

13.3.10 Rebar Repair and Replacement

- A. Any exposed rebar encountered during renovation shall be sand blasted to remove all rust.
- B. Heavily corroded rebar, exceeding 10% loss of cross section, (as determined by the Engineer) shall be lapped with new rebar of the same size.
 - 1. All new rebar shall be sand blasted in the same manner as repaired rebar.
 - 2. Heavily corroded rebar may be removed if sufficient lap is available with acceptable rebar.
 - a. If sufficient lap length is not available, the Contractor shall drill and grout rebar dowels as directed by the Engineer.
 - 3. Minimum cover on newly placed rebar shall be 40 mm, unless otherwise approved by the Engineer.
 - 4. Clear distance between newly placed rebar and existing rebar shall be 35 mm for shotcrete applications.

13.3.11 Application of epoxy fillers

- A. All cementitious surfaces shall have been sand blasted and thoroughly cleaned by high-pressure air blast just prior to filler application.
 - 1. Surface must be dry.
- B. Mixing shall be according to manufacturer's recommendations.
 - 1. All components must be fully mixed.
- C. Application shall be according to manufacturer's recommendations over the entire surface to smoothly fill all cavities, offsets, air holes and pinholes.

13.3.12 Application of epoxy Mortars

- A. Prior to start the repairs, and in view of prequalifying the proposed repair Epoxy Mortar system, The Contractor shall apply this method over three representative areas selected by the Engineer:
 - 1. From each area, three pullout tests shall be performed by the Contractor to determine the bonding strength between the old concrete and the Epoxy Mortar.
 - 2. The rehabilitation works cannot start unless the above prequalification tests are successful and to the satisfaction of the Engineer.
 - 3. The Epoxy Mortar system is subject to the approval of the Engineer prior to any