

NU-WOOL[®]

PREMIUM CELLULOSE INSULATION
GREEN Since 1949



Save up to **40%*** on utility bills with
Nu-Wool Premium Cellulose Insulation

What is Nu-Wool Insulation?

What is Nu-Wool Premium Cellulose Insulation?

Nu-Wool Premium Cellulose Insulation is an energy-saving insulation made from recycled papers. With its superior thermal and air infiltration properties, it is installed in both attics and walls of residential and commercial buildings. This environmentally friendly, "GREEN" insulation provides savings of up to 40%* on energy bills when compared to fiberglass insulation materials. In addition to energy savings, Nu-Wool Premium Cellulose Insulation provides a quiet, comfortable, draft-free home. Nu-Wool Premium Cellulose Insulation is a product high in R-value (3.8 per inch), made by Nu-Wool Co., Inc., a business with more than 60 years of proven performance standards.



How is Nu-Wool WALLSEAL better than other insulation materials?

Nu-Wool WALLSEAL is a premium insulation system. Homeowners, builders and architects choose Nu-Wool for significant energy savings, sound control, and overall comfort. The increased efficiency of the Nu-Wool WALLSEAL system, along with Nu-Wool Insulation in the attic, saves homeowners as much as 40%* on heating and cooling costs.

How does Nu-Wool compare in performance to other insulation products?

Nu-Wool WALLSEAL is sprayed in place, eliminating the voids and air pockets common with other insulation materials. Density, or weight per cubic foot, which is important in reducing air infiltration and increasing "Effective R-value", is more consistent with the Nu-Wool WALLSEAL system. The builder and the homeowner can actually see the insulation in place and know that all of the areas in the wall are insulated.



*Nu-Wool Co., Inc. has over
60 years of proven performance
standards!*

How much will I save in energy costs by using Nu-Wool Premium Cellulose Insulation?

While savings vary, owners of new homes with Nu-Wool save up to 40%* on energy bills when compared to homes insulated with fiberglass. Your professional Nu-Wool installer can give you an idea of how much money you might save by using Nu-Wool Premium Cellulose Insulation. Install Nu-Wool Premium Cellulose Insulation in your home and enjoy comfort and savings!

The Benefits of Nu-Wool Insulation

A Naturally "GREEN" Product

Nu-Wool was GREEN long before Green Building existed. With its low embodied energy, high recycled content and superior energy saving performance, Nu-Wool Premium Cellulose Insulation is without question the GREENEST insulation product in the marketplace.

Sixty years ago, Nu-Wool Co., Inc. began using recycled newspaper to manufacture its environmentally safe and effective cellulose insulation. Converting recycled paper to insulation used in the walls and attics of buildings helps keep it out of landfills, where it has the potential to pollute the environment. Recycling paper also reduces the number of trees used to produce new paper. The amount of Nu-Wool Premium Cellulose Insulation in an average-sized new home is the equivalent of 39 trees!



Using Nu-Wool Premium Cellulose Insulation is more than a smart choice for its comfort and savings benefit, it is environmentally friendly even in the manufacturing process. Fiberglass insulation is made by melting sand and recovered glass in gas-fired furnaces. Cellulose Insulation is produced by processing post-consumer recovered paper through electrically driven mills. It takes at least 10 times more energy to make fiberglass insulation and at least 40 times more energy to manufacture polyiso (foam) insulation than to produce cellulose insulation.

The application process of Nu-Wool Premium Cellulose Insulation is also GREEN, because all excess sprayed insulation is brushed off the wall and then vacuumed up to be reused resulting in no product waste. Even the product bags can be recycled!

Nu-Wool processes over 150 tons of recycled paper each business day, and that number grows every year. That's the equivalent of 2,550 trees per day!

Nu-Wool Premium Cellulose Insulation is without question the "GREENEST" insulation product in the marketplace.

How does Nu-Wool Insulation protect against mold?

