



SPECIFICATIONS

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1. Scope

This document covers the composition and physical properties of Applegate cellulose insulations. This information is relevant to the specification of Applegate Insulation in ceilings, attics, walls, floors and other areas. Applegate Insulation delivers superb R-value per inch, and excellent sound control qualities.

2. Components

Applegate Insulation contains up to 85% recycled, natural cellulose fiber. A proprietary two-stage process injects dry and liquid fire retardants that penetrate and strengthen the fibers while providing permanent flame resistance. When installed properly and under normal conditions of use, these additives are nontoxic to humans, and will not adversely affect other building components. Follow relevant installation documents for your product, including but not limited to: Standard Practice for Installing Cellulose Building Insulation, Standard Practice for the Installation of Sprayed Cellulosic Wall Cavity Insulation, Standard Operating Procedures for Installation of Applegate Stabilized Insulation in Attics along with any instructions, precautions & limitations on the bags.

3. Purpose

3.1 Thermal Insulation

Applegate Insulation helps buildings stay warmer in the winter and cooler in the summer by effectively controlling all 3 methods of heat transfer: convective, conductive and radiant; thus lowering heating and cooling costs while enhancing occupants comfort. Research at universities and national laboratories has proven that cellulose can provide up to 50% better performance than fiberglass

3.2 Acoustical Insulation

Applegate Insulation provides superior sound attenuation, in large part, because it is blown or sprayed in. This provides a custom fit that eliminates the acoustical shortcuts that are created by traditional batt insulations: gaps and voids in odd shaped cavities and around obstacles such as plumbing, air ducts, and wiring.

4. Properties & Standards

Applegate Insulation sold in the U.S. for use in residential & commercial buildings conforms to CPSC Standards 16 CFR Parts 1209 & 1404. Applegate Insulation also conforms to the requirements of ASTM Standard C-739; and is third party-tested.

4.1 Thermal Resistance

Thermal resistance R-Values up to R-3.8 per inch calculated using ASTM C-518 at 4 inches.

4.2 Non-Corrosive

Applegate Insulation is tested and certified to be non-corrosive in accordance with ASTM Standard C-739. The test regimen includes aluminum, copper, and steel.

4.3 Building Codes

Applegate Insulation, when properly installed, meets the following building code requirements for thermal insulating materials: BOCA, CABO, ICBO, ICC, SBCCI, & the Model Energy Code.

4.4 Fire Safety

Applegate Insulation meets or exceeds all necessary fire safety requirements conducted in accordance with ASTM standards:

Critical Radiant Flux:	$\geq 0.12 \text{ w/cm}^2$
Smoldering Combustion:	$\leq 15\%$

4.5 Moisture Absorption

Applegate Insulation has less than 15% weight gain under test conditions per ASTM Standard C-739. Normal relative humidity variations do not adversely affect the insulation.

4.6 Health and Indoor Air Quality

Applegate Insulation does not contain fiberglass, formaldehyde, or other materials associated with increased health concerns.

OSHA cancer warning?	No
Contains glass fibers?	No
Contains formaldehyde?	No

4.7 Other Properties

Applegate Insulation passed ASTM C-739 tests for odor emission and fungi growth.

4.8 Sound Control

Applegate Insulation is an excellent choice for reducing sound transmission through walls, ceilings, and floors. The following Sound Transmission Class (STC) ratings demonstrate its effectiveness in attenuating noise. The higher the STC number, the greater the reduction in sound.

Cellulose insulated wall: 44 STC
Fiberglass insulated wall: 39 STC
Uninsulated wall: 35 STC

Above STC ratings are representative of the tested range of STC's for standard residential walls.