

# ThermoWrap

ThermoWrap is an engineered, field-saturated repair system made of proprietary fiberglass cloth applied with a two-part epoxy and a high-modulus filler material. ThermoWrap is used globally in plants, refineries, tank farms, terminals and on offshore assets as a pressure-containing repair to seal leaks and as a reinforcing repair to restore the strength of a pipe in the axial and circumferential directions. It is ideal for repairs involving complicated geometry, including tees, flanges, and varying diameter pipe.

ThermoWrap is available in multiple kit sizes for any temperature and diameter pipe and can be installed with minimal disruption to operations. It repairs through-wall defects and installs easily in challenging environments where there is complicated pipe architecture.

**APPLICATIONS**

- › Cooling water lines
- › Flare lines
- › Blow down lines
- › Chemical processing lines
- › Oil and gas risers
- › Steel pipe
- › Stack towers
- › Steam piping
- › Underwater pipeline
- › Storage Tanks and Vessels

**COMPLIANT WITH:**

(standards/regulations)

- › AB-539
- › ASME PCC-2
- › ISO 24817
- › ASME B31
- › US DOT
- › API
- › CSA Z662

**BENEFITS:**

- › Eliminates unplanned down time for high-consequence piping
- › Extends the life of aging and corroding assets
- › No pipe cutting or welding
- › Minimal creep ensures a long service life
- › No VOCs
- › Prevents future external corrosion

# **THERMOWRAP**

## TECHNICAL DATA

### **THERMOWRAP      THERMOWRAP MT      THERMOWRAP HT      THERMOWRAP 500**

Fabric	FEB-530	FEB-660	FEB-530	FEB-660	FEB-530	FEB-660	FEB-660
Ply Thickness	0.013"	0.027"	0.013"	0.027"	0.013"	0.027"	0.027"
Shore D Hardness	85		85		84		85
Max Installation Temp	120°F (50°C)		180°F (80°C)		250°F (121°C)		250°F (121°C)
Max Operating Temp	200°F (93°C)		313°F (156°C)		430°F (221°C)		500°F (260°C)
Min Operating Temp (after full cure)	-58°F (-50°C)		-58°F (-50°C)		-58°F (-50°C)		-58°F (-50°C)
Shelf Life	12 months		12 months		12 months		12 months
Chemical Resistance	Wide range (see Chemical Compatibility Chart for details)						

### **CURE SCHEDULE<sup>1,2</sup> (HOURS)**

TEMPERATURE		THERMOWRAP		THERMOWRAP MT		THERMOWRAP HT		THERMOWRAP 500	
(°C)	(°F)	Option 1 Recommended	Option 2						
25	77	24	-	3	3	-	-	-	-
60	140	-	18	2	2	5	5	-	-
90	195	-	-	1	-	1	1	-	-
120	250	-	-	1	-	-	-	1	-
150	300	-	-	1	10	-	1	-	2
175	350	-	-	3	-	1	-	1	-
205	400	-	-	-	-	-	3	-	10
230	445	-	-	-	-	2	-	-	-
260	500	-	-	-	-	-	-	4	-

(1) The listed cure schedule should be followed from the lowest temperature to the highest with the hold times listed in hours completed prior to ramping up to the next temperature.

(2) The cure schedule of the chosen column must be fully completed to reach the recommended cure and achieve 90% of the Target Shore D hardness.

**WARRANTY** CSNRI routinely implements product improvements. Please contact your local distributor or office for the most current product specifications. CSNRI warrants the quality of this product when used according to directions.

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**ISO 9001 Certified**