STEEL H-PILE DRIVING POINTS

Product	*Manufacturer*
Hard Bite HP-77600-B Hard Bite HP-77750-B Hard Bite HP-7780-B PAR-T Series	Associated Pile and Fitting Corp. P.O. Box 5933 Parsippany, New Jersey 07054
ICE Rock-Bite HPH 10-RB ICE Rock-Bite HPH 12-RB ICE Rock-Bite HPH 14-RB	Mid-America Foundation Supply, Inc. 3101 New Haven Avenue P.O. Box 5198 Fort Wayne, Indiana 46805
Tuftip H-776 Tuftip H-777	Dougherty Foundation Products P.O. Box 688 Franklin Lakes, N.J. 07417
VS- 300 Series	Versa-Steel Inc. 1618 NE First Avenue Portland, Oregon 97232 -1136

Method of Documentation of Acceptance: By brand and manufacturer.

Method of Approval for Materials to be added to this Qualified Products List:
Detailed design drawings, material specifications, test data, product literature and installation procedures must be submitted for approval. Pile points must meet the requirements of ASTM A 27, Grade 65-35 or ASTM A 148, Grade 80-40. Random samples may be taken by the Department for evaluation. Any deviation in performance from the original sample may be sufficient reason to discontinue acceptance of the material from the manufacturer, determination of which shall be by the Materials Engineer.

Furthermore, all iron and steel material used on Department projects must be in compliance with "Buy America" requirements and the Department's "Standard Specifications for Highway Construction", Subsection 106.01. This means all manufacturing processes of the iron or steel in a product(i.e., smelting/remelting, and any subsequent process which alters the steel material's physical form or shape or changes its chemical composition) must occur within the United States to be considered of domestic origin. This includes processes such as rolling, extruding, machining, bending, grinding, drilling, and applying coatings. The use of pig iron or processed, pelletized, and reduced iron ore manufactured outside of the United States is permitted in the domestic manufacturing process for steel and/or iron materials. All steel mill test reports will contain a statement certifying that all manufacturing processes for the steel occurred in the United States. Each supplier/fabricator of an intermediate product will also certify that the product complies with "Buy America" requirements.

The following information concerning proper identification of steel piling is forwarded for use in inspection of steel piling delivered to a project:

H-Piles

805.03 (c) – Unless otherwise specified, steel piles shall consist of structural shapes of the section shown on the plans and shall comply with AASHTO M 270, Grade 36 (250)

- AASHTO M 270 – "Material identification shall include the composition type for Grade 50W in addition to that required by AASHTO M 160 (ASTM A 6). "
- AASHTO M 160 (ASTM A 6) - "Shapes shall be marked with the heat number, size of section, length, and mill identification on each piece. The manufacturer's name, brand, or trademark shall be shown in raised letters at intervals along the length. In addition, shapes shall be identified with the ASTM designation and grade, either by marking each piece individually or, if bundled……." (H-piles would not be bundled)
- Color coding is required for AASHTO M 270, Grade 50 (ASTM A 572, Grade 50) – green and yellow

Stenciling, stamping (steel die stencils), or substantial tags, applied by the manufacturer are acceptable forms of identification marks. Any paint, chalk, or crayon marks applied by hand are not acceptable for primary identification, but are considered supplementary. H-piles also require the manufacturer's name, brand, or trademark be shown in raised letters.

Steel Shell Piles

805.03 (d) – Unless otherwise specified, plain round steel shells shall comply with ASTM A 252, Grade 2. Shells shall be welded or seamless steel pipe…….
Steel shell piles shall be marked by the manufacturer near both ends of the pile. Marking shall be in accordance with ASTM A 252.

- ASTM A 252 - **Product Marking:** "Each length of pipe piles shall be legibly marked by stenciling, stamping, or rolling to show: the name or brand of the manufacturer; the heat number; the process of manufacture (seamless, flash welded, fusion welded, or electric resistance welded); the type of helical seam (helical-lap or helical-butt), if applicable; the outside diameter, nominal wall thickness, length, and weight per unit length; the specification designation; and the grade."

Stencils, stamps, or rolling of identification marks by the shell pile manufacturer are the only acceptable forms of identification. Any marking by hand such as chalk, paint, or crayon, is considered supplementary.

Overall – **PILING FOR WHICH THE MANUFACTURER'S MARKING IS ILLEGIBLE, IMPROPER, OR INCOMPLETE SHOULD BE REJECTED AND NOT USED ON THE PROJECT.**