1611 - SHEET STEEL FOR LIGHT SHEET PILING

SECTION 1611

SHEET STEEL FOR LIGHT SHEET PILING

1611.1 DESCRIPTION
This specification governs the sheet steel utilized to fabricate lightweight or thin sheet piling.

1611.2 REQUIREMENTS
   a. General. Provide steel sheets intended for these applications that comply with the design, dimensions, requirement for corrosion protection, and specific fabrication requirements as specified in the Contract Documents. The sheets may be flanged, interlock seamed, corrugated, or flat. When properly driven, the sheets interlock or overlap so as to form a relatively impervious and continuous barrier. Provide the sheets with zinc coatings applied by hot dip galvanizing when corrosion protection is specified. The classifications, designations, grades of steel govern property requirements for the steels and corrosion protection, and or the specifications designated in the Contract Documents and in accordance with subsection 1611.2b.

   b. Material Specifications.
      (1) When corrosion protection is not required, provide basis sheet steel that complies with ASTM A 1011, Grade 30.
      (2) When corrosion protection is specified, provide basis sheet steel that complies with ASTM A 653, Grade 33, and is zinc coated by the hot dip galvanizing process in compliance with ASTM A 653, Coating Designation G90.

1611.3 TEST METHODS
Conduct all tests required by the applicable ASTM specifications of subsection 1611.2b. Coating thickness may be measured by any one of the methods referenced in ASTM B 633 and by eddy current methods, ASTM E 376 (B 244 may also be useful as a technique guideline) provided that appropriate calibration procedures and standards have been applied. The magnetic induction and eddy current methods are nondestructive in nature and are preferred. Destructive techniques, i.e., coating removal, may be utilized as referee methods.

1611.4 PREQUALIFICATION
Not applicable.

1611.5 BASIS OF ACCEPTANCE
Receipt and approval of a Type D certification as specified in DIVISION 2600.
Inspection and testing by field personnel of all components for compliance with dimensional requirements and corrosion protection coating thickness when corrosion protection is specified. Measure the coating thickness in accordance to any of the procedures of subsection 1611.3.

The final disposition of all components will be completed at the final destination as the result of inspection for the quality of workmanship and the delivery condition.