Nu-Wool Premium Cellulose Insulation is one of the few insulation products that contains a fungicide registered by the Environmental Protection Agency (EPA). Under federal law, a claim of mold resistance can only be made by a product which contains a fungicide registered with the EPA for use in that product. Registration is achieved only after rigorous testing to ensure that the borate based fungicide makes Nu-Wool Insulation resistant to the growth of mold, even when exposed to the conditions favorable to mold growth.

Nu-Wool Insulation contains an EPA registered fungicide, making it resistant to the growth of mold.



Buildings insulated with WALLSEAL have a noticeable "quietness"

The sharp sounds that easily transmit through fiberglass insulated structures are subdued by the increased mass of the WALLSEAL system. Use Nu-Wool WALLSEAL to quiet the sound in laundry rooms, mechanical rooms, family rooms, theatre rooms, and walls containing noisy water pipes.

Choosing Nu-Wool is a "sound" decision for quieter, more comfortable homes.

A Quality Product, Guaranteed

Nu-Wool Guarantee

The performance of Nu-Wool Premium Cellulose Insulation is so consistent that Nu-Wool Co., Inc. guarantees the quality of its product and the amount of heating and cooling bills in houses insulated with Nu-Wool Premium Cellulose Insulation.

Guaranteed Energy Program

Nu-Wool Co., Inc., through certified WALLSEAL Dealers, offers a Guaranteed Energy Program for new homes insulated with Nu-Wool Premium Cellulose Insulation, at no cost to the homeowner or builder. This energy guarantee not only ensures savings on fuel bills, it can help home buyers add upgrades to their home without adding costs. Under this program, a home's heating and/or cooling bill is guaranteed for a period of three years. If energy bills exceed the guaranteed amount, Nu-Wool Co., Inc. will reimburse the homeowner 50% of the overage.



Nu-Wool Premium Cellulose Insulation is so energy-efficient, we guarantee the heating & cooling bills on new homes insulated with Nu-Wool Premium Cellulose Insulation!



Two easy ways to qualify for This Program:

1. Get it in writing before building

Using detailed blueprints before construction begins, Nu-Wool Co., Inc. offers home buyers a three year guarantee on the amount of energy bills when Nu-Wool is properly installed by a Certified Nu-Wool WALLSEAL Dealer. Key information from the prints will be entered into a computer program that will calculate the guarantee amount. A Certified Nu-Wool WALLSEAL Dealer will verify that the key components of the house were constructed as drawn on the blueprints.

2. Choose Nu-Wool even after construction starts

Have your new house insulated with Nu-Wool Insulation in both the attic and walls. Upon request, the installing Certified Nu-Wool WALLSEAL Dealer will complete the guarantee form, listing the key characteristics of the house. This information will be entered into a computer program that will calculate the guarantee amount.

Nu-Wool® Reduces Air Leakage

What is R-value**?

The R-value of Nu-Wool Premium Cellulose Insulation is 3.8 per inch.

R-value is the measure of how well an insulation product resists the flow of heat and cold through it. R-value is determined by a laboratory test in which an insulation material is sandwiched between a cool and a warm surface. The ability of the material to resist temperature changes results in an R-value for that material.

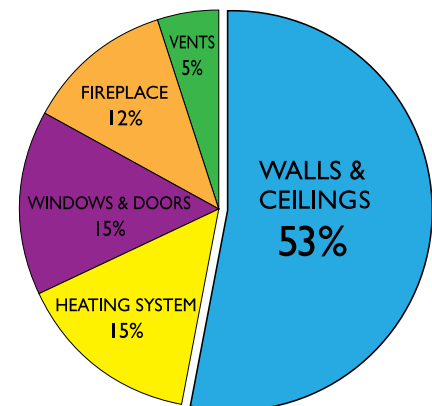
How is it affected by outside conditions?

A machine in a laboratory gives a relative number that can be used to compare products, but a laboratory R-value does not tell everything you need to know about the effectiveness of those products. Insulation is subjected to a wide range of temperature conditions in the house. The insulation is affected by air movement, and it is also degraded by the convection forces that develop within the insulation material.

