

## 3M™ Nextel™ Fiber Terminology

**Chopped Fiber** – Short lengths of fiber made by cutting continuous fiber roving. Chopped fibers are uniform in length and diameter unlike melt blown fibers.

**Continuous Strand** – A strand in which individual filament lengths approach the strand length.

**Denier** – Number of grams per 9000 meters.

**End** – A single strand, roving or yarn, incorporated in a product.

**Fiber** – Thread-like structure having a length at least 100 times its diameter, can be either definite short lengths or continuous.

**Filament** – A single fiber having extreme length.

**Fill** – Ends that run at right angles to the warp.

**Finish** – Material applied to fiber products to improve fiber-resin bonding, improve lubricity and high temperature abrasion, or stabilize a weave. Can contain a coupling agent.

**Greige Goods** – Loom state fabric; fabric that may contain sizing but no finish.

**Heat Cleaning** – Batch or continuous process to remove sizing.

**Heat Treating** – Batch or continuous process to remove sizing and change the crystal structure of the fiber improving its resistance to moisture and chemical attack.

**Nonwoven Mat** – An assembly of several layers of discontinuous fibers held together by mechanical interlocking in a random web.

**Paper** – A nonwoven made from an aqueous suspension of discontinuous fibers and binder(s).

**Pick** – A single strand, roving, or yarn incorporated in a product.

**Plied Yarn** – An assembly of two or more previously twisted yarns.

**Roving** – A loose assemblage of fibers in single strand, without twists.

**Serving** – Wrapping a yarn such as rayon around a roving or yarn for protection.

**Singles** – A yarn made from one or more strands twisted together but not plied. Examples: 1/0, 2/0, 4/0. Single strand construction is singles yarn made from one strand (1/0).

**Sizing** – Starch, oil, wax, or other suitable organic ingredient applied to a fiber strand to protect and aid handling. A sizing contains ingredients to provide lubricity and binding action. Unlike a finish, a sizing is usually removed before final product use.

**Strand** – An untwisted primary filament bundle, can be either continuous filament or staple fiber (sliver).

**Tex** – Number of grams per 1000 meters.

**Twist** – Twisting and/or plying strands or singles.

**Warp** – Ends that run lengthwise in a fabric.

**Yarn** – An assembly of one or more strands twisted together. Examples: 1/0, 4/0, 1/2, 2/2, 4/5.

**Yield** – Length of yarn per unit weight.