

PART 460—LABELING AND ADVERTISING OF HOME INSULATION

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AUTHORITY: 38 Stat. 717, as amended (15 U.S.C. 41 et seq.).

SOURCE: 44 FR 50242, Aug. 27, 1979, unless otherwise noted.

§ 460.1 What this regulation does.

This regulation deals with home insulation labels, fact sheets, ads, and other promotional materials in or affecting commerce, as “commerce” is defined in the Federal Trade Commission Act. If you are covered by this regulation, breaking any of its rules is an unfair and deceptive act or practice or an unfair method of competition under section 5 of that Act. You can be fined heavily (up to \$11,000 plus an adjustment for inflation, under §1.98 of this chapter) each time you break a rule.

[70 FR 31274, May 31, 2005]

§ 460.2 What is home insulation.

Insulation is any material mainly used to slow down heat flow. It may be mineral or organic, fibrous, cellular, or reflective (aluminum foil). It may be in rigid, semirigid, flexible, or loose-fill form. Home insulation is for use in old

or new homes, condominiums, cooperatives, apartments, modular homes, or mobile homes. It does not include pipe insulation. It does not include any kind of duct insulation except for duct wrap.

§ 460.3 Who is covered.

You are covered by this regulation if you are a member of the home insulation industry. This includes individuals, firms, partnerships, and corporations. It includes manufacturers, distributors, franchisors, installers, retailers, utility companies, and trade associations. Advertisers and advertising agencies are also covered. So are labs doing tests for industry members. If you sell new homes to consumers, you are covered.

§ 460.4 When the rules apply.

You must follow these rules each time you import, manufacture, distribute, sell, install, promote, or label home insulation. You must follow them each time you prepare, approve, place, or pay for home insulation labels, fact sheets, ads, or other promotional materials for consumer use. You must also follow them each time you supply anyone covered by this regulation with written information that is to be used in labels, fact sheets, ads, or other promotional materials for consumer use. Testing labs must follow the rules unless the industry members tells them, in writing, that labels, fact sheets, ads, or other promotional materials for home insulation will not be based on the test results.

460.5 R-value tests.

R-value measures resistance to heat flow. R-values given in labels, fact sheets, ads, or other promotional materials must be based on tests done under the methods listed below. They were designed by the American Society of Testing and Materials (ASTM). The test methods are:

(a) All types of insulation except aluminum foil must be tested with ASTM C 177-04, “Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus;” ASTM C 518-04, “Standard Test Method for Steady-State Thermal Transmission Properties by Means of

the Heat Flow Meter Apparatus;" ASTM C 1363-97, "Standard Test Method for the Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus" or ASTM C 1114-00, "Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Thin-Heater Apparatus." The tests must be done at a mean temperature of 75 [degrees] Fahrenheit and with a temperature differential of 50 [degrees] Fahrenheit plus or minus 10 degrees Fahrenheit. The tests must be done on the insulation material alone (excluding any airspace). R-values ("thermal resistance") based upon heat flux measurements according to ASTM C 177-04 or ASTM C 518-04 must be reported only in accordance with the requirements and restrictions of ASTM C 1045-01, "Standard Practice for Calculating Thermal Transmission Properties from Steady-State Conditions."

(1) For polyurethane, polyisocyanurate, and extruded polystyrene, the tests must be done on samples that fully reflect the effect of aging on the product's R-value. To age the sample, follow the procedure in paragraph 4.6.4 of GSA Specification HH-I-530A, or another reliable procedure.

(2) For loose-fill cellulose, the tests must be done at the settled density determined under paragraph 8 of ASTM C 739-03, "Standard Specification for Cellulosic Fiber Loose-Fill Thermal Insulation."

(3) For loose-fill mineral wool, self-supported, spray-applied cellulose, and stabilized cellulose, the tests must be done on samples that fully reflect the effect of settling on the product's R-value.

(4) For self-supported spray-applied cellulose, the tests must be done at the density determined pursuant to ASTM C 1149-02, "Standard Specification for Self-Supported Spray Applied Cellulosic Thermal Insulation."

