

**Able Industries Co.,Ltd.**  
**Company in Industry of Steel Pipes and Fittings.**

**MWA Standard and PWA Standard for Steel Pipes**

**MWA : Metropolitan Waterworks Authority (Thailand)**

**PWA : Provincial Waterworks Authority (Thailand)**

**Underground steel pipe**

- 1 The pipe shall be fabricated in compliance with AWWA C200, BS 534, BS 3601, JIS G 3457 or TIS 427.
- 2 All pipes shall be passed hydrostatic test at the specified pressure.
- 3 All surface of pipes shall be cleaned in accordance with SSPC SP10 or SA2.5 before coating.
- 4 Inside coating of pipes shall be cement mortar lining in accordance with AWWA C205 for ND.150 mm. to ND.500 mm. or liquid epoxy coating min.406 microns dft. in accordance with AWWA C210 for ND.600 mm. to ND.3400 mm.

Outside coating of pipes shall be coated by Polyurethane at the minimum dry film thickness of 625 microns dft. In accordance with AWWA C222

**For Alternative** (Subject to the approval or agreement of customer)

Outside coating of pipes shall be wrapped in accordance with AWWA C214, which consists of :-

- Liquid Adhesive
- Inner-Layer Tape (min. thickness 0.5 mm.) with overlap not less than 1 in.
- Outer-Layer Tape (min. thickness 0.75 mm.) with overlap not less than 1 in.

**Aboveground steel pipe**

- 1 The pipe shall be fabricated in compliance with AWWA C200, BS 534, BS 3601, JIS G 3457 or TIS 427.
- 2 All pipes shall be passed hydrostatic test at the specified pressure.
- 3 All surface of pipes shall be cleaned in accordance with SSPC SP10 or SA2.5 before coating.
- 4 Inside coating of pipes shall be cement mortar lining in accordance with AWWA C205 for ND.150 mm. to ND.500 mm. or liquid epoxy coating min.406 microns dft. in accordance with AWWA C210 for ND.600 mm. to ND.3400 mm.
- 5 Outside coating shall be coated by liquid epoxy at the minimum dry film thickness of 150 microns and topcoated by acrylic aliphatic Polyurethane paint at the minimum dry film thickness of 60 microns.

**Sleeve pipe**

- 1 The pipe shall be fabricated in compliance with AWWA C200, BS 534, BS 3601, JIS G 3457 or TIS 427.
- 2 All surface of pipes shall be cleaned in accordance with SSPC SP10 or SA2.5 before coating.
- 3 Inside coating shall be coated by non-bleeding type coal tar epoxy (for MWA standard) or coal tar epoxy (for PWA standard) at the total dry film thickness of at least 100 microns.
- 4 Outside coating shall be coated by non-bleeding type coal tar epoxy (for MWA standard) or coal tar epoxy (for PWA standard) at the total dry film thickness of at least 100 microns.

