Ca.
 (800) 227-8074

or approved equal to the portable infrared thermometer.

816.04 SURFACE PREPARATION

This work shall consist of washing and solvent cleaning of each structure.

A. Washing (QCP #1)

After steel is delivered, erected, and before painting, all surfaces shall be washed with potable water having a nozzle pressure of at least 7 MPa (1,000 PSI) and a delivery rate of not less than 15 L (4 gallons) per minute. The contractor, shall provide equipment specifications to verify the above. The equipment shall also be equipped with gauges to verify the pressure. The nozzle shall be held at a maximum of 300 mm (12") from the surface being washed or rinsed. Surface shall not be considered as clean until clear rinse water runs off the structure. After the surface is rinsed and allowed to dry, it shall be checked for remaining visible dirt. Surfaces shall be rewashed as necessary to remove all remaining dirt. The intermediate coat shall be applied within one (1) month after washing the structure.

All dirt, sand, bird nestings, bird droppings and debris shall be completely removed from all surfaces of the bridge before field painting.

B. Solvent Cleaning (QCP #2)

After washing, all traces of asphaltic cement, oil, grease, diesel fuel deposits, and other soluble contaminants which remain, shall be removed by solvent cleaning (see SSPC-SP 1 Solvent Cleaning for recommended practices). Under no circumstances shall any painting be done to areas with asphaltic cement, oil, grease, or diesel fuel deposits. All solvent cleaned areas shall be rewashed as previously noted.

816.05 TESTING EQUIPMENT

The Contractor shall provide the Engineer the following testing equipment in good working order, for the duration of the project. When the Contractor'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 no test equipment is available, no work shall be performed.

- 1.) One Spring micrometer and 3 (unless otherwise specified on plans) rolls of extra coarse replica tape.
- 2.) Two steel surface thermometers accurate within 1° C (2 ° F) or one portable infrared thermometer available from:

- 3.) One sling Psychrometer including Psychrometric tables - Used to calculate relative humidity and dew point temperature.
- 4.) One film thickness gauge (Positector 2000 or 6000, Quanix 2200, or Elcometer A345FB11) 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.
- 5.) One Flashlight, 2-D cell batteries.

816.06 HANDLING

All paint and thinner shall be delivered to the project site in original, unopened containers with labels intact. Minor damage to containers is acceptable provided the container has not been punctured. Thinner containers shall be a maximum of 19 L (5 gallons).

Paint shall be stored at the temperature recommended by the manufacturer to prevent paint deterioration.

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.

All containers of paint and thinner shall remain unopened until required for use. The label information shall be legible and shall be checked at the time of use.

Solvent used for cleaning equipment is exempt from the above requirements.

Paint that 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. In every case, paint shall be used before its' shelf life has expired.

Paint may be considered as eligible for payment for material on hand as specified in 109.07. However, only paint which the Contractor can prove to the Engineer will be used during the construction season shall be eligible for payment. The Contractor shall provide the Engineer calculations indicating the total square meters (square feet) of steel to be painted during the construction season. He shall also provide calculations showing the total number of liters (gallons) required. The Contractor shall be responsible to store the paint on the project in such manner to prevent theft and adverse temperatures. The contractor shall provide thermometers capable of monitoring the maximum high and low temperatures within the storage facility. The Contractor is responsible for properly disposing of all unused paint and empty containers.