

X-Wrap HD

APPLICATION SPECIFICATION FOR X-Wrap HD

DESCRIPTION:

X-WRAP HD consists of a strong fiberglass wrap that is pre-impregnated with a water activated resin that hardens in minutes.

1.1 Impact, Abrasion and Mechanical Protection for Pipe

1.1.1 Material Storage and Handling

A. Do not open or puncture package containing X-WRAP HD until ready for application. If seal is broken the X-WRAP HD curing process will begin and product will need to be applied immediately.

B. Storage is recommended at an ambient temperature of 40°F to 83°F (5°C to 28°C). Exposure to temperatures above 110°F (44°C) or below 40°F (5°C) may affect the quality of the product.

1.1.2 Materials and tools Required for Application of X-WRAP HD

- X-WRAP HD sealed foil pouch,
- Compression film (supplied separately),
- Perforator tool (supplied separately)
- Water source

1.1.3 Surface Preparation Recommendations for Application of X-WRAP HD:

Note: Application of X-WRAP HD assumes that the underlying coatings have been applied correctly and if required the holiday inspection has been completed prior to the X-WRAP HD application.

Loose scale, rust and other foreign materials must be removed from surface. Water can be used to wash surface contaminants. If applicable, a solvent cleaning can be conducted as long as those solvents do not leave a residue.

1.1.4 Application of X-WRAP HD

- A.** Thoroughly wet all areas to be wrapped with water.
- B.** Remove X-WRAP HD from the foil pouch. Begin application by overlapping the edges of field joint coating 2-6". On bores, drills and tunnels a minimum 6" overlap is recommended.
- C.** Begin wrapping and wetting the product with water simultaneously on the surface. All sides of X-WRAP HD shall be wet during the entire application. It is not possible to oversaturate this product. In a two layer system, start with two complete, circumferential wraps on the side farthest from the bore. In a four layer system, start with two circumferential wraps on the side closest from the bore. If application is at an air-to-soil transition begin with the application of X-WRAP HD below ground and proceed above. Air-to-soil transitions can be applied using the two layer method outlined below.
- D. Two Layer System**
 - a. The X-WRAP HD shall be held tightly to the pipe surface so to prevent any creases or wrinkles. X-WRAP HD shall be applied with a 50% overlap after the initial two wraps of 100%. Do not reverse the direction of the wrap before completing the entire application length. Once the application length has been reached, finish the application with two complete circumferential wraps on the side closest to the bore. Additional layers may be required in areas of high mechanical stress. Consult with Polyguard representative to determine appropriate number of layers for the situation.
- E. Four Layer System**
 - a. The X-WRAP HD shall be held tightly to the pipe surface so to prevent any creases or wrinkles. X-WRAP HD shall be applied with a 50% overlap after the initial two wraps of 100%. Once the application length has been reached, complete two circumferential wraps and spiral wrap in the opposite direction until reaching the initial wrapped area. At this point apply two circumferential wraps and spiral wrap to the side closest to the bore and end with two circumferential wraps. Additional layers may be required in areas of high mechanical stress. Consult with Polyguard representative to determine appropriate number of layers for the situation.
- F.** Immediately after the application of X-WRAP HD is complete, apply compression film to X-WRAP HD in a spiral wrap fashion with a 50% overlap. Begin in the same direction as the X-WRAP HD was applied starting 2" beyond the starting and finishing edges of the X-WRAP HD and then reverse direction. This will give you two complete passes of compression film with a 50% overlap and four layers of film.
- G.** Upon the completion of the compression film application use the perforator tool to puncture the film along the length and circumference of the X-WRAP HD application.
- H.** When X-WRAP HD has hardened the compression film can be removed.
- I.** Measure the hardness of the X-WRAP HD using a durometer directly on the fibers of the weave. A Shore D reading of the X-WRAP HD must attain a reading of 50-60 before pulling the pipe.

Notes

If X-WRAP HD is installed in an area that is above ground an appropriate UV protective top coat will be required to prevent fading. Polyguard RD-6 UVO is an approved product for UV protection of X-WRAP HD.

1.1.5 Installation Notes

- A.** Cold weather installations: follow the procedures above however, use ethylene glycol in the sprayer (instead of water) to speed up the curing process, since X-WRAP HD will not cure on its own at temperatures below 40°F (5°C). Store unopened bags of X-WRAP HD in a heated truck if possible.
- B.** Hot weather installations: follow the procedures above however, use ice water in the sprayer to slow down the curing process, thus allowing the installer more working time. Store unopened bags of X-WRAP HD in an ice chest if possible.

PRECAUTIONS:

This material is sold by Polyguard Products, Inc. only for the purposes described in this literature. Any other use of the products is the responsibility of the purchaser and Polyguard Products does not warrant nor will be responsible for any misuse of these products. Polyguard Products will replace material not meeting our published specifications within one year from date of sale.

HEALTH AND SAFETY:

All Polyguard Products Safety Data Sheets (SDS) and precautionary labels should be read and understood by all user supervisory personnel and employees before using. Purchaser is responsible for complying with all applicable federal, state or local laws and regulations covering use, health, safety, and disposal of the product.

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