



Designation: C 1049 – 85 (Reapproved 1995)<sup>ε1</sup>

## Standard Practice for Installation of Granular Loose-Fill Thermal Insulation<sup>1</sup>

This standard is issued under the fixed designation C 1049; 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.

ε<sup>1</sup> NOTE—Keywords were added editorially in May 1995.

### 1. Scope

1.1 This practice describes procedures for the installation of granular loose-fill insulation in ceilings, attics, floor, and wall cavities of new or existing housing and other framed buildings.

1.2 This practice applies only to the installation of dry loose-fill thermal insulation consisting of granular materials such as perlite and vermiculite by pneumatic or pouring application.

1.3 This practice covers the installation process from pre-installation inspection through post-installation procedure. It does not cover the production of the insulation materials.

1.4 These procedures are not intended to replace the manufacturer's installation instructions but shall be used in conjunction with such instructions. This practice is not intended to supercede local, state, or federal codes.

1.5 This practice assumes that the installer possesses a good working knowledge of the applicable codes and regulations, safety practices, tools, equipment, and methods necessary for the installation of thermal insulation materials. It also assumes that the installer understands the fundamentals of residential construction that affect the installation of insulation.

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.* Specific safety procedures are contained in Section 5.

### 2. Referenced Documents

#### 2.1 ASTM Standards:

C 168 Terminology Relating to Thermal Insulating Materials<sup>2</sup>

C 516 Specification for Vermiculite Loose-Fill Thermal Insulation<sup>2</sup>

C 549 Specification for Perlite Loose-Fill Insulation<sup>2</sup>

C 755 Practice for Selection of Vapor Retarders for Thermal Insulation<sup>2</sup>

E 136 Test Method for Behavior of Materials in a Vertical

Tube Furnace at 750°C<sup>3</sup>

#### 2.2 NFPA Standards:

NFPA 31 Standard for the Installation of Oil Burning Equipment<sup>4</sup>

NFPA 54 National Fuel Gas Code<sup>4</sup>

NFPA 70 National Electric Code<sup>4</sup>

NFPA 211 Standard for Chimneys, Fireplaces and Vents<sup>4</sup>

#### 2.3 Other Documents:

16 CFR 460 Federal Trade Commission Trade Regulation Rule; Labeling and Advertising of Home Insulation<sup>5</sup>

HUD Minimum Property Standards (MPS) for One- and Two-Family Dwellings<sup>6</sup>

CPSC Product Safety Fact Sheet No. 18 "The Home Electrical System"<sup>7</sup>

### 3. Terminology

#### 3.1 Definitions:

3.1.1 For definitions of terms relating to thermal insulation refer to Terminology C 168.

#### 3.2 Definitions of Terms Specific to This Standard:

3.2.1 *applicator*—the person or persons who apply thermal insulation materials in residential buildings whether or not such person or persons have contracted with the owner to perform the work.

3.2.2 *conditioned space*—any space in a residential building that is served by a heating or cooling system.

3.2.3 *granular loose-fill thermal insulating materials*—those materials that meet the minimum requirements set forth in Specifications C 516 or C 549.

3.2.4 *owner*—the person, partnership, corporation, agency, or other entity who owns the residential building to be insulated whether such ownership is by virtue of deed, contract, or any other instrument for acquiring legal title under the laws of the state in which the building is located.

3.2.5 *residential building*—any building used for residential occupancy and which has a mechanical or electrical system for

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 04.07.

<sup>4</sup> Available from National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

<sup>5</sup> Federal Register, Vol 45, No. 160, Aug. 15, 1980.

<sup>6</sup> Available from Department of Housing and Urban Development, 451 7th St. N.W., Washington DC 20410.

<sup>7</sup> Available from U.S. Consumer Product Safety Commission, Washington DC 20207.

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee C-16 on Thermal Insulation and is the direct responsibility of Subcommittee C16.23 on Blanket and Loose Fill Insulation.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 04.06.