



Designation: E 1825 – 96 (Reapproved 2003)

## Standard Guide for Evaluation of Exterior Building Wall Materials, Products, and Systems<sup>1</sup>

This standard is issued under the fixed designation E 1825; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This standard covers guidance to design professionals in the evaluation of materials, products, or systems with which they are not familiar and to help determine that the selected materials, products, or systems are suitable for use on or as a part of an exterior building wall.

### 2. Referenced Documents

#### 2.1 *ASTM Standards:*

E 631 Terminology of Building Constructions<sup>2</sup>

### 3. Terminology

3.1 There are no terms in this standard that require definition other than as provided by Terminology E 631.

### 4. Significance and Use

4.1 This standard may be used by design professionals and others in the building construction industry to provide factual support for professional judgment of materials, products, or systems during the design development of new and remedial exterior building wall construction.

4.2 This standard is intended to provide guidance to the user of this standard in the evaluation and qualification of materials, products, or systems with which they do not have substantial, long-term experience or that are intended to be employed in a new or different manner. The standard may be used to investigate and assess the probable performance of such materials, products, or systems in relation to the proposed use on or as part of an exterior building wall.

4.3 The procedures outlined in Section 5 will help guide the user in making informed selections based on the materials, products, or systems performance history on constructed projects and provide information on limitations of use, the

manufacturer's performance history, and current status. The use of this guide will reduce, but not eliminate, the risk of in-service performance problems with materials, products, or systems.

4.4 The procedures listed in this standard are intended for use in selecting materials, products, or systems that are critical to the safety, function, or serviceability of a building, or where they constitute substantial components of the work. The recommendations in this guide are not applicable to all materials, products, or systems that can be incorporated in buildings. The user is encouraged to use judgment regarding the need and cost effectiveness of applying the procedures listed herein. Materials, products, or systems that will be used for a noncritical or incidental use usually do not require an exhaustive evaluation. Materials, products, or systems with which the user has first-hand experience do not generally require an exhaustive evaluation since many of the evaluation tasks listed herein should have been performed previously.

NOTE 1—Often components of exterior building wall construction are tested in the laboratory to help assure adequate performance. Laboratory evaluation of materials, products, or systems is not described in this guide.

### 5. Investigation

5.1 Technical information from sellers, manufacturers, or distributors.

5.1.1 Obtain a list of projects where the materials, products, or systems for each project were used, including:

5.1.1.1 Dates of installation;

5.1.1.2 Name of project, address, owner, contact persons, type of use, phone number;

5.1.1.3 Name of contractor, subcontractor, contact persons, address, phone number; and

5.1.1.4 Name of engineer or architect, contact persons, address, phone number.

5.1.2 Obtain pertinent research reports, test data, and certifications for the materials, products, or systems from inception to help evaluate current characteristics, changes, and their uses over time.

5.1.3 Ask the manufacturers for a listing of specific changes in the materials, products, or systems over time including improvements, changes in physical and chemical components, geometry, production methods, and quality control.

<sup>1</sup> This guide is under the jurisdiction of ASTM Committee E06 on Performance of Buildings and is the direct responsibility of Subcommittee E06.55 on Exterior Building Wall Systems.

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<sup>2</sup> 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.