

## applegateinsulation

# SUBMITTAL FORM Applegate Insulation

Date:	
Submitted to:	
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Submitted by:	
Job Reference:	
Job Name:	

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Applegate Cellulose Insulations (26.5 lb bag)₁					
		Minimum Thickness (inches)		R-value	
Product Type	Description	Installed	Settled	@ 75° F	Applicable Standards / Specifications
Applegate Stabilized Cellulose Insulation® (26.5 lb bag.)	Designed for stabilized attic, floor, and wall applications. Made of up to 85% recycled paper fibers. Remaining 15% contains dry adhesive and fire resistance additives.	3.71 5.42 6.27 8.69 11.18 14.41 17.65	3.68 5.38 6.23 8.44 10.59 13.65 16.71	R-13 R-19 R-22 R-30 R-38 R-49 R-60	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739, ASTM E- 84, Flame Spread Index ≤25, Smoke Developed Index ≤450, ASTM C- 1497
Applegate Loose-Fill Insulation® (26.5 lb bag.)	Designed for dry-blown application in attic, wall and floor applications. Made of up to 85% recycled paper fibers. Remaining 15% contains fire resistance additives.	4.50 6.36 7.32 9.90 12.50 16.08 19.68	4.05 5.72 6.58 8.91 11.25 14.48 17.71	R-13 R-19 R-22 R-30 R-38 R-49 R-60	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739
Applegate® Bora-Spray Stabilized Insulation (26.5 lb bag.)	Designed for stabilized attic, floor, and wall applications. Made of up to 85% recycled paper fibers. Remaining 15% contains dry adhesive and fire resistance additives.	3.92 5.73 6.63 8.91 11.28 14.54 17.81	3.76 5.50 6.36 8.54 10.66 13.74 16.83	R-13 R-19 R-22 R-30 R-38 R-49 R-60	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739
R-Value Loose-fill® Insulation (26.5 lb bag.)	Designed for dry-blown application in attic, wall and floor applications. Specially formulated for Retro-fit applications. Made of up to 85% recycled paper fibers.  Remaining 15% contains fire resistance additives.	4.82 6.59 7.49 9.90 12.33 15.68 19.04	4.34 5.93 6.74 8.91 11.10 14.11 17.14	R-13 R-19 R-22 R-30 R-38 R-49 R-60	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739
R-Value Stabilized® Insulation (26.5 lb bag.)	Designed for stabilized attic, floor, and wall applications. Made of up to 85% recycled paper fibers. Remaining 15% contains dry adhesive and fire resistance additives.	3.71 5.42 6.27 8.69 11.18 14.41 17.65	3.68 5.38 6.23 8.44 10.59 13.65 16.71	R-13 R-19 R-22 R-30 R-38 R-49 R-60	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739, ASTM E- 84, Flame Spread Index ≤25, Smoke Developed Index ≤450, ASTM C- 1497

Available from; Webberville, Michigan - Monroe, Louisiana - Hickory, Kentucky - Eastanolee, Georgia - Chambersburg, Pennsylvania.
 Available from Bloomer, Wisconsin.
 Available from Penrose, Colorado.

Applega	te Cellulose Insulation (19		- see prior page for details	s	
		Minimum Thickness (inches)		R-value	
Product Type	Description	Installed	Settled	@ 75° F	Applicable Standards / Specifications
American Loose-Fill Cellulose Insulation® (19 lb bag.)	Designed for dry-blown application in attic, wall and floor applications. Made of up to 85% recycled paper fibers. Remaining 15% contains fire resistance additives.	4.82 6.59 7.49 9.90 12.33 15.68 19.04	4.34 5.93 6.74 8.91 11.10 14.11 17.14	R-13 R-19 R-22 R-30 R-38 R-49 R-60	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739
Applega	te Cellulose Insulations (25	lb baɑ)₃	- see prior page for details	S	
<u> </u>	(	Minim	um Thickness		
Product type	Description	Installed	(inches) Settled	R-value @ 75° F	Applicable Standards / Specifications
Applegate Stabilized Cellulose Insulation® (25 lb bag.)	Designed for stabilized attic, wall and floor applications. Made of up to 85% recycled paper fibers. Remaining 15% contains dry adhesive and fire resistance additives.	3.71 5.42 6.27 8.69 11.18 14.41 17.65	3.68 5.38 6.23 8.44 10.59 13.65 16.71	R-13 R-19 R-22 R-30 R-38 R-49 R-60	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739, ASTM E- 84, Flame Spread Index ≤25, Smoke Developed Index ≤450, ASTM C-1497
Applegate® Bora-Spray Stabilized Insulation (25 lb bag.)	Designed for stabilized attic, wall and floor applications. Made of up to 85% recycled paper fibers. Remaining 15% contains dry adhesive and fire resistance additives.	3.8 5.5 6.4 8.7 11.0 14.2 17.4	3.5 5.1 5.9 8.1 10.3 13.2 16.2	R-13 R-19 R-22 R-30 R-38 R-49 R-60	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739
Applegate Loose-fill Cellulose Insulation ° (25 lb bag.)	Designed for dry-blown application in attic, wall and floor applications. Made of up to 85% recycled paper fibers. Remaining 15% contains fire resistance additives.	4.50 6.36 7.32 9.90 12.50 16.08 19.68	4.05 5.72 6.58 8.91 11.25 14.48 17.71	R-13 R-19 R-22 R-30 R-38 R-49 R-60	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739
R-Value Loose-fill® Insulation (25 lb bag.)	Designed for dry-blown application in attic, wall and floor applications. Made of up to 85% recycled paper fibers. Remaining 15% contains fire resistance additives.	4.1 5.2 6.0 9.1 11.4	3.7 5.2 6.0 8.2 10.3	R-13 R-19 R-22 R-30 R-38	Federal Regulation 16 CFR 1209, 16 CFR 1404, 16 CFR 460. ASTM C-739

