



## Designation: C 725 – 90 (Reapproved 1998)

AMERICAN SOCIETY FOR TESTING AND MATERIALS  
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# Standard Specification for Semidense Mineral Fiber Siding<sup>1</sup>

This standard is issued under the fixed designation C 725; 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.

*This standard has been approved for use by agencies of the Department of Defense.*

## 1. Scope

1.1 This specification covers semidense mineral fiber siding (shingles, clapboards, and sheets) designed to provide the weather-exposed sidewall surfaces of buildings. These sidings are nailable with or without prepunched holes.

1.2 The values stated in SI units are to be regarded as the standard. The values stated in parentheses are provided for information only.

1.3 The following precautionary caveat pertains only to the test method portion, Section 9, of this specification: *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.* See 9.2.1.1 for a specific hazard warning.

## 2. Referenced Documents

### 2.1 ASTM Standards:

C 460 Terminology for Asbestos-Cement<sup>2</sup>

D 1037 Methods of Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials<sup>3</sup>

### 2.2 Federal Standard:

Fed. Std. No. 123 Marking for Shipment (Civil Agencies)<sup>4</sup>

### 2.3 Military Standard:

MIL-STD-129 Marking for Shipment and Storage<sup>4</sup>

## 3. Classification

3.1 Semidense mineral fiber siding shall be one of the following types, as specified:

3.1.1 *Type I, Shingles*—Uniform thickness, rectangular in shape, and having wavy, random, thatched, straight or irregular butts. Shingles are limited to 1.22 m (48 in.) in maximum length and 0.41 m (16 in.) in maximum width. Shingles are applied in horizontal lapped courses. The specified width is generally less than the specified length.

3.1.2 *Type II, Clapboards*—Uniform thickness, rectangular in shape and in lengths from 1.24 m (49 in.) to 3.66 m (144 in.) and widths up to 0.41 m (16 in.). The clapboards are applied in horizontal lapped courses.

3.1.3 *Type III, Sheets*—Uniform thickness, rectangular in shape and usually in 1.22-m (48-in.) widths and 1.22 to 3.66-m (48 to 144-in.) lengths. The sheets are generally applied vertically to sheathed or unsheathed sidewalls.

## 4. Materials and Manufacture

4.1 Semidense mineral fiber sidings are composed of a combination of asbestos fibers, portland cement or portland blast-furnace slag cement and mineral fillers, with or without the addition of organic fibers, curing agents, water repellent substances, coatings, or pigments, formed under pressure and cured to meet the physical requirements of this specification.

## 5. Physical Properties

5.1 *Flexural Strength*—The average breaking load obtained by loading equally and simultaneously at both one-third points of the span shall not be less than as shown in Table 1.

5.2 *Deflection*—At the ultimate breaking load obtained by loading equally and simultaneously at both one-third points of the span shall not be less than as shown in Table 1.

5.3 *Water-Absorption Swelling*—The average thickness increase resulting from water absorption shall not exceed 2 %.

5.4 *Product Durability*—The product shall withstand six complete cycles of accelerated aging conducted in accordance with Section 120 of Methods D 1037, and exhibit no visible delamination. The average breaking load of the dried test specimens after cycling shall not show a decrease in strength of more than 10 % when compared with the corresponding values obtained from tests made on companion control specimens tested in accordance with 5.1.

5.5 *Density*—The average density as measured in the dry state shall be not less than 800 kg/m<sup>3</sup> (50 lb/ft<sup>3</sup>).

5.6 Refer to Terminology C 460 for terminology.

## 6. Dimensions, Mass, and Permissible Variations

6.1 Siding covered by this specification shall conform to the dimensions prescribed in Table 2.

6.2 *Tolerances*—The permissible variation from the nominal width or length shall be 3.2 mm ( $\pm\frac{1}{8}$  in.), and the

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee C-17 on Fiber-Cement Products and is the direct responsibility of Subcommittee C17.03 on Asbestos-Cement Products.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 04.05.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 04.10.

<sup>4</sup> Available from Standardization Documents, Order Desk, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.