• • • • • Standard Specification

1. Scope

1.1 This specification provides data pertinent to the pneumatic application of ***Thermolok*** **InCide®** cellulose insulation in attics and walls. ***Thermolok*** **InCide®** cellulose insulation provides outstanding resistance to heat flow for thermal applications, noise control for acoustical treatments, and fire control in walls and attics of residential and commercial construction.

2. Materials

2.1 More than 80% of the content of ***Thermolok*** **InCide®** cellulose insulation is processed from recycled cellulose fiber. These fibers are chemically treated to create permanent flame resistance. The additives are non-toxic, will not irritate normal skin, will not attract vermin or insects, and will not adversely affect other building materials.

3. Functions

3.1 Insulation. ***Thermolok*** **InCide®** cellulose insulation resists the flow of heat in three ways. Air is trapped (1) within, (2) by the wall of the fiber, and (3) between fibers creating significant resistance to air movement. This natural ability to trap air provides cellulose insulation with 25% to 40% more effective insulation power than the same R-Value of other low-density loose-fill fiberous insulation materials.

3.2 Sound Control. These same isolated air pockets and density also provide effective noise reduction in walls and between floors by effectively creating a customized batt at the job site.

4. Material Characteristics

4.1 All cellulose insulation sold in the U.S. must conform to the Consumer Products Safety Commission (CPS) standard 16 CFR Part 1209 and 1404. In addition, Comfort plus cellulose meets all the test requirements of American Society of Testing and Materials (ASTM) C739. Underwriter's Laboratories (UL) R 8296 tested the following properties:

4.1.1 Density

The maximum density anticipated after long-term settling of dry applications was determined by the following specifications:

ASTM C739 1.45 lb/ft3 (25.6 kg/cm3)

4.1.2 Thermal Resistance

The average thermal resistance per inch was determined by test method ASTM C518 (4 in. thick):

ASTM C739 3.7 (R-Value/in)

4.1.3 Surface Burning Characteristics

Two surface burning characteristics are evaluated. They are Critical Radiant Flux using test method ASTM E970, and Flame Spread using ASTM E84. ***Thermolok*** **InCide®** cellulose insulation meets or exceeds the specified requirements for each test as follows:

ASTM E970 greater than 0.12 watts/cm

ASTM E84 less than 25

4.1.3.1 Building Codes

Properly installed ***Thermolok*** **InCide®** cellulose insulation meets the requirements for thermal insulation materials set forth in CABO, ICBO, BOCA, SBCCI and the Model Energy Code.

4.1.4 Moisture Vapor Sorption

This requirement assures that normal variations in relative humidity will not adversely affect thermal resistance. ***Thermolok*** **InCide®** insulation meets the requirements of less than 15% for maximum weight gain under the specified test conditions.

4.1.5 Corrosiveness

When in contact with steel, copper, aluminum, or galvanized materials, ***Thermolok*** **InCide®** cellulose insulation was determined to be non-corrosive.

4.1.6 Other Properties Tested

Thermolok **InCide®** cellulose insulation passed additional tests:

Odor Emission	Flame Spread Permanency
Fungi Resistance	Smolder Resistance
Acute Toxicity Study	EPA Registration