

# Ceramic Textiles & Composites

## 3M™ Nextel™ Woven and Braided Tape

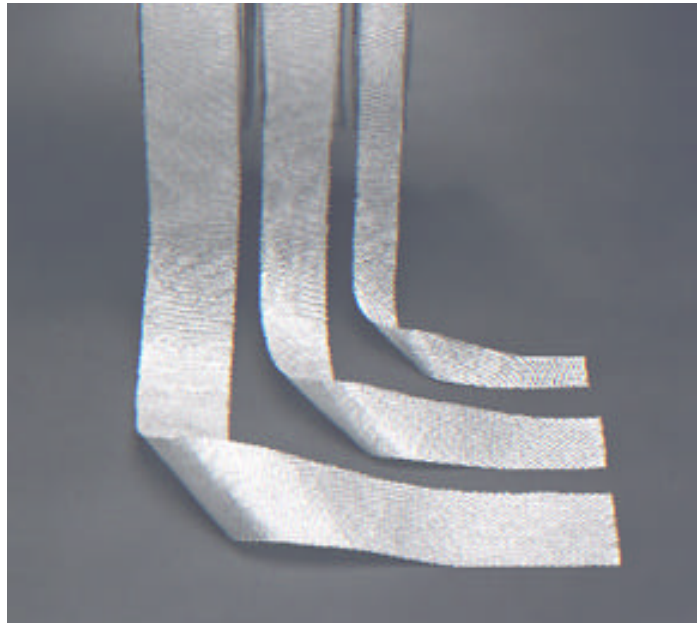
Nextel 312 (AP) and 440 (BP) woven and braided tapes are made from continuous Nextel alumina-boria-silica fibers.

Nextel 312 tapes (AP) retain strength and flexibility at continuous temperatures of up to 2012°F (1100°C).

Nextel 440 tapes (BP) retain strength and flexibility at continuous temperatures of up to 2500°F (1371°C).

### Typical Applications:

- Electrical Insulation
- Hose Protection
- Fire Zone Cable Protection
- Pipe Wrap
- Automotive



### Typical Physical Characteristics of Nextel 312 and 400 Woven and Braided Tape

Style	Tape Width		Weight		Thickness		Breaking Strength without Sizing*	
	inch	cm	oz/yd	g/m	inch	mm	lbs/in	kg/cm
<b>Nextel 312 Woven Tape, Style AP-18</b>								
	1.0	2,5	0.30	9,3	0.018	0,46	160	29
	1.5	3,8	0.45	14,0	0.018	0,46	160	29
	2.0	5,1	0.60	18,6	0.018	0,46	160	29
<b>Nextel 312 Braided Tape, Style AP-50</b>								
	1.16	2,9	1.40	43,4	0.061	1,55	290	52
<b>Nextel 440 Woven Tape, Style BP-18**</b>								
	1.0	2,5	0.33	10,2	0.019	0,48	180	32
	1.5	3,8	0.50	15,5	0.019	0,48	180	32
	2.0	5,1	0.66	20,5	0.019	0,48	180	32

\*Test method ASTM D5035

\*\*Available only by special order.

## Important Processing Information

Nextel 312 and 440 Ceramic Fibers are coated during manufacture with sizings which serve as aids in textile weaving or processing operations. After such processing, the sizing is removable through heat cleaning. Consult 3M's technical literature for proper handling instructions since the sizings may decompose to hazardous byproducts or process contaminants.

If Nextel 312 and 440 Ceramic Fibers are to be subjected to hot, humid environments for extended periods of time (e.g. 95°C, 100% relative humidity for ten days), heat treatment is necessary. The heat treatment changes the crystal structure of the fiber, preventing physical degradation in these conditions.

Heat Cleaning and Heat Treating are available to meet your safety or process requirements. See our Nextel Ceramic Fabric Heat Cleaning/Heat Treating instructions and our Health Safety Bulletin for more information.

## For ordering contact:

3M Ceramic Textiles and Composites  
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Phone: 800-223-1687  
Fax: 888-993-9185

Terms: Net 30 days  
Transportation: F.O.B. shipping point with transportation charges prepaid and charged back.  
Prices subject to change without notice.

### IMPORTANT NOTICE TO PURCHASER:

3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. All statements, technical information and recommendations contained in this brochure are based upon tests conducted with 3M approved equipment and are believed to be reliable. However, many factors beyond the control of 3M can affect the use and performance of 3M Ceramic Fibers in a particular application, including the conditions under which the product is used. Since these factors are uniquely within the user's knowledge and control, it is essential the user evaluate the 3M Ceramic Fibers to determine whether this product is fit for the particular purpose and suitable for user's application.

**LIMITATION OF REMEDIES AND LIABILITY:** If the 3M product is proven to be defective THE EXCLUSIVE REMEDY, AT 3M'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR REPLACE THE DEFECTIVE 3M PRODUCT. 3M shall not otherwise be liable for any injury, losses or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including tort, contract, negligence, warranty, or strict liability.

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