(5) For loose-fill insulations, the initial installed thickness for the product must be determined pursuant to ASTM C 1374-03, "Standard Test Method for Determination of Installed Thickness of Pneumatically Applied Loose-Fill Building Insulation," for R-values of 13, 19, 22, 30, 38, 49 and any other R-val-

ues provided on the product's label pursuant to §460.12.

(b) Single sheet systems of aluminum foil must be tested with ASTM E 408-71 (Reapproved 2002), "Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques," or ASTM C 1371-04a, "Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emisometers." This tests the emissivity of the foil—its power to radiate heat. To get the R-value for a specific emissivity level, air space, and direction of heat flow, use the tables in the most recent edition of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers' (ASHRAE) Fundamentals Handbook, if the product is intended for applications that meet the conditions specified in the tables. You must use the R-value shown for 50[degrees] Fahrenheit, with a temperature differential of 30[degrees] Fahrenheit.

(c) Aluminum foil systems with more than one sheet, and single sheet systems of aluminum foil that are intended for applications that do not meet the conditions specified in the tables in the most recent edition of the ASHRAE Fundamentals Handbook, must be tested with ASTM C 1363-97, "Standard Test Method for the Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus," in a test panel constructed according to ASTM C 1224-03, "Standard Specification for Reflective Insulation for Building Applications," and under the test conditions specified in ASTM C 1224-03. To get the R-value from the results of those tests, use the formula specified in ASTM C 1224-03.

(d) For insulation materials with foil facings, you must test the R-value of the material alone (excluding any air spaces) under the methods listed in paragraph (a) of this section. You can also determine the R-value of the material in conjunction with an air space. You can use one of two methods to do this:

(1) You can test the system, with its air space, under ASTM C 1363-97,

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“Standard Test Method for the Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus,” which is incorporated by reference in paragraph (a) of this section. If you do this, you must follow the rules in paragraph (a) of this section on temperature, aging and settled density.

(2) You can add up the tested R-value of the material and the R-value of the air space. To get the R-value for the air space, you must follow the rules in paragraph (b) of this section.

(e) The standards listed above are incorporated by reference into this section. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected at the Federal Trade Commission, Consumer Response Center, Room 130, 600 Pennsylvania Avenue, NW., Washington, DC 20580, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. Copies of materials and standards incorporated by reference may be obtained from the issuing organizations listed in this section.

(1) The American Society of Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

(i) ASTM C 177-04, “Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.”

(ii) ASTM C 518-04, “Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.”

(iii) ASTM C 739-03, “Standard Specification for Cellulosic Fiber Loose-Fill Thermal Insulation.”

(iv) ASTM C 1045-01, “Standard Practice for Calculating Thermal Transmission Properties from Steady-State Conditions.”

(v) ASTM C 1114-00, “Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Thin-Heater Apparatus.”

(vi) ASTM C 1149-02, “Standard Specification for Self-Supported Spray Applied Cellulosic Thermal Insulation.”

(vii) ASTM C 1224-03, “Standard Specification for Reflective Insulation for Building Applications.”

(viii) ASTM C 1363-97, “Standard Test Method for the Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus.”

(ix) ASTM C 1371-04a, “Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers.”

(x) ASTM C 1374-03, “Standard Test Method for Determination of Installed Thickness of Pneumatically Applied Loose-Fill Building Insulation.”

(xi) ASTM E 408-71 (Reapproved 2002), “Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques.”

(2) U.S. General Services Administration (GSA), 1800 F Street, NW., Washington, DC 20405.

(i) GSA Specification HH-I-530A, Federal Specification, Insulation Board, Thermal (Urethane), November 22, 1971.

(ii) [Reserved]

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§ 460.6 “Representative thickness” testing.

All tests except aluminum foil tests must be done at a representative thickness for every thickness shown in a label, fact sheet, ad, or other promotional material. “Representative thickness” means a thickness at which the R-value per unit will vary no more than plus or minus 2% with increases in thickness. However, if the thickness shown in your label, fact sheet, ad, or promotional material is less than the representative thickness, then you can test the insulation at the thickness shown.

§ 460.7 Which test version to use.

Use the version of the ASTM test method that was in effect when this regulation was promulgated. If ASTM changes a test method, the new version will automatically replace the old one in these rules 90 days after ASTM first publishes the change. However, the Commission’s staff or a person affected