

PROJECT-8

STEEL PILES PROFILE (Z & U)

1. Raw Materials

- Type: Hot-rolled structural steel plates into Z or U sheet pile profiles.
- Standards & Grades:
 - ***IS 2026 (E350/ E410)- INDIA***
 - ***ASTM A572 (Gr. 50/55/60/65),ASTM A690 (marine grade)- USA***
 - ***EN 10248-1 & 2 (S240GO, S355GP, S430GP, S430GP)-EUROPE***
 - ***JIS A5523(SY295, SY390)-JAPAN***

2. Profile types:

- Z-type: Higher section modules, efficient bending resistance, Used in quay walls, deep retaining walls.
- U-type: Symmetrical profile, easier to drive. Used in cofferdams, river training works, temporary works.

3. Surface Finish & Protection

- As-rolled (mill finish): Free from laminations, scale, rust.
- Optional coatings:
 - Hot-dip galvanizing (70-100um, IS 4759 / ASTM A123 / ISO 1461).
 - Coal Tar Epoxy, Polyurethane, or Fusion Bonded Epoxy.(marine/coastal)

Application Standards: *IS 2062, IS 4759, EN 10248 1 / 2, ASTM A572, ASTM A690, JIS A5523, AWS D1.1, ISO 1461*