

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 02 41 99 – Selective Demolition.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 00 10 – General Instructions.
- .2 Record of identification system.
- .3 Product data.
 - .1 Epoxy grout for hand rails.

1.3 QUALITY ASSURANCE

- .1 Qualifications:
 - .1 Work of this Section: executed by experienced contractor experienced with installing metal railing systems.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 00 10 – General Instructions.
- .2 Storage and Handling Requirements:
 - .1 Store materials off ground in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect railing components and guards from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.
- .3 Packaging Waste Management.
 - .1 Remove for reuse and recycling pallets, crates, padding and packaging materials in accordance with Section 01 00 10 – General Instructions.

Part 2 Products

2.1 DESIGN CRITERIA

- .1 Re-installed hand rail and attachments to resist lateral force of 0.7 kN/m at any point without damage or permanent set.
- .2 Re-installed guard assemblies and attachments to resist lateral force of 1.0 kN/m at any point without damage or permanent set.

2.2 EXISTING BRONZE RAILING COMPONENTS AND GLASS GUARDS

- .1 Dismantled and stored existing bronze railings, balusters, fittings, connectors, fasteners and glass guards.

2.3 MATERIALS

- .1 Epoxy grout: two component, methacrylate resin and hardener.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrates are acceptable for handrail installation.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.
- .2 Verify condition of stored bronze railing components and glass guards salvaged under Section 02 41 99 – Selective Demolition.

3.2 PREPARATION

- .1 Supply items required to be embedded in masonry with setting templates, to appropriate locations.

3.3 RE-INSTALLATION

- .1 Re-install bronze handrails and glass guards in original configurations and locations.
- .2 Re-install components plumb and level.
 - .1 Anchor railings to structure with grout and install caps. Apply epoxy grout.

3.4 ERECTION TOLERANCES

- .1 Maximum Variation from Plumb: 3 mm.
- .2 Maximum Out-of-Position: 3 mm.

3.5 CLEANING

- .1 Wipe clean components of bronze handrails and guard systems with dry cloth.
- .2 Progress Cleaning: clean in accordance with Section 01 00 10 – General Instructions.
 - .1 Leave Work area clean at end of each day.
- .3 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 00 10 – General Instructions.

- .4 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 00 10 – General Instructions.
 - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

3.6 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by hand rail installation.

END OF SECTION