



Designation: D7018 – 04

Standard Terminology Relating to Glass Fiber and Its Products¹

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1. Scope

1.1 This standard is a compilation of terminology developed by Committee D13.18 on Glass Fiber and its Products.

1.2 This terminology is unique to glass fibers, strands, yarns, fabrics, etc. in the glass textile industry. Terms that are generally understood or adequately defined in other readily available sources are not included.

1.3 Subcommittee D13.18 has jurisdictional responsibility for standards and terminology in this standard. Any change in wording requires the approval of D13.18 subcommittee. Any changes approved by the subcommittee and main committee are then directed to subcommittee D13.92 on Terminology for inclusion in Terminology D123.

2. Referenced Documents

2.1 *ASTM Standards*:²

D578 Specification for Glass Fiber Strands

D579 Specification for Greige Woven Glass Fabrics

D580 Specification for Greige Woven Glass Tapes and Webbing

D581 Specification for Glass Fiber Greige Braided Tubular Sleaving

D3374 Specification for Vinyl-Coated Glass Yarns

D3656 Specification for Insect Screening and Louver Cloth Woven from Vinyl-Coated Glass Yarns

D4028 Specification for Solar Screening Woven from Vinyl-Coated Fiber Glass Yarn

D4029 Specification for Finished Woven Glass Fabrics

D4030 Specification for Glass Fiber Cord and Sewing Thread

D4389 Specification for Finished Glass Fabrics Woven From Rovings

D4912 Test Method for Fabric Stability of Vinyl-Coated Glass Yarn Insect Screening and Louver Cloth

D4963 Test Method for Ignition Loss of Glass Strands and Fabrics

¹ This terminology is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.18 on Glass Fiber and its Products.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

3. Terminology

3.1 Alphabetical listing of terms for which Subcommittee D13.18 has jurisdiction:

atmosphere for testing textiles, *n*—*for glass*, air maintained at a relative humidity of at least 48 % and no greater than 67 %, and at a temperature of at least 20°C (68°F) and no greater than 25°C (77°F).

DISCUSSION—(as related to all D13.18 standards)—Glass textiles are used in various products such as reinforced plastics, mat-like material, tire cords, electrical insulation, etc. Each of these materials require different testing atmospheres. It is the intent of this wide spread in testing atmosphere to allow testing of glass textiles in respective laboratories where end product test atmosphere requirements differ. The test atmospheres for respective products should be controlled as specified in Specification E171. It is the opinion of Subcommittee D13.18 that the physical properties cited in respective specifications would not be affected by the range selected. In any event, the test atmosphere should be stated in the report.

blocking, *n*—of coated fiber glass yarn solar screening, an undesired adhesion between touching layers of a material. Such as occurs under moderate pressure, during storage or use.

braid, *n*—a narrow tubular or flat fabric produced by inter-twining a single set of yarns according to a definite pattern (Maypole process).

carrier, *n*—in braiding machinery, that part of a braiding machine that holds the package of yarn, thread, or cord, and carries the yarn when the machine is operated.

chopped strand, *n*—in glass textiles, a strand made for short predetermined lengths of cut continuous filament and used as a reinforcing material. (See also **strand**.)

color stability, *n*—in coated glass textiles, the ability of the applied coating to resist fading from exposure to sunlight and water.

continuous filament yarn, *n*—a yarn made of filaments that extend substantially throughout the length of the yarn.

cord, *n*—of glass fiber, a strand made by combining multiple ends of filament stands, including cabled yarns, primarily for structural application.

crowfoot weave, *n*—a broken-twill weave one-up and three-down or three-up and one-down with two ends to the right and two ends to the left, commonly referred to as 4-harness satin or broken crow.