

# DENSO GLASS OUTERWRAP™ HD

## Protective Fiberglass Heavy-Duty Outerwrap

### Description

Denso Glass Outerwrap HD is a woven-roving fiberglass wrap impregnated with a water-activated resin. It has excellent performance against abrasion, gouge, impact and fracture to protect Denso anti-corrosion coatings during and after installation in many construction applications.

### Uses

- Used as a protective outerwrap for Denso petrolatum tapes and Viscotaq products.
- Used as field applied ARO coating for HDD or boring applications.
- Used as a protective outerwrap over Denso products in applications involving underground pipes, aboveground pipes, soil-to-air, and piles that are above and below water.
- Used for a variety of other applications where additional mechanical protection is required.

### Features

- Prevents damage to anti-corrosion coatings
- Rapid application and curing time
- Easy to apply and no messy cleanup
- It can be applied to dry, underwater, and wet surfaces
- Outstanding abrasion, gouge and impact resistant
- No mixing or VOCs
- Quick, long term protection, ready for immediate service
- It can be top-coated for aesthetics
- Resistant to water, acid, salts, and soil organics
- CSA Z245.30 component

### Surface Prep

Prepare surfaces by removing all loose scale, rust or other foreign matter in accordance to SSPC SP2 "Hand Tool Cleaning" or SP3 "Power Tool Cleaning". High pressure water wash of 3,000 - 7,000 psi (20.68-48.26 MPa) is also suitable.



# TECHNICAL DATA SHEET

## Application

Spirally wrap a layer of Denso Petrolatum Tape with a minimum 1" (25 mm) overlap. For severely corrosive environments, a 55% overlap is recommended. While wrapping, press air pockets out and smooth all lap seams. Using rubber gloves, remove the Denso Glass Outerwrap HD from the hermetically sealed foiled pouch and soak in temperate water (salt or fresh) for 20 to 30 seconds. Remove from water and begin wrapping product tightly on substrate, overlapping a recommended 50%.

Irregular surfaces such as valves, flanges, etc. may require the use of Densyl Mastic, Denso Profiling Mastic, or ViscoMastic prior to product application to transition diameter variations. Refer to the technical data sheets for these specific products for information on application and selection.

A final temporary double layer of Denso Poly-Wrap shall be immediately applied over the uncured Denso Glass Outerwrap HD. This allows all seams of the Denso Glass Outerwrap HD to lay out more smoothly and provides a tighter cured seal. If needed, once compressed, use the Denso Perforating Tool or equivalent to puncture the Denso Poly-Wrap to allow excess resin, moisture, and CO<sub>2</sub> to escape during the reaction. The Denso Poly-Wrap should be removed after approximately 15 to 30 minutes, depending on temperature.

## Storage

12 months when stored in original packaging @ 41°F (5°C) to 90°F (32°C). Do not store in direct sunlight.

## Cleaning

Remove any resin immediately from any contaminated surface using a clean, dry cloth. If a solvent is required, use xylene or dibasic ester or comparable solvent containing essentially no water.

## HSE

Refer to SDS before use. Always refer to project specifications as they may supersede Denso specifications.

## Packaging

Tape Width	Tape Length	Rolls*/ Case	Coverage with 50% Overlap
in.	ea.	ea.	ea.
8" (200 mm)	40' (12 m)	10	133 ft <sup>2</sup> /case (12.33 m <sup>2</sup> /case)

\*Other widths and lengths available upon special request.

# TECHNICAL DATA SHEET

## Tech Data

Properties	Imperial	Metric
<b>Thickness</b>	24 mils avg.	0.61 mm
<b>Flexural Strength</b> (ASTM D790)	26,100 psi	180 MPa
<b>Tensile Strength</b> (ASTM D3039)		
Strength	31.9 ksi	220 MPa
Modulus	2.60 Msi	17.9 GPa
Strain	1.31%	1.31%
<b>Tabor Abrasion</b> (ASTM D4060-14)		
Wear Index	81.5 mg/1000 cycles	81.5 mg/1000 cycles
Thickness Loss (After 1000 Cycles)	3.75 mils	95 microns
Initial Thickness Avg.	49 mils	1.2 mm
<b>Compression Strength</b> (ASTM D 695-15)	39.8 ksi	274 MPa
<b>Lap Shear Strength</b> (ASTM D 5868-01R14)	2.26 ksi	15.6 MPa
<b>Dielectric Strength</b> (ASTM D 149-09 (2013))	220 V/mil	8700 V/mm
<b>Impact Resistance</b> (NACE SP 0394)	92.9 ft-lb	126 J
<b>Maximum Service Temperature</b>	250°F	121°C
<b>Setting Time</b>		
@ 70°F (21°C)	30 minutes	30 minutes
@ 90°F (32°C)	15 minutes	15 minutes



**DENSO, INC.**

**HOUSTON:**  
9710 Telge Road,  
Houston, Texas,  
U.S.A. 77095  
Tel: 281-821-3355  
Fax: 281-821-0304

**TORONTO:**  
90 Ironside Crescent,  
Unit 12, Toronto,  
Ontario, Canada M1X1M3  
Tel: 416-291-3435  
Fax: 416-291-0898

**www.densona.com**

info@densona.com

**A Member of Winn  
& Coales International**

The information given on this sheet is intended as a general guide only and should not be used for specification purposes. We believe the information to be accurate and reliable but do not guarantee it. We assume no responsibility for the use of this information. Users must, by their own tests, determine the suitability of the products and information supplied by us for their own particular purposes. No patent liability can be assumed.