



Designation: D 4029 – 9704

Standard Specification for Finished Woven Glass Fabrics¹

This standard is issued under the fixed designation D 4029; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers finished fabrics woven from “E” electrical glass fiber yarns that are intended as a reinforcing material in laminated plastics for structural use. This specification can also be applied to fabrics made of other glass-fiber types as agreed upon between the purchaser and the supplier.

1.2 This specification specifies the terminology, definitions, general requirements, and physical requirements for finished woven glass-fiber finished fabrics. This specification permits the application of sizing materials to the glass fiber yarn during manufacture that helps facilitate weaving. ~~When used as permitted in this specification, such~~ These organic materials are typically removed from the greige fabric and replaced with a finish that is compatible with the resin matrix as specified in the contracting instrument. ~~document~~

NOTE 1—Sizing materials on glass fiber yarns, in most cases, are removed by various cleaning procedures as a first stage in preparing a finished fabric. When these yarn sizing materials are removed during a cleaning procedure they need not be compatible with the subsequent resin matrix.

1.3 This specification shows values in both SI units and in inch-pound units. “SI units” is the technically correct name for the system of metric units known as the International System of Units. “Inch-pound units” is the technically correct name for the customary units used in the United States. The values in SI units are provided as information only; the values stated in inch-pound units are to be regarded as standard.

1.4 This specification is one of a series to provide a substitute for Military Specifications: MIL-Y-1140 Yarn, Cord, Sleeving, Cloth, and Tape-Glass; and MIL-C-9084 Cloth, Glass Finished for Resin Laminates.

1.5 Additional ASTM specifications in this series have been drafted and appear in current editions of the Annual Book of ASTM Standards. These include greige glass fabrics, glass tapes, glass sleeveings, glass cords, glass sewing threads, and finished laminates made from finished glass fabrics.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

NOTE 2—This specification is one of a series to provide a substitute for Military Specifications:

MIL-Y-1140H

MIL-C-9084C

NOTE 3—~~Specification D 2150, for Woven Glass Fabric for Polyester Glass Laminates, is being extensively revised. This method will contain test methods and requirements for laminated plastics made from fabrics referenced in this specification.~~ use.

¹ This specification 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. Current edition approved April 10, 1997; March 1, 2004. Published July 1997; March 2004. Originally published as D 4029—81; approved in 1981. Last previous edition approved in 1997 as D 4029 – 907.