

SECTION 03921

PARAPET SURFACE REPAIR AND SEALING

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Repair and seal existing concrete front face and top of parapets.

1.2 RELATED SECTIONS

- A. Section 03310: Structural Concrete.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Patching Concrete:
 - 1. Approved patching concrete product from the Accepted Products Listing, available at www.dot.utah.gov/res.
 - 2. Use only products for which vertical application is recommended by the manufacturer.
- B. Substrate Coating: Bonding agent or primer recommended by the patching concrete manufacturer.
- C. Surface Sealing Material (Non-penetrating Type): Approved concrete epoxy sealer product from the Accepted Products Listing, available at <http://www.dot.utah.gov/res>.

PART 3 EXECUTION

3.1 PREPARATION

- A. For Surface Repair:
 - 1. Remove loose and spalled concrete before sandblasting.
 - 2. Sandblast the top and traffic face of the concrete surfaces to remove all dirt, grease, laitance, rust and corrosion prior to placing concrete.

- B. For Sealing:
 - 1. Sandblast the top and traffic face of the parapet surfaces to remove all dirt, grease, and laitance.
 - 2. Patch spalled or damaged spots on parapets before applying sealer.

3.2 SURFACE REPAIR

- A. Prevent sandblasting material and debris from falling into streams, pedestrian areas, traffic areas, or onto railroad tracks.

- B. After sandblasting, coat concrete substrate with the manufacturer's recommended primer of the particular patching concrete.

- C. Place concrete within the manufacturer's prescribed time period after sandblasting and prime coating has been completed.

- D. Patching Concrete:
 - 1. Apply the one component, non-shrinking patching concrete uniformly to build back the original surfaces of the face and top areas of the parapets to within $\pm 1/8$ inch of the original surface. Allow concrete to cure in accordance with the requirements of the manufacturer's recommendation.
 - 2. If the patch fails to bond to the existing concrete, remove the patch completely and repair again.

- E. Finishing Surfaces:
 - 1. Provide a uniform color matching existing parapet.
 - 2. Finish according to Section 03310, part 3, article, "Concrete Surface Finishing." Follow manufacturer's recommendations for procedure.

- F. Coating Parapet Surfaces:
 - 1. Allow concrete to properly cure.
 - 2. Sandblast all curing compound from the top and traffic face of the parapet.
 - 3. Coat all sandblasted surfaces with non-penetrating type epoxy sealer following the manufacturer's recommended procedure.

- G. If wingwalls, overhanging portions of the deck, and/or exterior beam surfaces become stained or discolored due to water or concrete leaking from the forms, provide a satisfactory treatment to restore these surfaces to a uniform color.

- H. Remove sandblasting materials and debris from the deck after the work is complete.

3.3 SEALING

- A. Coat the top and traffic face (front face) with non-penetrating type epoxy sealer, following the manufacturer's application procedures and recommendations.

END OF SECTION