— Homeowner's Guide to

Attic Insulation



Compliments of



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03	Letter From	Darian And	David Bobby
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A Message From The Owners

According to the Harvard University School of Public Health, if your home is as little as 5 to 10 years old, you likely have one of the <u>46 million under-insulated</u> homes in the US.

Worse Yet, If your insulation has not been inspected in over three years it very well could have compressed itself enough to reduce your R-values by half – This means much higher energy bills.

Hello, this is Darian & David Bobby, owners of Atlas Home Improvement. Now, before you start getting the wrong idea about the partiality of this report you need to know that we intend to be as un-biased as possible.

Sounds hard to believe, we know. You see, we started the Atlas Home Improvement company back in 1989. Back then you could trust people. You could trust products to do what they claimed they would do. Unfortunately, times have changed and it's tough to believe much of anything that you see or hear about the performance of a product without actually seeing it perform in real life. As a result we understand that homeowners have become increasingly cynical as a result of these products not living up to their claims.

This trend towards a consumer jaded mentality led us to one conclusion – that if we truly believed we have the best product on the market today then it was our responsibility to share what we know with everyone that we possibly can.

This free informational report exposes the truths, the lies and the stuff everyone in this industry simply wants to keep under wraps. If you are considering insulation of any kind – we challenge you to read this report and find out what the entire rest of the industry doesn't want you to know.

Respectfully,

Darian & David Bobby

Atlas Home Improvement



Darian & David Bobby



Questions?

Need More Information?

Call (800) 378-1924
Visit AtlasHomeImprovement.com

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What Every Home Owner Should Know About

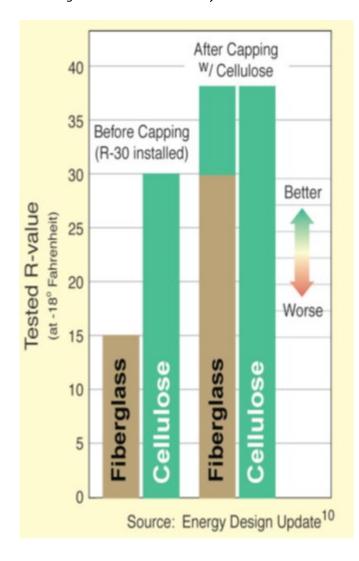
ATTIC INSULATION

YOUR INSULATION IS A CRITICAL PIECE OF YOUR ROOFING SYSTEM.

Most home owners don't think about their insulation very much. Far too often the first thought about a home's insulation comes only after months, if not years, of paying high energy bills.

Faulty, poorly installed, or insufficient insulation can cause a multitude of problems, not the least of which are:

- Convection currents that literally "suck" the energy right out of the home
- Increased allergens in the air from mildewed or moldy attics
- Dangerous ice dams which may lead to water in the home



A COUPLE OF FACTS YOU NEED TO KNOW ABOUT INSULATION

- According to the Harvard University School of Public Health, you probably already own one of the 46 Million <u>Under-Insulated Homes</u> In The U.S.; especially if you currently have Rolled Fiberglass insulation.
- According to the Department of Energy, heating and cooling systems use more than half of the energy consumed in American homes. Typically, 42% of the average family's utility bill goes to keeping homes at a comfortable temperature. The right insulation installed properly can reduce this cost by over 20%.
- In residential and commercial buildings, energy efficiency through insulation is the simplest and most cost effective way to reduce energy use and greenhouse gas emissions.
- Fiberglass Insulation is listed as a possible cancer causing material.

HISTORYOF

ASBESTOS



- Insulator of choice for more than 50 years
- Now known to cause cancer
- Now prohibited in the U.S.

FIBERGLASS



- Used widely in insulation, weatherproofing and textiles
- Was considered a "safe" substitute for asbestos
- Nowever, it is now listed as a cancer causing material
- Can also cause skin allergies and reactions
- Formaldehyde is actually used in the manufacturing process
- Unfortunately, still the material of choice for many home builders
- Proven to be inefficient in both the rolled and blown-in form

MINERAL WOOL



- Once the most common type of insulation on the market
- Replaced by fiberglass during the 1960's and 70's
- It is actually slag wool and rock wool

CELLULOSE



- The Absolute best material for insulation in the modern age
- The Absolute best "Green Material" available for home insulation
- Cellulose is made mostly of RECYCLED newspaper
- MORE HEAT TRANSFER resistance per inch than fiberglass
- SEALS HOME against air infiltration better than all other fiberglass insulation on the market today

What Is R-VALUE And Why Is It IMPORTANT

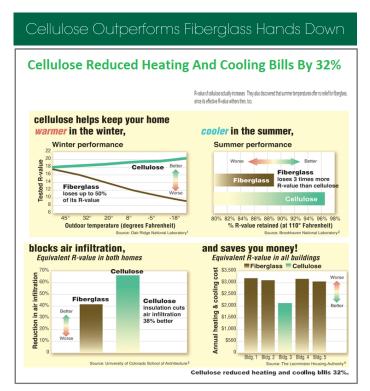
No Other Single Point Of Measurement Is Quoted More Often In Home Insulation Than A Products R-Value.

