

HIGH TEMPERATURE ENVIRONMENTS

The DiamondWrap[®] High Temperature kits have been designed to be applied to pipes that operate above 82° C (180° F). Three different high temperature kits are available depending upon the conditions of the pipe and the application: High Temperature Ambient[™] (HTA[™]), High Temperature 701[™] (HT701[™]), Ultra High Temperature[™] (UHT[™]).

DIAMONDWRAP[®] HIGH TEMPERATURE AMBIENT[™] (HTA) EPOXY SYSTEM

This kit is designed to be used on pipes that operate at temperatures between 30° C and 149° C (86° F and 300° F). The **DiamondWrap[®] High Temperature Ambient[™]** kit is formulated to set at temperatures of 30° C (86° F). Its slow set time is great for wrapping pipes while in service at elevated temperatures. It is also designed for pipes that operate at elevated temperatures, but will be wrapped while the line is out of service.

HTA[™] EPOXY DATA

| PROPERTY | METRIC SYSTEM | ENGLISH SYSTEM |
|---|-----------------------------------|----------------------------------|
| Glass Transition Temperature (Tg) | 171° C | 340° F |
| Max Recommended Operating Temperature | 149° C | 300° F |
| Recommended Application Temperature Range | 30° C – 149° C | 86° F – 300° F |
| Tensile Strength – Hoop | 576,719 kPa | 83,646 PSI |
| Tensile Strength – Axial | 247,729 kPa | 35,930 PSI |
| Modulus – Hoop | 49.1 x 10 ⁶ kPa | 7.13 x 10 ⁶ PSI |
| Modulus – Axial | 23.8 x 10 ⁶ kPa | 3.46 x 10 ⁶ PSI |
| Nominal Thickness | 1.016 mm (2ply) – 3.43 mm (6 ply) | 0.04 in (2ply) – 0.135 in (6ply) |
| Carbon Fiber % | 35 – 50% | 35 – 50% |
| Glass Fiber % | 0% | 0% |
| Resin Type | 2 Part, 100% Solid Epoxy | 2 Part, 100% Solid Epoxy |
| Lap Shear | > 8,273.71 kPa | > 1,200 PSI |
| Hardness @ Full Cure | 80 Shore-D | 80 Shore-D |
| Primer Color Code | Gray | Gray |