



A True LEED-er

Consumer Update: Insulation Effectiveness Bulletin

Truely Green Applegate Cellulose Insulation Contributes Whopping 25% to LEED™ Certification!

It seems that everybody's talking about "green building." In fact, in a recent article by staff writer Sandra Fleishman, the *Washington Post* records how the future of this trend "is the sunniest it has ever been." But what is it? It's has to be more than a paint color. Is your home, office or arena green? How do you know? How do you know you are building green?

A Good Start

The US Green Building Council (USGBC), the nation's foremost coalition of leaders from across the building industry, asked the same questions. The USGBC works together to promote buildings that are environmentally responsible, profitable and healthy places to live and work. As a part of those endeavors, they have developed the Leadership in Energy and Environmental Design (LEED™) program.

The LEED™ system was established to provide a national standard that would serve as a

design guideline and third-party certification tool for commercial buildings. Architects, builders and other green professionals work together to "improve occupant well-being, environmental performance and economic returns" of those buildings.

And its catching on. As of April 2005, nearly 1800 commercial buildings have applied to be certified and 171 have officially succeeded since the programs implementation in 2000.

LEED™ Certification

In order to qualify for LEED™ Certification, each building, as a system, must achieve a level of credits based on the following criteria:

1. SS: Sustainable Site Selection and Planning
2. WE: Safeguarding Water and Water Efficiencies
3. EA: Energy and Atmosphere Performance
4. MR: Materials and Resources Conservation
5. EQ: Indoor Environmental Quality
6. IQ: Innovation in the Design Process

While it is the building itself that is certified and not the materials themselves, various products contribute prerequisite and additional credits to the overall rating of the building.

Levels of LEED™ Certification

Platinum	(52 – 69)
Gold	(39 – 51)
Silver	(33 – 33)
Certified	(26 – 32)

Applegate Contribution to Certification

The use of Applegate Cellulose Insulation contributes to the overall process in the following ways:

Prerequisites

- EA Prerequisite 2: Minimum Energy Performance—establishes minimum level of energy efficiency
Applegate Insulation has an R-value of 3.8 per inch and meets or exceeds federal standards for cellulose insulation

Credits

- EA Credit 1: Optimize Energy Performance—increasing levels of energy performance above the prerequisite standard
Applegate Cellulose Insulation seals wall cavity spaces very effectively, without being cut, pieced together or compressed. Additionally, Applegate's natural, interlocking fibers create a high-density blanket of insulation in ceiling applications that effectively eliminate convective currents that will commonly deteriorate the effectiveness of traditional, blown fiberglass insulation. Tests demonstrate up to 38% performance advantage over traditional insulations.
- MR Credit 4.1/2: Recycled Content—incorporate recycled content materials
Made from 85% (by weight) recycled newsprint from industrial and consumer paper drives, Applegate Insulation is a truly "green" by both content and manufacturing process.

- EQ Credit 4.4: Low-Emitting Materials—reduce quantity of indoor air contaminants
Applegate Insulation does not contain formaldehyde-based binders or glass-fibers that could be inhaled by both installer and occupant.

Contribution to Credits

- MR Credit 2.1: Construction Waste Management—divert construction debris from landfill disposal by redirecting reusable materials to appropriate sites.
Inherent in the Applegate Wall-Spray application process is the reclamation of unused product for installation later in the project or on other jobsites.
- MR Credit 5: Regional Materials—materials and products that are extracted and manufactured within 500 mile radius
Applegate products are manufactured at seven locations:
Eastanollee, GA — 888-427-7534
Hickory, KY — 888-502-7753
Monroe, LA — 800-854-1907
Webberville, MI — 800-627-7536
Chambersburg, PA — 800-231-1939
Bloomer, WI — 800-633-3179
Penrose, CO — 866-568-9639
- EQ Credit 7.1: Thermal Comfort—provide a thermally comfortable environment
HVAC equipment can run consistently and more effectively when the building envelope is insulated with Applegate Insulation. Furthermore, Applegate seals wall cavity spaces very effectively, greatly reducing air infiltration and exfiltration.

The Future

As a national program, the LEED™ Certification process is beginning to change the “green building” nebulosity in the commercial building sector that has remained highly localized for residential buildings.

It is because of this regionalization of the “green building” movement—about 40 programs total—combined with the fact that residential homes use about 20% of the national energy every year that USGBC is undertaking the development of a program for the residential, single-family home market—LEED-H . The components of this LEED-H program will look similar in structure to the LEED™ program and is currently being linked closely to the Energy Star Program.

As cold waters to a thirsty soul, so is good news from a far country. (Proverbs 25:25)