

EPS NO. 1019

SUBJECT: FIRE RETARDANTS

DATE: MARCH 2009 (REVISED JANUARY 2019)

R-Shield[®] insulation is a key component to help reduce the use of energy in buildings. The energy reduction from using R-Shield insulation translates into important savings of carbon dioxide emissions to the environment over the entire life of the building. R-Shield insulation is recognized to achieve Green Building initiatives when used in foundation, wall, and roof insulation systems.

In addition to important energy reduction, compliance with fire and life safety is a first priority issue when using R-Shield insulation. The use of foam plastic insulation in buildings is regulated by building codes across North America. The most widely adopted building code is the International Building Code (IBC) published by the International Code Council (ICC). The IBC provides a series of requirements for the use of materials in buildings. For foam plastics, the typical requirements are:

1. The packages and containers display a third party (approved agency) label showing compliance with IBC requirements.
2. The foam plastic shall have a flame spread index of not more than 75 and a smoke-developed index of not more than 450 where tested in the maximum thickness for use in accordance with ASTM E84.
3. The foam plastic is separated from the interior of the building with 1/2" gypsum board.

Expanded polystyrene can be manufactured without flame retardants, but the resulting product would not meet the fire performance required by the IBC. The use of a flame retardant in expanded polystyrene is essential to ensure compliance with the IBC, provide for a safe building environment, and to protect lives and property from the risk of fire. **R-Shield insulation is always manufactured with flame retardants to ensure compliance with the fire requirements of the IBC.**