1707 – MANHOLE STEPS

SECTION 1707

MANHOLE STEPS

1707.1 DESCRIPTION
This specification covers the requirements for steps for use in precast or cast in place manholes. The steps may be either Type 1 or Type 2 unless otherwise shown in the Contract Documents.

1707.2 REQUIREMENTS

a. Type 1. Provide a manhole step made of a No. 3 or larger deformed steel reinforcing bar encapsulated in a copolymer polypropylene plastic possessing good impact and load-bearing properties and corrosion resistance. Use a steel bar that complies with ASTM A 615 and make it continuous throughout the entire length of the legs and tread. Use a copolymer polypropylene plastic coating that complies with ASTM D 4101, Group 2.

b. Type 2. All steps not complying with Type 1 are considered Type 2 and require prequalification. Provide steps that comply with ASTM C 478, Sections 13.4 and 13.6. Galvanize ferrous metal steps, or encapsulate them in a plastic, which possesses good impact, load bearing, and corrosion resistant properties.

1707.3 TEST METHODS
Test in accordance with the ASTM methods shown for each step type.

1707.4 PREQUALIFICATION
Submit a sample and a certified test report, listing the results of all applicable tests, from a qualified laboratory, for each model and size of Type 2 step to be prequalified to the Engineer of Tests. The Engineer of Tests will review the test results and inspect and/or test the sample, and will notify the manufacturer in writing of the status of each type of step submitted.

The Bureau of Materials and Research will maintain a list of prequalified Type 2 manhole steps.

1707.5 BASIS OF ACCEPTANCE

a. Type 1 manhole steps. Receipt and approval of a Type D certification as specified in DIVISION 2600 and visual inspection for conditions and dimensional requirements.

b. Type 2 manhole steps. Receipt and approval of a Type C certification as specified in DIVISION 2600 and visual inspection for conditions and dimensional requirements.