

# POLYcoat 780

High Impact Resistance Tape

## **Description**

Cold applied, reinforced tape designed to protect metallic and concrete surfaces against corrosive forces. It is constituted by an adhesive (modified bitumen with synthetic rubber) of increased thickness, laminated onto a film of woven polypropylene fabric and a disposable release sheet, which creates a strong bond with the pipe surface, protecting against moisture penetration.

#### Uses

With stable dielectric rigidity and effective insulation, this product is suitable for low, medium, and high-pressure pipelines, complex pipeline networks, municipal and inner-station pipelines, and long distance pipelines.

### **Characteristics**

POLYcoat 780 is an effective barrier to almost any combination of mechanical, chemical, and electrical corrosive forces.

POLYcoat 780 is available in two different thicknesses (1.4, 1.6mm) which provides increased mechanical protection from the destruction of soil stress.

POLYcoat 780 is resistant to curing and cracking, and enables the tape to adjust to expansion and contraction of the pipe due to temperature change.

## **Application**

The surface shall be free of dust, paint, oils, fats, and all other strange elements.

The entire prepared surface must be immediately primed to avoid the formation of oxide and must be coated within 24 hours.

The pipelines are generally coated in spiral form manually or with machine avoiding the formation of wrinkles, air globes and with enough tension to adapt to all the irregularities of the surface, except the first and last return.



| Particulars                    | Properties       | Test Method |
|--------------------------------|------------------|-------------|
| Base film                      | PP Woven Fabric  |             |
| Base film thickness            | 0.60 mm          | ASTM-D1000  |
| Compound                       | Modified Bitumen |             |
| Compound thickness             | ≥ 0.80, 1.00 mm  | ASTM-D1000  |
| Total thickness                | ≥ 1.40, 1.60 mm  | ASTM-D1000  |
| Tensile strength               | ≥ 180 N/cm       | ASTM-D1000  |
| Elongation at break            | ≥ 20%            | ASTM-D1000  |
| Peel on primed steel           | ≥ 45 N/cm        | ASTM-D1000  |
| Peel on Base                   | ≥ 25 N/cm        | ASTM-D1000  |
| Cathodic disbondment           | ≤ 5 mm           | ASTM-G8     |
| Conformance                    | Excellent        |             |
| Dielectric rigidity            | ≥ 25 kV          | ASTM-D149   |
| Water absorption               | ≤ 0.35 %         | ASTM-D570   |
| Fungus resistance              | Satisfactory     | ASTM-G21    |
| Bacteria resistance            | Satisfactory     | ASTM-G22    |
| Impact resistance double cover | ≥ 100 lb. inch   | ASTM-G14    |
| Impact resistance single cover | ≥ 30 lb. inch    | ASTM-G14    |
| Application temperature        | -5 to +50 °C     |             |
| Operation temperature          | -34 to +75 °C    |             |

| Tape Dimensions |         |         |                     |
|-----------------|---------|---------|---------------------|
| Tape Width      | m2/Roll | m2/Case | Pipe Diameter Range |
| 50 mm           | 1       | 12      | 50 – 80 mm          |
| 100 mm          | 2       | 12      | 80 – 150 mm         |
| 150 mm          | 3       | 12      | 200 – 250 mm        |
| 200 mm          | 4       | 8       | 250 – 300 mm        |
| 250 mm          | 5       | 10      | 350 – 400 mm        |
| 300 mm          | 6       | 12      | ≥ 400 mm            |

<sup>\*</sup> All rolls are 20 meters in length.