

Ceramic Textiles and Composites

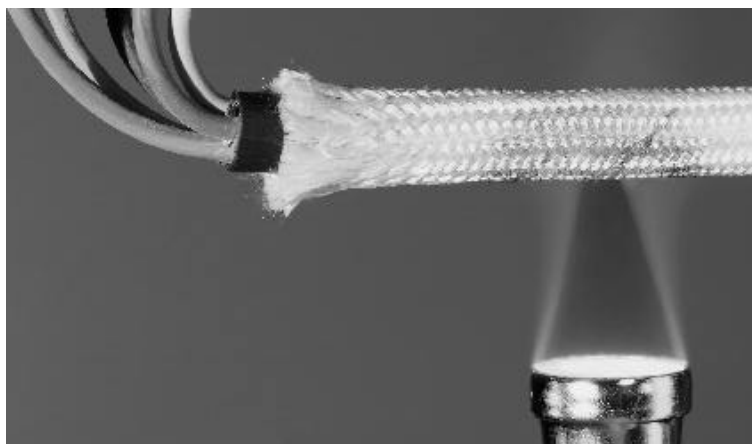
3M™ Nextel™ 312 Braided Sleeving

Nextel™ 312 Braided Sleeving is made from continuous Nextel 312 Alumina-Boria-Silica Fibers.

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

Typical Applications:

- Electrical Insulation
- Hose Protection
- Fire Zone Cable Protection
- Thermocouple Insulation
- Heater Wire Insulation



Typical Properties

Sleeving Inside Diameter		Wall Thickness Sized		Length per Unit Weight		Yield As Packaged Roll Form		Picks per Unit Length		Length Coverage Factor*
Inch	mm	Inch	mm	Yards/lb	m/kg	Lbs/100 ft	g/m	Picks/in	(Picks/cm)	
Nextel 312 Braided Sleeving, Style AS-40										
1/16	1,6	0.027	0,69	83	167	0.38	5,7	12	5	0.95
1/8	3,2	0.038	0,97	37	75	0.79	12	12	5	0.88
1/4	6,4	0.036	0,91	24	48	1.2	18	11.5	4,5	0.86
1/2	12,7	0.041	1,04	12	24	2.1	31	10.5	4	0.75
3/4	19,1	0.039	0,99	8.7	18	2.8	42	10	4	0.72
1	25,4	0.035	0,89	7.4	15	3.5	52	12	5	0.77
1-1/2**	38,1	0.033	0,84	5.3	11	4.6	68	12	5	0.74
2	50,8	0.034	0,86	3.4	6,9	6.2	92	11	4	0.63
2-1/2	63,5	0.037	0,94	3.1	6,2	7.6	113	8	3	0.70
Nextel 312 Braided Sleeving, Style AS-50										
2	50,8	0.027	0,69	5.7	11,5	5.4	80	5.5	2	0.92
Input yarn is Nextel 312 900 Denier Yarn. Yarn construction: 1/2, 2.7z.										
*(Package Length x Factor = Approximate Length Covered at Specified I.D.)										
Approximate Length Covered at Specific Inside Diameter per 100 foot of Braided Sleeving.										
**Available only by special order.										

Important Processing Information

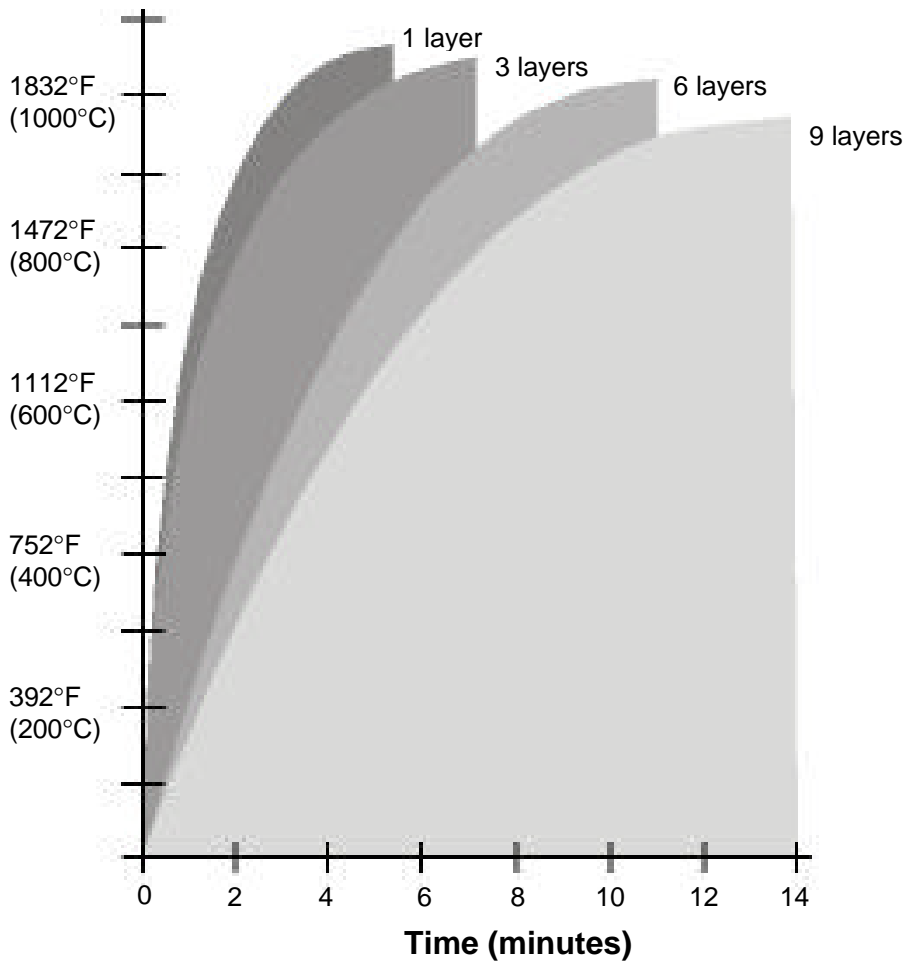
Nextel™ 312 Ceramic Fibers are coated during manufacture with sizings or finishes which serve as aids in textile processing. These sizings or finishes consist of organic polymers which may ignite and/or decompose to hazardous byproducts or process contaminants when first heated.

If Nextel 312 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 and process requirements. See our Nextel 312 Heat Cleaning/Heat Treating Instructions and our Health Safety Bulletin for more information.

The chart below illustrates the time/temperature function for increasing layers of 3M™ Nextel™ 312 Sleeving 0.038 inch (0,965 mm) thick after insertion in a 2000°F (1093°C) furnace.



IMPORTANT NOTICE TO PURCHASER

All statements, technical information, and recommendations contained in this brochure are based on tests conducted with 3M approved equipment, and are believed to be reliable. However, the accuracy or completeness of the tests is not guaranteed. THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE: The seller's and manufacturer's only obligation will be to replace the quantity of the product proved to be defective. Neither the seller nor 3M will be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, the user must determine the suitability of the product for his or her intended use.

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Printed on 50% recycled waste paper, including 10% post-consumer waste paper.

Printed in U.S.A.

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