

## Lifetime Warranty Certificate

Central Fiber Corporation® guarantees that CLEAN® cellulosic insulation is an exceptionally high-quality, Class One building material produced from recycled natural cellulose fibers. As manufactured and supplied, CLEAN® cellulosic insulation complies with all requirements of the California Bureau of Home Furnishings and Thermal Insulation. CLEAN® meets the Consumer Product Safety Commission standard for flame resistance and corrosiveness, Federal Specification ASTM-C739 and the Federal Trade Commission regulations for Home Insulation Materials.

CLEAN® cellulosic insulation material is guaranteed for the life of the structure to retain its thermal resistance (R-value), resist insects, retain fire-retardant characteristics and provide effective sound control when properly installed. This warranty excludes damages to the insulation resulting from structural defects, physical abuse and/or acts of nature. Additionally, this warranty expressly excludes consequential damages that may arise from the use or misuse of these products. Failure of the insulation to perform as outlined above entitles the owner to free replacement material only. The undersigned warrants that CLEAN® cellulosic insulation has been installed in accordance with all product installation requirements and the recommendations of the manufacturer. The R-value rating of the installed insulation is as follows: Ceilings R-\_\_\_\_\_

Owner \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Installer's signature \_\_\_\_\_ Date installed \_\_\_\_\_

Keep this certificate with your other valuable papers. If you sell this property, this certificate should be passed on to the purchaser. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. For service, call or write your installing contractor or Central Fiber Corporation® at one of the addresses listed below.



### Central Fiber Corporation®

Toll Free: 800-654-6117  
 Fax: (785) 883-4429  
 www.centralfiber.com

4814 Fiber Lane  
 Wellsville, KS 66092  
 785-883-4600



# HOW TO INSULATE YOUR ATTIC WITH HIGH PERFORMANCE CELLULOSE INSULATION



A CLEAN® home is a healthy home.™



### Central Fiber Corporation®

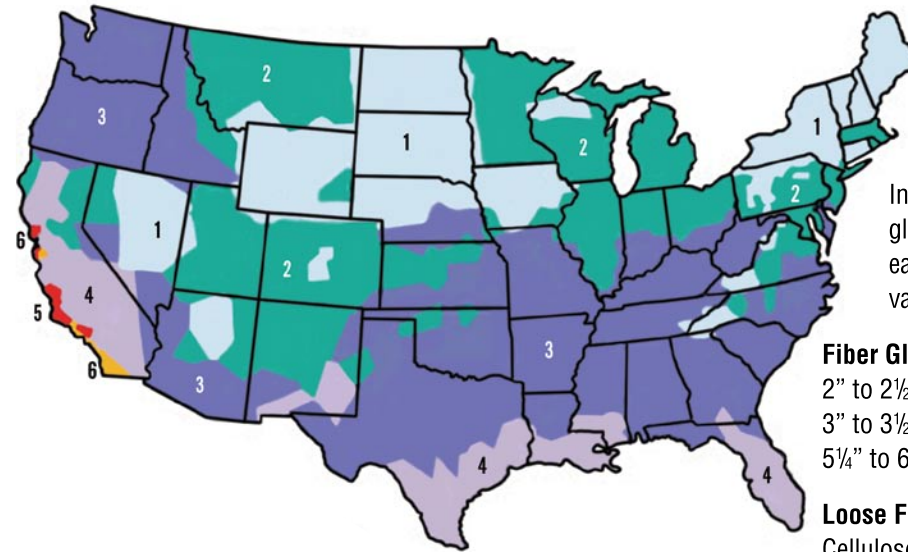
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## Let's get started!

### HOW MUCH INSULATION YOU NEED DEPENDS ON:

- The size of your attic in square feet
- What R-value you need
- The amount of insulation already in your attic



1. Determine the square footage of your attic by either measuring it (length x width) or consulting the blueprints you may have received when you purchased your home.

2. Use this US Department of Energy zone map to determine the recommended R-value for your area.

3. If you already have some insulation in your attic, determine the R-value for what's there using the following I.C.A.A. guidelines:

In case of older batts, whether fiber glass or rock wool, their thickness is easily measured. Thickness and R-values may be correlated, as follows:

**Fiber Glass and Rock Wool Batts:**  
 2" to 2½" .....R-7  
 3" to 3½" .....R-11  
 5¼" to 6½" .....R-19

**Loose Fill and Blown-In:**  
 Cellulose.....R-3.65 per inch  
 Fiber Glass.....R-2.2 per inch  
 Rock Wool.....R-3.0 per inch

R-values can be added together. For example, if the insulation already in your attic is R-19 and you want to bring it up to R-49, you'll need to add an R-30 of CLEAN®.

