

SECTION 660 - TIMBER PAINTING

660.01 DESCRIPTION. This work shall consist of the field cleaning and painting of existing timber members of an existing timber bridge with insecticide/fungicide and fire retardant coatings.

660.02 MATERIALS. Materials shall meet the requirements of the following Subsections:

Insecticide/Fungicide.....708.05(b)
Fire Retardant.....708.05(c)

660.03 APPLICATION. Prior to painting, the Contractor shall determine if a timber surface is sealed or unsealed to verify the coatings specified below. Usually a painted or preservative treated finish surface is considered sealed and a natural bare surface is considered unsealed. All faces of the existing bridge members shall be painted in the following manner:

- (a) General Application. Insecticide/fungicide coatings shall be applied first and allowed to dry prior to applying fire retardant coatings.

The insecticide/fungicide and fire retardant coatings shall be applied in accordance with the manufacturer's recommendations. Coatings shall be applied to all bridge members following installation in the bridge. All field cuts shall be retreated as required.

The coatings shall not be subjected to freezing temperatures prior to curing.

It is mandatory that the Contractor obtain the services of a qualified technical advisor employed by the coating manufacturer to make at least one site visit at the start of the work to assist the Contractor and to verify the proper application of the coatings, or the applicator shall be trained and certified by the manufacturer as an authorized applicator of the coatings. In the latter case, the applicator shall show documentation of training and certification for the Engineer's review and acceptance.

The applicator shall have on hand the product data sheets and materials safety data sheets for the coatings to be used prior to performing any work.

All painting shall be performed in a workmanlike manner, by experienced workers, in the manner recommended by the coating manufacturer and to the satisfaction of the Engineer.

- (b) Insecticide/Fungicide Application. All interior unsealed natural (i.e. bare) timber surfaces (e.g. roof rafters and boards, truss chords and web members, strapping, upper lateral bracing, etc.) shall be cleaned and prepared as specified herein and shall receive an application of specified material. Areas around joints shall be coated generously by spraying.

Insecticide/Fungicide coating shall not be applied to the deck.

- (c) Fire Retardant Application. Interior Coatings are intended for unsealed interior surfaces not primarily exposed to moisture and sunlight.

All interior unsealed natural (i.e. bare) timber surfaces (e.g. roof rafters and boards, truss chords and web members, strapping, upper and lower bracing, etc.) shall be cleaned and prepared as specified herein and shall receive one application of Interior Coating.

Exterior Coatings are intended for unsealed exterior surfaces. All exterior unsealed natural (i.e. bare) timber surfaces on the underside of the bridge (including truss chords and web members), siding, and siding returns shall be cleaned and prepared as specified herein and shall receive one application of Exterior Coating.

Interior/Exterior Primer is intended as a primer for sealed (not preservative treated) interior and exterior surfaces and/or for bare surfaces that are to be sealed. Interior/Exterior Coating is intended as a finish coating for surfaces primed with Interior/Exterior Primer.

660.04 SURFACE PREPARATION. All timber surfaces to be painted shall be clean, dry, and free from all dirt, dust, oils, and other foreign contamination that would adversely affect the adhesion, performance, or appearance of the coatings. Solvent cleaning shall be used as necessary to remove oils or waxes, followed by a water rinse. Spent debris shall be collected. Cleaning and surface preparation shall meet the recommendations of the coating manufacturer. Alternate methods of cleaning, surface preparation, and collection of debris may be proposed.

660.05 SEASONAL LIMITATIONS. Paint shall not be applied in the field between November 1st and April 15th unless authorized in writing by the Engineer.

Coatings shall not be applied when the air temperature is below 5°C (40°F) or when the air is misty, or when, in the opinion of the Engineer, conditions are otherwise unsatisfactory for the work. Coatings shall not be applied upon damp or frosted surfaces.

Surfaces to be painted under cover shall have suitable temperature and humidity controls provided in damp or cold weather and shall remain under cover until dry.

Painting shall not be performed when surfaces are so hot as to cause the paint to blister and produce a porous paint film.

660.06 ENVIRONMENTAL PROTECTION. During cleaning and painting, the Contractor shall provide appropriate measures (such as suitable protective coverings) to protect the public, the bridge structure, substructure, work area, river, etc. from coatings contamination and other damage due to the drippings, spatter, and wind-blown particles of coatings, as well as from falling objects, etc. The Contractor shall ensure that no coating is applied to the roof. The Contractor shall be fully responsible for property damage or personal injury which may result from operations incidental to field painting.

660.07 WASTE MANAGEMENT. All rubbish, spent coatings debris, and refuse of any kind resulting from the work shall be removed by the Contractor from the work area and adjoining premises upon completion of the work so as to leave the site in a condition satisfactory to the Engineer. During the progress of the work, the area shall be kept clean and clear of debris and waste material.

660.08 METHOD OF MEASUREMENT. The quantities of Timber Painting, Environmental Protection; Timber Painting, Fire Retardant; and Timber Painting, Insecticide/Fungicide to be measured for payment will be on a lump sum basis for each item included in the Contract.

660.09 BASIS OF PAYMENT. The accepted quantity of Timber Painting, Environmental Protection will be paid for at the Contract lump sum price. Payment will be full compensation for all materials, labor, equipment, and incidentals necessary to protect workers, the public, and the environment from contamination due to construction operations performed under these specifications.

The accepted quantities of Timber Painting, Fire Retardant and Timber Painting, Insecticide/Fungicide will be paid for at the Contract lump sum price. Payment will be full compensation for all materials, labor, equipment, services of the coating manufacturer's representative, and all incidentals necessary for the satisfactory performance of cleaning and painting work, as specified herein. The cleaning, surface preparation, and painting of the timber bridge shall include all materials, apparatus, and labor necessary to install, equip, and place into immediate operation the respective coatings specified in the Contract. Any apparatus, material, and labor not specifically mentioned herein which may be found necessary to complete or perform any portion of the work in a satisfactory manner and in compliance with the requirements implied or intended in these specifications shall be furnished by the Contractor at no additional cost to the Agency. This shall include all materials, devices, or methods particular to the apparatus or system furnished and installed by the Contractor.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
660.10 Timber Painting, Environmental Protection	Lump Sum
660.20 Timber Painting, Fire Retardant	Lump Sum
660.30 Timber Painting, Insecticide/Fungicide	Lump Sum