



SECTION 711

PROTECTIVE COATINGS FOR EXPOSED CONCRETE SURFACES

711.1 Description. This work shall consist of the surface preparation and application of protective coatings for sealing and protecting exposed concrete elements. The locations and elevations of the protective coatings shall be as shown on the bridge plans. The work involving temporary coating on weathering steel bridges shall also include the removal of the temporary coating.

711.2 Material. All material shall be in accordance with Division 1000, Material Details, and specifically as follows:

Item	Section
Protective Coating Material	1059

711.3 Construction Requirements.

711.3.1 Protective Coating - Concrete Bents and Piers (Urethane). This protective coating shall consist of a modified urethane or polyurethane elastomer. New concrete shall cure a minimum of 28 days prior to application of the protective coating. The coating shall be applied to dry surfaces. The surface preparation and application shall be in accordance with the manufacturer's recommendations. The coating shall be applied to obtain a minimum dry film thickness of 40 mils (1 mm). Any unevenly applied film that causes ponding of water shall be given additional coats as directed by the engineer.

711.3.2 Protective Coating - Concrete Bents and Piers (Epoxy). This protective coating shall consist of a two-component, modified polyamide converted epoxy, clear or gray in color. New concrete shall cure a minimum of 28 days prior to application of the protective coating. The coating shall be applied to dry surfaces. The surface preparation and application shall be in accordance with the manufacturer's recommendations. The coating shall be applied to obtain a minimum dry film thickness of 6 mils (150 μ m).

711.3.3 Concrete and Masonry Protection System. This protective coating shall consist of a clear penetrating siloxane or silane based sealer. The surface preparation and application shall be in accordance with the manufacturer's recommendations. Field approval of the proposed material will be in accordance with [Sec 1059](#).

711.3.4 Sacrificial Graffiti Protection System. This system shall consist of a clear coating that can be removed with a hot water wash. The surface preparation and application shall be in accordance with the manufacturer's recommendations. Field approval of the proposed material will be in accordance with [Sec 1059](#).

711.3.5 Temporary Coating - Concrete Bents and Piers (Weathering Steel) . This protective coating shall consist of a clear temporary coating applied to the concrete substructure for protection against staining from weathering steel girders during initial weathering. The surface preparation and application shall be in accordance with the manufacturer's recommendations. The concrete substructure shall be cured a minimum of 14 days prior to application, unless otherwise specified by the manufacturer. The coating shall be applied to the concrete substructure before the erection of structural steel. The temporary

coating shall be removed by the contractor after construction of the deck and curbs is complete, or as directed by the engineer.

711.4 Basis of Payment. The accepted quantity of protective coatings for exposed concrete surfaces will be paid for at the contract lump sum price.