

NAPCA Bulletin 6-69-94-3

SUGGESTED PROCEDURES FOR COATING FIELD JOINTS, FITTINGS, CONNECTIONS AND PRE-FABRICATED SECTIONS USING TAPE COATINGS

1. **General**
 - a. These specifications may be used in whole or in part by anyone without prejudice, if recognition of the source is included. The National Association of Pipe Coating Applicators (NAPCA) assumes no responsibility for the interpretation or use of these specifications.
 - b. The intended use of these coatings is to provide corrosion protection for buried pipelines. Above ground storage of coated pipe in excess of 6 months without additional Ultraviolet protection is not recommended.
 - c. The following definitions apply:
 - i. Applicator - The contractor who applies the coating to the pipe.
 - ii. Company - The purchaser of the coated pipe or the entity for whom the Applicator coats the pipe.
 - iii. SSPC - The Steel Structures Painting Council.
 - iv. NACE - NACE International.
 - v. Manufacturer - The company that makes the coating materials which are applied to the pipe.

2. **Scope**
 - a. The Applicator shall furnish all labor, equipment and material required, shall prepare all surfaces to be coated and shall apply the coating to all surfaces to be coated.
 - b. Tape coating products may generally be classified into two categories as follows:
 - i. Hot applied tapes which are manufactured with either coal tar or asphalt bitumen material saturated onto a reinforcement fabric with either a removable separator liner or a separator liner that becomes an exterior protective film in the finished application.
 - ii. Cold applied tapes which are manufactured with a plastic film and an adhesive material, either with or without a separator liner in the roll.
 - c. Since installation conditions vary, specific recommendations from the Manufacturer may be required; however, the application procedures set forth hereafter are generally recommended.

3. **Coating Material**
 - a. All coating materials, including repair or patch materials, purchased or used under these specifications, shall be packaged in suitable and approved containers. The containers shall be plainly marked with the name of the Manufacturer, type of material and batch or lot number where applicable. Bulk shipments shall be allowed provided the above information is included in the bill of lading.
 - b. The coating material shall be packaged in containers suitable to keep the contents

- clean and dry during handling, shipping and storage. Storage and handling conditions shall be in accordance with the Manufacturer's recommendations.
- c. Precautions shall be taken during the handling, shipping and storage of all materials to prevent damage to the containers that would result in contamination of the coating materials. All contaminated, or otherwise damaged materials shall be discarded.
4. **Surface Preparation**
- a. The surface to be coated must be cleaned of all rust, mud, oil, grease, moisture, mill lacquer or other deleterious substances. Wire brushing and/or solvent washing is sufficient in most instances. Weld splatter should be removed by filing.
 - b. When required, kraft paper shall be removed from the mill wrapped pipe in an area equivalent to the width of tape being used.
5. **Primer Application**
- a. Welded joints shall be allowed to cool prior to application of primer.
 - b. A uniform and continuous coat of primer shall be applied in accordance with the Manufacturer's recommendation for the specific tape and primer system being used.
 - c. The primer coverage and curing or drying time shall be sufficient to insure an effective bond between the substrate and the coating.
6. **Application Procedures**
- a. Hot-Applied Tapes
 - i. Hot-applied tapes are applied by hand or machine, spirally or in a cigarette wrap, after heating to obtain a softening of the coating material.
 - ii. Only enough tape should be heated to insure that it will remain in a liquified state during application.
 - iii. When being applied by hand, a propane fueled torch with a wide mouth tip is recommended.
 - iv. Application proceeds by alternately heating and wrapping the tape to obtain the tension and the overlap recommended by the Manufacturer.
 - v. Hot-applied tapes with removable separators require a light bleeding over the exterior surface to insure lap seal. Exterior surface heating is not required for hot-applied tapes designed for machine application or for hot-applied tapes that incorporate the separator liner as a part of the finished application.
 - b. Cold-Applied Tapes
Cold-applied tapes are applied by hand or machine spirally or in a cigarette method with tension and overlap as recommended by the Manufacturer.
7. **Inspection and Testing**
Test with Holiday Detector, voltage not to exceed that used by plant coating application.
8. **Repair Procedures**

When plant applied coatings require repair, wire brush and re-prime the exposed metal surfaces. Next, the perimeter of the damaged area should be feathered. Apply either hot or cold applied tape to the exposed area pursuant to the Manufacturer's specific recommendations.