If there is less than 3" of existing insulation or you can't determine the present R-value you may wish to proceed as if there is none.

4. Use the coverage chart **ON THE BAG** to tell you how many bags you'll need. For example, if your attic has 1,225 sq. ft. and you need it insulated to R-49, follow this equation:

$$\frac{1,225 \text{ sq. ft.}}{\div 10.48 \text{ sq. ft. cover per bag @ R-49}} = 117 \text{ bags}$$

Zone	Gas	Heat pump	Fuel oil	Electric furnace	Ceiling				Basement			
					Attic	Cathedral Wall <sup>(A)</sup>	Floor	Crawl space <sup>(B)</sup>	Slab edge	Interior	Exterior	
1	✓	✓	✓	✓	R-49	R-38	R-18	R-25	R-19	R-8	R-11	R-10
1				✓	R-49	R-60	R-28	R-25	R-19	R-8	R-19	R-15
2	✓	✓	✓	✓	R-49	R-38	R-18	R-25	R-19	R-8	R-11	R-10
2				✓	R-49	R-38	R-22	R-25	R-19	R-8	R-19	R-15
3	✓	✓	✓	✓	R-49	R-38	R-18	R-25	R-19	R-8	R-11	R-10
4	✓	✓	✓	✓	R-38	R-38	R-13	R-13	R-19	R-4	R-11	R-4
4				✓	R-49	R-38	R-18	R-25	R-19	R-8	R-11	R-10
5	✓				R-38	R-30	R-13	R-11	R-13	R-4	R-11	R-4
5		✓	✓		R-38	R-38	R-13	R-13	R-19	R-4	R-11	R-4
5				✓	R-49	R-38	R-18	R-25	R-19	R-8	R-11	R-10
6	✓				R-22	R-22	R-11	R-11	R-11 (c)	R-11	R-11	R-4
6		✓	✓		R-38	R-30	R-13	R-11	R-13	R-4	R-11	R-4
6				✓	R-49	R-38	R-18	R-25	R-19	R-8	R-11	R-10

(A) R-18, R-22, and R-28 exterior wall systems can be achieved by either cavity insulation or cavity insulation with insulating sheathing. For 2 in. x 4 in. walls, use either 3½ in. thick R-15 or 3½ in. thick R-13 cellulose insulation with insulating sheathing. For 2 in. x 6 in. walls, use either 5½ in. thick R-21 or 6¼ in. thick R-19 cellulose insulation.

(B) Insulate crawl space walls only if the crawl space is dry all year, the floor above is not insulated, and all ventilation to the crawl space is blocked. A vapor retarder (e.g., 4- or 6-mil polyethylene film) should be installed on the ground to reduce moisture migration into the crawl space.

(C) No slab edge insulation is recommended.

CLEAN® natural cellulose insulation

## Let's do the job right!

### MATERIALS YOU WILL NEED:

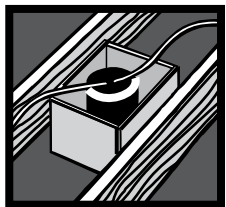
1. The correct number of bags of cellulose insulation
2. Insulation machine, hose, clamps and accessories
3. Attic insulation rulers
4. Dust mask for each installer
5. Ventilation chutes as needed
6. Caulking materials as needed
7. Heat barriers and or heat blocking materials to keep the insulation away from heat sources
8. Utility knife to open bags
9. Extension light with long cord and flashlight



### PREPARING YOUR ATTIC FOR INSULATION.

Correct preparation of your attic typically takes only a short time and is very important. Improper installation of any insulation material (regardless of type) could create a fire hazard in your home. Follow these instructions carefully to assure a safe, comfortable home.

**1. Do not cover recessed light fixtures, ballast transformers, exhaust fans, flues or furnaces, water heaters or any other heat generating devices with insulation.** The National Electrical Code states "insulation shall not be installed within 24 inches of the top or within 3 inches of the side of recessed enclosures." Backer board, metal shields or similar heat barrier material must be used to block around the heat sources. The blocking must be at least 3" away from the heat source and 2" higher than the finished insulation depth.



