



Designation: E2098/E2098M – 13 (Reapproved 2023)

Standard Test Method for Determining Tensile Breaking Strength of Glass Fiber Reinforcing Mesh for Use in Class PB Exterior Insulation and Finish Systems (EIFS), after Exposure to a Sodium Hydroxide Solution¹

This standard is issued under the fixed designation E2098/E2098M; 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 test method covers procedures for determining the breaking force of glass fiber mesh following their conditioning in an alkali solution. The method is applicable to glass fiber mesh used in Class PB Exterior Insulation and Finish Systems (EIFS) with base coats that contain portland cement as an ingredient.

1.2 Breaking force is expressed both as force per unit width of mesh and as a percentage of the breaking force of the mesh that has not been exposed to alkali conditioning.

1.3 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system are not necessarily exact equivalents; therefore, to ensure conformance with the standard, each system shall be used independently of the other, and values from the two systems shall not be combined.

1.4 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This test method is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.58 on Exterior Insulation and Finish Systems (EIFS).

Current edition approved Oct. 1, 2023. Published October 2023. Originally approved in 2000. Last previous edition approved in 2018 as E2098/E2098M – 13 (2018). DOI: 10.1520/E2098_E2098M-13R23.

2. Referenced Documents

2.1 ASTM Standards:²

D76/D76M Specification for Tensile Testing Machines for Textiles

D579/D579M Specification for Greige Woven Glass Fabrics
D5035 Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)

E631 Terminology of Building Constructions

E2110 Terminology for Exterior Insulation and Finish Systems (EIFS)

2.2 Other Documents:³

EIFS Industry Members Association (EIMA) Guideline Specification for Exterior Insulation and Finish Systems (EIFS), Class PB

3. Terminology

3.1 For general terminology regarding EIFS and building in general, see Terminology E2110 (for EIFS terms) and Terminology E631 (for buildings in general).

4. Summary of Test Method

4.1 Specimens are tested for breaking force with and without conditioning. Conditioning is immersion for 28 days in an aqueous solution of 5 % sodium hydroxide.

4.2 Breaking force is determined by mounting a test specimen in a tensile testing machine and applying a force to the specimen until it breaks.

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 Available from the EIFS Industry Members Association (EIMA), 513 West Broad Street, Suite 210, Falls Church, VA 22046-3257, http://www.eima.com.