

SECTION 907 — PILES AND PILING

907.01 TIMBER PILING. Timber piling shall conform to M 168.

907.01.01 Resin and Fiberglass Caps for Timber Pile Heads. Resin and fiberglass for use in protecting timber pile heads shall conform to the following:

PROPERTY	SPECIFICATION LIMITS	TEST METHOD
MOISTURE INSENSITIVE RESIN		
Tensile Strength, psi, min	5000	D 638
Tensile Elongation, % min	0.05	D 638
Compressive Strength, psi, min	9000	C 109
Abrasive Resistance, *l/mil, min	60	D 968
WOVEN GLASS CLOTH		
Weight, oz/yd ² , min	9	—
Type	Volan A	—

*liters (l) of fine aggregate per mil thickness of resin

907.02 STEEL PIPE PILES. Steel pipe piles shall conform to A 252, Grade 2.

907.03 STEEL BEARING PILES. Steel bearing piles and steel bearing pile splice material shall conform to A 36.

907.04 STEEL SHEET PILES. Steel sheet piles shall conform to A 328. Sheet pile accessories shall conform to A 36. High strength bolts shall conform to 909.07.

907.05 WELDING MATERIALS. Welding materials shall conform to AASHTO/AWS D1.5.

SECTION 908 — REINFORCEMENT STEEL

908.00 CERTIFICATION. The steel manufacturer shall furnish certification for each heat of steel as specified in TC-1.02.

908.01 DEFORMED REINFORCEMENT. Unless otherwise specified, reinforcement bars and reinforcement bars used as anchoring devices shall be deformed bars conforming to A 615, Grade 60.

Deformed bars shall be epoxy coated when specified in the Contract Documents. Epoxy powder shall conform to 917.02.

908.02 PLAIN REINFORCEMENT. Unless otherwise specified, dowel bars and dowel bars used as ties in portland cement concrete pavement expansion and contraction joints shall be plain round steel bars conforming to A 615, Grade 60 or A 36. Bars shall be epoxy coated. Epoxy powder shall conform to 917.02.

908.03 STAINLESS STEEL BARS. In lieu of epoxy coated plain bars, the Contractor may use stainless steel bars. Deformed bars shall be stainless steel when specified in the Contract Documents. Stainless steel shall conform to A 276, Type SM-29. Deformed stainless steel bars shall conform to A 615 for cross sectional area and deformations.

908.04 SLEEVES FOR DOWEL BARS IN PAVEMENT EXPANSION JOINTS. Sleeves for dowel bars shall be of sheet metal capable of sliding over $2 \pm 1/4$ in. of the dowel and shall have a closed end with a stop to hold the end of the sleeve at a minimum distance of 1 in. from the end of the dowel bar.

908.05 WELDED STEEL WIRE FABRIC. Welded steel wire fabric shall conform to M 55. Fabric used in pavement construction shall be furnished in flat sheets.

908.06 WELDED DEFORMED STEEL WIRE FABRIC. Welded deformed steel wire fabric shall conform to M 221.

908.07 FABRICATED STEEL BAR MATS. Fabricated steel bar mats shall consist of steel conforming to A 184.

908.08 WIRE FABRIC FOR PNEUMATICALLY APPLIED MORTAR. Wire fabric for pneumatically applied mortar and concrete encasement shall conform to A 185. It shall be fabricated either from size W1.5 wire on 3 in. centers in each direction or from W1 wire on 2 in. centers in each direction. It shall be galvanized as specified in 906.01.01.

908.09 COLD DRAWN STEEL WIRE. Cold drawn steel wire for concrete reinforcement shall conform to M 32.

908.10 TIE DEVICES FOR CONCRETE PAVEMENT. Tie device sizes shall be as specified in the Contract Documents and produce a frictional force of at least 160 lb/ft per foot of spacing when tested as specified in MSMT 512.

908.11 STEEL STRAND. Steel strand shall conform to M 203, Grade 270, Low Relaxation Strand.

SECTION 909 — METALS

909.00 CERTIFICATION. The metal producer shall furnish certification as specified in TC-1.02. The certification shall include actual mill test results. The chemical and physical properties of the finished metal products shall also be furnished by the processing manufacturer.

909.01 STRUCTURAL STEEL. Structural steel shall conform to the requirements specified in the Contract Documents. All primary load carrying members shall conform to the supplementary toughness requirements of M 270, Zone 2.

Primary load carrying members are as follows or as designated in the Contract Documents: Finger joint steel from which saw tooth configurations have been cut, all stringers, cover plates, bearing stiffeners, splice plates, pins and pin links for straight rolled steel beam bridges; all flanges, webs, bearing stiffeners, splice plates, pins and pin links for straight steel girder bridges. Additionally, on curved rolled steel beam and steel girder bridges; all diaphragms, cross frames, lateral bracing, including connection plates to main stringers.

909.02 STEEL FOR MISCELLANEOUS USE. Steel for miscellaneous use shall conform to A 36 or A 709, Grade 36.

909.03 WELDING MATERIALS. Welding materials shall conform to AASHTO AWS D1.5.

909.04 GRAY IRON CASTINGS. Iron castings shall conform to A 48, Class 30B.

909.05 STEEL STUD SHEAR DEVELOPERS. Shear developers shall conform to AASHTO AWS D1.5.

909.06 BOLTS, NUTS AND WASHERS FOR GENERAL USE. Bolts, nuts and washers for general use shall conform to A 307, and shall be galvanized as specified in A 153. Anchor bolts shall be galvanized and shall conform to A 709, Grade 36.

909.07 HIGH STRENGTH BOLTS, NUTS AND WASHERS. High strength bolts, nuts and washers shall conform to A 325.