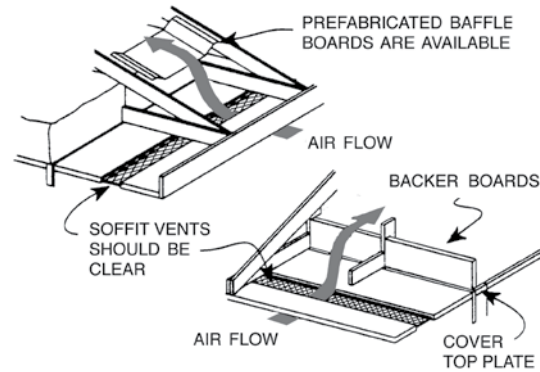
In addition, dams or boxing should be built around attic access openings to keep the insulation from falling and to allow it to be its full depth.

**2. Do not block air flow with insulation.** It is important to have adequate ventilation in your attic. Openings in the soffit area at the end of the rafter space must be blocked off with pieces of backer board or other material between and at the ends of the joists. Allow at least one inch between the ceiling and the underside of the roof deck.

When there are individual soffit vents, ventilation chutes can be used in the rafter space in front of and on either side of the soffit vents.

The attics of many older homes are not adequately ventilated. You should consult with an HVAC contractor concerning proper attic ventilation.

A properly ventilated attic usually does not require a vapor barrier. However, you should check with local building codes concerning any local requirements.



**3. Caulking around cracks and openings** into the attic ceiling created by plumbing and wiring will improve the performance of all insulation.

**4. Fasten insulation rulers** vertically between ceiling joists and the roof rafters (one for very 500 sq. ft. of attic space). These will guide you in blowing the insulation evenly throughout your attic. The rulers are available at the store where you purchased CLEAN®.

### INSTALLING YOUR INSULATION.

1. Long sleeved shirts, gloves, dust masks, goggles and protective headgear are all recommended when installing any insulation.



2. Place the blowing machine on the ground as close to the opening in your attic as possible.

3. This is a two person job, one in the attic and one filling the blowing machine.



4. Start at the corner most distant from the attic access.

5. Hold the hose level, with insulation falling 6 to 10 feet ahead. Spray parallel with joists, not across them.

6. When the roof slope does not allow full depth to the ends of the joists, bounce the insulation off the underside of the roof to increase density in that area. Take care not to block the eave vents.

7. Fill to correct depth using attic rulers as guides.

8. Follow manufacturer's operating instructions for the blowing machine.

9. Install all the bags called for on the coverage chart, even if the insulation turns out to be thicker than shown on the chart.

## Congratulations!

You made the smart decision by choosing CLEAN® cellulose insulation because you want to start saving money on utility bills and have a more comfortable home. There are other things you should know:

**EXCELLENT R-VALUE, MORE COMFORTABLE**  
No traditional product insulates as well as CLEAN®. This revolutionary product has an **R-value up to 70% higher than ordinary insulation.**

**LOWER ENERGY COSTS**  
CLEAN® is blown to completely fill around wood framing, electrical wiring and plumbing. The highly efficient natural cellulose barrier blocks air movement and energy loss. CLEAN® ability to resist heat transfer remains consistent through a greater temperature range. This consistent heat flow resistance, or R-Value, **means that you'll spend less to heat and cool your home – much less.**

**SUPERIOR FIRE SAFETY**  
CLEAN's® **Class 1 Fire Rating** meets or exceeds all local and national building code requirements.

**HEALTHIER, WITH NO ITCHY FIBERS**  
CLEAN® is made from natural fibers that don't irritate skin and lungs.

**BETTER SOUND CONTROL**  
CLEAN® insulation creates **a seal that doubles as a sound barrier**, keeping unwanted noise from traveling through walls and ceilings.

**SAFER FOR THE ENVIRONMENT**  
Using CLEAN® **dramatically reduces the amount of newspaper that ends up in landfills.** And because CLEAN® homes require less energy for heating and cooling, they **reduce consumption of our nonrenewable energy resources.**

Thank you for choosing CLEAN®  
cellulose insulation from Central Fiber