Air Leakage

Research shows that air leakage into and out of the building envelope is a primary factor in heat loss and moisture accumulation.

Because air infiltration can account for between 25%-45% of the total heat loss in a typical home, the R-value of an insulation material alone is not a true measure of its effectiveness.



House air leakage distribution

GREEN SAVINGS

Nu-Wool's higher "Effective R-value" results in savings of up to 40% on heating and cooling costs.*

"Real world" R-value**

R-value** is the measure of how well an insulation product resists the flow of heat or cold. Some insulation materials, through installation, have more leaks - reducing the "Effective R-value." Nu-Wool Premium Cellulose Insulation, when properly installed, greatly reduces air leakage, providing a superior R-value in "real world" environments, where it counts. Nu-Wool's higher "Effective R-value" results in energy savings of up to 40%* compared to fiberglass insulation.



Gaps and air pockets are common with fiberglass insulation materials.



Nu-Wool WALLSEAL eliminates gaps and air pockets.

Questions to Ask Your Builder

What insulation choices do I have?

If a builder uses fiberglass insulation without considering the benefits of higher performing insulations, buyers should ask why. Many builders use a lower cost insulation even though a superior insulation, such as Nu-Wool Premium Cellulose Insulation, would save homebuyers energy dollars during the ownership of their home.

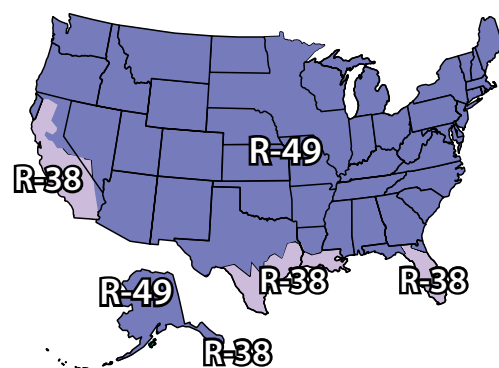
How much insulation will be used?

More insulation not only keeps the heat or cold out, it also leads to more even temperatures between and across rooms. For insulation to work properly, it must be installed carefully with no gaps, crimping or compression. This is especially important in areas where the insulation has to fit around obstacles such as pipes and electrical wiring and outlets. Nu-Wool WALLSEAL fills in gaps, creating a seamless seal.

Nu-Wool supports the recommendation of the Department of Energy with a minimum of R-13 in the walls and R-49 in the attic.

How can noisy pipes be prevented?

Water pipes in walls, floors and ceilings can be noisy at times. Nu-Wool Premium Cellulose Insulation installed around water pipes reduces condensation on cold water pipes, as well as heat loss from hot water pipes. Care should be taken when insulating exterior walls and attics with water pipes to ensure that no insulation is placed between the water pipes and the drywall or other interior surface of the wall or ceiling. If this precaution is not followed, the pipes will be isolated from heat in the living area and could freeze and burst.



The US Department of Energy recommends that homes in most areas of the country have R-49 insulation in the attic.

Ask your builder to specify Nu-Wool Premium Cellulose Insulation for your home. You will experience greater comfort and lower energy bills!

What can be done to make the house more soundproof from room to room?

Noise problems are a common complaint from homeowners, apartment dwellers and condominium owners. A vast majority of builders do not realize that common building practices do little to stop the transmission of noise within a structure. Anyone who has traveled and stayed in a fine resort or hotel knows that soundproofing a room is possible. The trouble is, to do it somewhat economically, it needs to be done as the structure is being built. Because of its density, Nu-Wool Premium Cellulose Insulation is a superior soundproofing insulation, resulting in a quieter home.

Will the insulation affect the sizing of the furnace and air conditioning units?

By using efficient insulation, heating and cooling equipment can be properly sized. "Right-sizing" HVAC equipment will likely save money during construction as well as every month on utility bills.

