# SECTION 099752 COLD-APPLIED WAX TAPE COATING

## PART 1 - GENERAL

A. Description

This section includes materials and application of a three-part, cold-applied wax tape coating system for buried piping per NACE RP0375-2006, Section 4 except as modified herein.

B. Related Work Specified Elsewhere

Polyethylene Sheet Encasement (AWWA C105): 099754.

C. Submittals

1. Submit shop drawings in accordance with the General Conditions and Section 013300.

2. Submit manufacturer's catalog data sheets and application instructions.

## PART 2 - MATERIALS

A. Primer

1. Primer shall be a blend of petrolatums, plasticizers, and corrosion inhibitors having a paste-like consistency. The primer shall comply with NACE RP0375-2006 and shall have the following properties:

   a. Pour Point: 100°F to 110°F.

   b. Flash Point: 350°F.

   c. Coverage: 1 gallon per 100 square feet.

2. Primer shall be Trenton Wax Tape Primer, Denso Paste Primer, or equal.

B. Wax Tape

1. Wax tape shall consist of a synthetic-fiber felt, saturated with a blend of microcrystalline wax, petrolatums, plasticizers, and corrosion inhibitors, forming a tape coating that is easily formable over irregular surfaces. The tape shall comply with NACE RP0375-2006 and shall have the following properties:

   a. Saturant Pour Point: 115°F to 120°F.

b. Thickness: 50 to 70 mils.

c. Tape Width: 6 inches.

2. Wax tapes used for pipe soil-to-air transitions shall be UV light stable so as not to degrade in the presence of sunlight.

3. Wax tape shall be Trenton No. 1 Wax Tape, Denso "Densyl Tape," or equal.

C. Plastic Wrapper

1. Wrapper shall be a polyvinylidene chloride plastic with three 50-gauge plies wound together as a single sheet. The wrapper shall have the following properties:

a. Color: Clear.

b. Thickness: 1.5 mils.

c. Tape Width: 6 inches.

2. Plastic wrapper shall be Trenton Poly-Ply, Denso Tape PVC Self-Adhesive, or equal.

D. Polyethylene Sheet Coating

See Section 099754.

PART 3 - EXECUTION

A. Wax Tape Coating Application

1. Surfaces shall be clean and free of dirt, grease, water, and other foreign material prior to the application of the primer and wax tape.

2. Apply primer by hand or brush to fitting surfaces. Work the primer into crevices and completely cover exposed metal surfaces.

3. Apply the wax tape immediately after the primer application. Work the tape into the crevices around fittings. Apply the wax tape by pressing and molding the tape into conformity with the surface so that it does not bridge over irregular surfaces configurations. Begin wrapping approximately 3 inches behind the area to be wrapped. If starting at a straight edge, wrap the tape spirally around the pipe while touching the end edge before starting the angle to begin the spiral. If the previous roll is headed in a downward direction, tuck the next roll under the previous roll. Stretch each roll tight as wrapping continues to avoid air bubbles.

4. Wrap the wax tape spirally around the pipe and across the fitting. Use a minimum overlap of 50% of the tape width. Apply tape to flanges, mechanical and restrained joint bolts, nuts and glands, and grooved-end couplings to 6 inches beyond each side of the item.

5. Work the tape into the crevices and contours of irregularly shaped surfaces and smooth out so that there is a continuous protective layer with no voids or spaces under the tape.

6. After application, seal the overlap seams of the tape by hand by tapering and pressing the seam, attempting to create a continuous surface. There shall be no air pockets underneath the tape. The tape shall have direct intimate contact with the pipe surface.

7. On vertical sections of the piping, such as at pipe-to-soil transitions, wrap the pipe starting from the bottom and proceeding upward so that downward flowing water and backfill do not catch in a seam.

8. Overwrap the completed wax tape installation with the plastic wrapping material. Wrap spirally around the pipe and across the fitting. Use a minimum overlap of 55% of the tape width and apply two layers or applications of overwrap. Secure plastic wrapper to pipe with adhesive tape.

B. Application of Polyethylene Sheet Coating to Buried Piping

Wrap completed wax tape coating system with polyethylene film per Section 099754 and secure around the adjacent pipe circumference with adhesive tape.

C. Handling and Installing Wax-Tape Coated Pipe

1. Handle pipe in a manner to minimize damage to the coating. Equipment used for the handling of coated pipe shall be designed and constructed to avoid damaging the protective coating system. Inspect supported areas of the pipe prior to installation. Repair damaged areas before installation.

2. The pipeline trench shall be free of rocks, foreign matter, and projections that could damage the coating system.

END OF SECTION