### **Read This Before You Buy**

14.7

18.0

13.3

16.2

R-49

R-60

What You Should Know About R-Values

The chart shows the R-Value of this insulation. "R" means resistance to heat flow. The higher the R-Value, the greater the insulating power. Compare insulation R-values before you buy.

There are other factors to consider. The amount of insulation you need depends mainly on the climate you live in. Also, your fuel savings from insulation will depend upon the climate, the type and size of your house, the amount of insulation already in your house, and your fuel use patterns and family size. If you buy too much insulation, it will cost you more than what you'll save on fuel.

To get the marked R-Value, it is essential that this insulation be installed properly.

#### Dollar for dollar, Applegate® has more insulating power Sound

At R 3.6 to 3.8 per inch, Applegate Cellulose Insulation® is considerably better than most mineral fiber blowing wools. Some materials, such as foam plastics, may have higher R-per-inch ratings, but they are typically much more expensive.

When you compare costs on the basis of the total R-value of insulation, you'll find that Applegate Cellulose Insulation® gives you the most heat transfer resistance for the money. Additionally, Applegate Insulation® has many additional benefits which are not realized with simple R-values.

#### Health

Dr. Arthur Furst, one of the world's foremost toxicologists, states, "In essence, the dusts from cellulose insulation materials can be considered as any household dusts. Cellulose, per se, is non-toxic. Biologically, cellulose is innocuous."

Applegate Insulation® eliminates irritating, abrasive, airborne glass fiber particles, providing you with peace of mind regarding your indoor air quality. Applegate Insulation® has been used by the American Lung Association of Virginia to insulate their Breathe Easy® Office complex.

#### Applegate Cellulose Insulation<sup>®</sup> fills existing walls with fewer voids and stops air infiltration better!

When Applegate Insulation® is run through an appropriate blowing machine, it takes on almost liquid-like properties that let it flow into cavities and around obstructions to completely fill walls and seal every crack, seam, and opening.

In new construction, Applegate Insulation® can be installed in walls using a damp-wall-spray or several different dry-dense-pack techniques that are even more effective at sealing homes against air infiltration. Research shows cellulose to be up to 40% better than fiber glass at controlling air infiltration. Many authorities believe insulating a building with cellulose insulation makes air barriers (housewrap) unnecessary, thus helping reduce the need for expensive air sealing work.

Because sound is often airborne, it will follow the same paths as air infiltration. The sprayed-in-place Applegate Insulation® creates a monolithic barrier, sealing off voids and gaps that could easily transmit sound. Because of its high-density and seamless coverage, Applegate Insulation® contributes to an excellent STC rating.

#### Fire safety

Walls insulated with Applegate Celulose Insulation® are extremely fire resistant. The International Fire Safety Code permits electrical boxes installed on opposite sides of an Applegate-filled wall to be separated by as little as 3.5 inches, while for fiberglass-insulated walls, the required separation is 24 inches. Applegate Cellulose Insulation® has been approved under some local building codes as a fire blocking product.

Applegate Cellulose Insulation's ability to add fire resistance is not limited to unique dry-liquid fire retardants alone; it also greatly restricts the amount of oxygen available to support combustion. Walls insulated with Applegate Cellulose Insulation® don't become draft chambers that deliver oxygen to burning framing members. Applegate® gives occupants additional time to reach safety during a fire, unlike fiberglass which can actually decrease the amount of time a fire needs to destroy a wall.

The National Research Council Canada wrote, "...the fire resistance performance of an assembly with glass fibre insulation in the wall cavity was slightly lower than that of a non-insulated assembly." Applegate Cellulose Insulation® helps make wall assemblies safer by providing up to 55% better fire resistance than a non-insulated assembly.

#### Applegate Cellulose Insulation® saves more energy!

Fiber glass, rock wool, and plastic insulation have from 10 to over 200 times more embodied energy than cellulose insulation. When you choose these products, you will reduce the amount of energy consumed in a building, but you contribute to overall pollution and demand for energy at the factory.

When you specify and install Applegate Cellulose Insulation<sup>®</sup>, you are not only choosing to save energy in the building, you are also choosing to reuse resources and reduce energy usage during the making of Applegate<sup>®</sup>.

#### Airflow Resistivity of Common Absorptive Materials (airflow resistance measured in accordance with ASTM C522-87)

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Absorptive Material	Thickness (inches)	Density (lbs per ft³)	Resistivity (mks rayls/m)
Glass Fiber Batt	5.9	0.70	4,300
Rockwool Batt	3.5	2.04	12,700
Blown-In Cellulose	3.7	3.08	33,000

Source: Halliwell, R.E.; Nightingale, T.R.T.; Warnock, A.C.C., Birta, J.A. National Research Council Canada "Gypsum Board Walls: Transmission Loss Data," IRS-IR-761, March 1998.

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