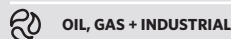


Milliken Infrastructure

# Atlas™

Carbon Fiber Composite Repair System



**Atlas™** is a high strength, high stiffness carbon fiber solution for on-site repair of piping structures. Atlas™ is designed for repairs requiring strain reduction due to dynamic loading conditions

MECHANICAL PROPERTIES	UNITS	ASTM TEST METHOD	VALUES
Tensile Strength	PSI, MPa	D3039-00	151,000 (1,041)
Tensile Modulus	PSI, MPa	D3039-00	9.7 x 10 <sup>6</sup> , (66,879)
Flexural Strength	PSI, MPa	D790-00	113,000 (779)
Flexural Modulus	PSI, MPa	D790-00	9.1 x 10 <sup>6</sup> , (62,742)
Shear Modulus	PSI, MPa	D5279-01	9.64 x 10 <sup>5</sup> (6,647)
Interlaminar Shear Strength	PSI, MPa	D3165-07	8,200 (56.5)
Barcol Hardness		D-2583	53
Glass Transition		ISO 11357-2	350°F (177°C)
Thermal Expansion		E831-6	.116 um/m/°F (.208 um/m/°C)
Poisson's Ratio		D3039-00	.150

**PHYSICAL PROPERTIES (ACFE)**

Stocked Width	12" (30.5 cm)
% Resin content by weight	36 ± 3
Fabric Orientation	Bi-Axial 0° and 90°
Cure Ply Thickness	0.019 IN (19 mils) (0.48 mm)

**GENERAL PROPERTIES**

Maximum Operating Temperature	314°F (157°C)
Working Time (Dependent on Temperature)	40 Minutes @ Ambient
Set Time	1 Hour
Chemical Resistance	Gasoline, MEK, Acetone, Toluene, Ethyl alcohol and other hydrocarbons
Shelf Life	One year from ship date
Application Conditions	Above 45°F (7°C) up to 120°F (49°C)

**Typical Uses**

The Atlas™ system is most commonly used for pipelines and piping systems that have suffered from corrosion or third party damages. Possible defects that can be repaired include:

- External corrosion and pitting
- Dents, gouges and scratches
- Welds and other manufacturing flaws
- Wrinkle Bends
- Crack Reinforcement (conditional cases)

**Benefits**

- Site impregnated
- Resin part A and part B come to the field pre-measured
- Structural fabric is impregnated in the field with conventional equipment
- Restores pipe to original strength
- Ideal application temperature up to 120 °F (49 °C)
- Independently certified to ASME-PCC-2 and ISO 24817 standards

**Complete Kit Includes**

- Carbon Fabric
- Primer Kit
- Constrictor Wrap



Before using any Milliken Infrastructure Solutions, LLC product, the user must review the most recent version of the product's technical data sheet, material safety data sheet and other applicable documents, available at [infrastructure.milliken.com](http://infrastructure.milliken.com) or by calling 1-855-655-6750. Milliken Infrastructure Solutions, LLC is a subsidiary of Milliken & Company. The Milliken logo is registered by Milliken & Company and used under license by Milliken Infrastructure Solutions, LLC, all rights reserved. Technology

[infrastructure.milliken.com](http://infrastructure.milliken.com)  
855-655-6750

**MILLIKEN INFRASTRUCTURE**  
A *Milliken* COMPANY

PW1102 - 0916