October 21, 2008 Supersedes October 16, 2007 Matls. IM 467.02

STEEL SHEET PILING

GENERAL

Steel Sheet Piling shall be rolled from carbon structural steel and shall meet the requirements of Article 4167 of the Standard Specifications and the requirements of ASTM A 328 / A 328 M

Steel Sheet Piling shall be of the interlocking type with section modules not less than that specified on the design drawings.

Sheet Piling supplied to a project under the specifications of ASTM A 328 / A 328 M shall also conform to the requirements of ASTM A 6 / A 6 M

Note: Coils are excluded from qualification to the requirements of ASTM A 328 / A 328 M until processed into finished sheet piling (meaning decoiling, leveling, hot forming or cold forming, conditioning, heat treatment, cutting to length, testing, marking, and certifications)

Unless otherwise specified appurtenant materials shall conform to the following standards:

A. Plates or structural shape ASTM A 36 / A 36M

B. Rivets
C. Bolts
ASTM A 502 Grade 1 or 2
ASTM A 307 Grade A or
ASTM F 568, Class 4-6

D. High strength bolts ASTM A 325 / A 325 M

E. Nuts ASTM A 563 / A 563 M DH, Heavy Hex, Class 2 B

When steel sheet piling is to be welded, a WPS shall be required and shall be pre-approved prior to welding.

For Welding and pre-heat requirements, please refer to IM 558

Note: Consult Appendix X-3 of ASTM A 6 / A 6M for specific information on weldability. Among other considerations:

- a. Actual production joint restraint / Base metal thickness
- b. Filler metal and base metal strength compatibility
- c. Preheat and interpass temperatures
- d. Heat input

Steel sheet piling shall not be accepted in the field without a mill test report and proper identification list (showing heat number, number of pieces, project number and county).

Acceptance shall be from approved sources only.

Steel sheet piling shall be melted and manufactured in the United States.

Steel sheet piling shall have a minimum tensile strength of 60 KSi (415 MPa) and a minimum yield point of 39 KSi (270 MPa). Elongation in eight inches (200 mm) shall be 17% (min) and Elongation in two inches (50 mm) shall be 20% (min).

Steel sheet piling shall have 0.035% (max) Phosphorous, 0.04% (max) Sulfur and 0.20% (min) Copper.

Steel sheet piling shall be free of injurious defects, discontinuity or irregularity, shall be uniform in thickness, web thickness, and shall not be les than 0.375 inches (9.52 mm) thick.

Steel sheet piling shall be of the interlocking type.