How do I create more comfortable rooms in high temperatures?

In the warm months of summer, the sun shines directly on the roof causing the roof to radiate heat through the attic to the ceilings of the home. This heat is then conducted through the ceiling to radiate throughout the home, increasing the temperature inside the home. Properly installing Nu-Wool Premium Cellulose insulation in your home will create a thermal barrier designed to prevent heat from radiating into the home. Even in triple digits, the home can still be cool and comfortable without turning up the air conditioning.

Beat the heat as the temperature rises with Nu-Wool Premium Cellulose Insulation in your home!



What about bedrooms above the garage?

Bedrooms over the garage are often unnecessarily colder in the winter and warmer in the summer than the rest of the house. Properly insulating under the floor and around the duct work with Nu-Wool Premium Cellulose Insulation can help prevent uncomfortable differences in these "bonus" rooms.

Nu-Wool Premium Cellulose Insulation reduces air infiltration better than conventional insulation materials, creating energy efficient homes that feel warmer in the winter and cooler in the summer.

Can ice dams on the roof be prevented?

The preferred method of preventing ice dams in non-cathedral roofs is to properly ventilate and insulate. Energy efficient roofs minimize problems with ice dams because they keep the entire roof cold. There is little difference in temperature between the part of the roof inside the perimeter of the outside walls and the part covering the eaves or overhangs. Thus, melting and refreezing is minimized. Insulating to prevent heat leaks and sealing against air leaks between the inside of the building and the attic are the best ways to achieve a cold roof. Ventilation of the attic may help to achieve a cold roof. Its primary purpose, though, is to prevent moisture from condensing in the attic on the underside of the roof decking and dripping down into the insulation. Any warm air leaking from the inside of the building into the attic carries moisture with it. Sealing the air leaks is usually more effective than increasing the ventilation.



Ice damming can be minimized by insulating your home with Nu-Wool Premium Cellulose Insulation.

The Nu-Wool[®] name and logo, as well as the WALLSEAL[®] name and logo, are registered with the US Trademark and Patent Office by Nu-Wool[®] Co., Inc.

*Savings can vary. Find out why in the seller's fact sheet on R-values.

**R-value testing is regulated by the Federal Trade Commission. The use of R-value tests allows the consumer to make choices based on the relative values for different products.

Underwriters Laboratories Inc.
Classified Loose Fill Material R-8078
Classified in accordance with the following
ASTM C-739 Characteristics.



Flammability Characteristics:

- Critical Radiant Flux: Greater than or equal to 0.12w/cm³
- Smoldering Combustion: Less than or equal to 15.0%

Environmental Characteristics:

- Corrosiveness: Acceptable
- Fungal Growth: Acceptable

Physical Characteristics:

- Density (settled): 1.6 pcf
- Thermal Resistance: 3.8 R (in.) (HH-I-515-E)
- Moisture Absorption: Acceptable
- Odor Emission: Acceptable
- Starch Content: Negative



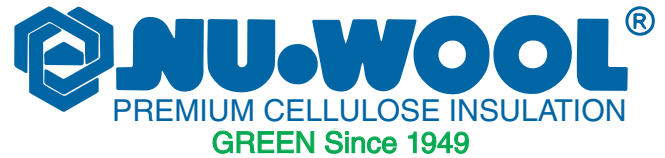
Underwriters Laboratories Inc.
Classified Spray Fiber R-13173



Surface burning characteristics applied to inorganic reinforced cement board with a maximum thickness of 5 inches*

Flame Spread 15
Smoke Developed 5

* Must be applied with water in accordance with the application instructions.



MIDWEST/CENTRAL US
2472 Port Sheldon Street
Jenison, MI 49428
Call: 800-748-0128
Email: info@nuwool.com

NORTHEAST US
50 Depot Street
Belchertown, MA 01007
Call: 800-282-7711
Email: info@nationalfiber.com

www.nuwool.com

