



# *Fiberglass Tissue*

Corrosion Protection &  
Reinforcement Membrane

Designed by Square Communications: 011-41656000



**U.P. Twiga Fiberglass Limited** (An ISO 9001:2000 Company)  
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### Company Overview

Twiga is the leading manufacturer of Fiberglass Tissue in India, with a ten year track record of supplying domestic and export customers with world-class products for pipeline protection, waterproofing and lamination applications.

With a plant capacity of 1,200 MT per annum, seven marketing and technical support offices in each of the major Indian metros and a national distribution network, Twiga's service and support is unmatched in the industry.

As a result of Twiga's commitment to quality and reliability, Twiga Fiberglass Tissue has been selected for many projects in India and abroad, especially for cross country pipelines (oil, gas and water), and as a facing material on acoustic insulation used in generator acoustic enclosures, multiplexes etc.

Whether you need Fiberglass Tissue for pipeline protection, waterproofing, lamination or any other purpose, we hope you will give us the opportunity to use our extensive experience for your benefit.

Twiga Fiberglass Tissue is a non woven felt made of randomly oriented glass fiber distributed in a special binder by a wet lay process.

The product is available with or without yarn reinforcement (standard reinforcement is at 10mm intervals), depending on the application and performance parameters required. Its high tensile strength, porosity and compatibility with anticorrosive chemicals offer significant performance benefits and advantages during application.

Twiga Fiberglass Tissue is available in roll form in various densities and thicknesses. The product is recommended for use in both hot and cold applications up to a temperature of 288°C. Our technical sales staff will be pleased to recommend the appropriate weight, thickness and reinforcement combination for your specific application.

### Fiberglass Tissue Overview

### Applications

Twiga Fiberglass Tissue is manufactured in various densities and thicknesses for different applications. Recommended materials for selected market segments and applications are given below:

Segment	Application	Recommended Product	Benefits Derived
Pipe protection	Wrapping and coating	50 gsm for Innerwrap 83 gsm for base membrane of outerwrap	<ul style="list-style-type: none"> <li>Counters natural and artificial corrosion</li> <li>Provides reinforcement</li> <li>Uniform coating</li> <li>No voids</li> </ul>
Waterproofing	Reinforcement membrane in waterproofing felts  In-situ waterproofing	40 to 50 gsm	<ul style="list-style-type: none"> <li>Provides reinforcement</li> <li>Dimensional stability</li> <li>Non bio-degradable</li> <li>Superior strength</li> <li>Compatibility with bitumen and asphalt</li> </ul>
Lamination	Acoustic lining of ducts  Facing over insulation	40 to 50 gsm	<ul style="list-style-type: none"> <li>Provides support to insulation material</li> <li>Improves handleability</li> <li>Improves sound absorption</li> </ul>

### Standard Technical Data

Properties	41/10	50/10	83/10
Nominal Mass (± 4gms)	41	50	83
Nominal Thickness (mm) at 2Lb/inch <sup>2</sup>	0.25	0.36	0.55
Minimum Tensile Strength			
Longitudinal (N/m)	4000	6000	8000
Transverse (N/m)	700	1000	2000
Reinforcement Pitch (approx.)	10mm	10mm	10mm
Standard Width	1m	1m	1m
Roll length (Max.)	2500m	2000m	1200m
Core diameter	76mm	76mm	76mm
	152mm	152mm	152mm
Porosity	0.8	1.1	1.8
Binder Type	Urea Formaldehyde	Urea Formaldehyde	Urea Formaldehyde
Binder content	28%	28%	28%
Pliability	No crack	No crack	No crack
Glass Fiber distribution	Uniform and smooth, free from any physical defect		
Temperature Resistance	288°C	288°C	288°C
Specifications	Meets requirements of AWWA C 203, IS 7193, IS 14695 & IS 15337		

Other weights, lengths and widths available upon request.