

TITLE 20. Public Utilities And Energy
Division 2. State Energy Resources Conservation and Development Commission
Chapter 4. Energy Conservation
Article 3. Standards for Insulating Material
§1553. Urea Formaldehyde Foam Field Applied.

(a) **Limitation on Sale.** Urea formaldehyde foam is unsafe for use as insulation . Sale within the State of California of urea formaldehyde foam insulation is prohibited.

(b) **Exemption.** Notwithstanding any other provision of this article, a manufacturer of the primary components of urea formaldehyde foam insulation may apply for certification as provided in Section 1555 of this article. Such certification statement shall indicate compliance with the following standards:

(1) **Composition.** The material shall consist of cellular plastic generated in a continuous stream by mixing the components which are a urea formaldehyde resin, air, and a foaming agent. The material shall be suitable for filling closed cavities through small holes and suitable also for filling open cavities by trowelling during foaming prior to enclosure.

(2) **Thermal Performance.** The effective thermal performance, incorporating a derating value, shall be determined according to the method described in 42 Fed. Reg. pages 55143-55148.

(3) **Resistance to Combustion.** Surface burning characteristics shall be determined according to the ANSI/ASTM E84-79, and shall not exceed the following values:

Flame spread	25
Smoke developed	450

Test specimens shall be aged for 45 days at 70° ± 5° and 35 to 40 percent relative humidity before testing.

(4) **Free Formaldehyde Content of Dry Foam.** The free formaldehyde content of the dry foam shall be less than 0.01 percent formaldehyde by weight when tested as specified in paragraph (f)(8), published in 45 Fed. Reg. page 63801, except that the specimens to be tested shall also be aged for 56 days at 24 ± 5°C (75 ± 10°F) and 50 ± 10 percent relative humidity in an uncovered beaker.

(5) **Corrosiveness.** The material shall be tested and meet the criteria for corrosiveness as specified in 45 Fed. Reg. pages 63786-63810.

(6) **Density.** The material shall be tested and meet the criteria for density as specified in 45 Fed. Reg. pages 63786-63810.

(7) **Shrinkage.** The material shall be tested and meet the criteria for shrinkage as specified in 45 Fed. Reg. pages 63786-63810, except that the material shall not shrink more than 2.0 percent in any direction.

(8) **Volume Resistivity.** The material shall be tested and meet the criteria for volume resistivity as specified in 45 Fed. Reg. 63786-63810.

(9) **Identification.** Resin and foaming agent containers shall be marked with conditions of proper storage and the derated R-value and shrinkage of the prepared foam as certified by the manufacturer.

(10) Safety Information. Installers of urea formaldehyde foam insulation shall present the following safety notice to the purchasers of the foam prior to the signing of the contract for installation. The notice shall be printed in a minimum of 8-point type size. One copy of the notice signed by the purchaser shall be immediately given to the purchaser, one copy shall be retained by the installer, and one copy shall be mailed by the installer to the Executive Director of the Energy Commission within 48 hours after installation of the insulation is completed.