Simply Stated: The **Higher** The R-Value The **More Effective** The Product Is In Insulating Your Home

Here is the actual definition of R-Value as provided by The American Society For Testing And Materials:

R-Value: Measure of resistance to heat flow. Insulation materials have tiny pockets of trapped air. These pockets resist the transfer of heat through material. The ability of insulation to slow the transfer of heat is measured in R-values. The higher the R-value, the better the insulation material's ability to resist the flow of heat through it.

Now that you know what an R-Value is compare the values between Fiberglass and Cellulose as tested by the Oak Ridge, Brookhaven National Laboratories and the University of Illinois.



But There Is More To The Story -

R-Values are also misleading because they measure only one type of heat transfer – conduction. That is why you need to get the whole story and make an educated decision about what type of insulation you want in your home.

There are three types of heat transfer that occurs in the home:

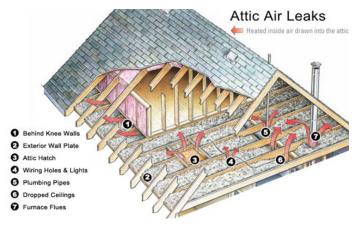
- Conduction
- Convection
- Radiation

UNDERSTANDING † PROBLEM

Most Homeowners Think That Rolling Fiberglass Or Simply Blowing Insulation In An Attic Is Enough To Insulate Their Home.

THEY ARE WRONG... And Its Costing Them Thousands.

Bottom Line: Blowing Insulation or Rolling Pink Or Yellow Batts In Your Attic Is NOT ENOUGH. You've Got To Stop The Air From Flowing Through Your Interior Walls And Your Attics Creating Convection Currents That Literally SUCKS The Heat Right Out Of Your Home.



Conventional wisdom says that to keep your home efficiently heated in the winter, you need to add a nice, thick layer of fiberglass insulation in your attic and you'll be "good to go." Then, as long as you've got reasonably efficient doors and windows, your energy bills will be low and your home will remain comfortable.

Yet you constantly find yourself "fiddling with the thermostat," wearing coats in the house, adding extra blankets at night, and feeling a genuine "breezy draft" in your house, and NO NOTICEABLE difference on your heating and cooling bills. Why is that?

Your attic, windows, and doors are only PARTS of the insulation puzzle—and without considering your entire home—how and why it's inefficient—you will be open to the problems

just listed above or worse. The key then, is understanding exactly what the problems are... and how to fix them.

Even if you have what you consider to be "a lot of insulation" in your attic, you are still probably <u>losing money each and every month</u> from air that is drafting up into your attic through your interior walls, light fixtures, attic pull-down hatch, chimney, and more. The effectiveness of an insulated ceiling, wall, or floor depends on **how and where** the insulation is installed.

For example, pink rolled fiberglass leaves your joists and rafters exposed and it has been proven, by the Oakridge National Laboratory, that exposed structural lumber is a <u>key source of heat loss.</u>

Even more important is that *Insulation which is compressed* will not give you its full rated R-value. This happens a lot because many people make the mistake of adding denser insulation on top of lighter insulation in an attic. Or worse, stuffing fiberglass into areas it won't fit into.

You know, the "do-it-your-selfer" who rushes out to the nearest home improvement warehouse and buys the thickest insulation they can find. They take it home and then just throw it on top of what's already in their attic; or worse, they shove batts rated for one thickness into a thinner cavity wall that it's not designed for.

Failure to account for proper installation and ventilation will cost you thousands on your energy bills.

FIXING †he PROBLEM

There Are Two Critical Areas That Must Be Addressed In A Home To Fix Insulation Problems:

You **Have To** Insulate The Attic | You **MUST** Have Proper Ventilation.

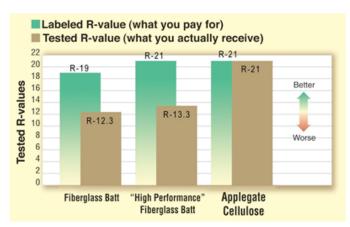
Over 46 Million Homes Across America Are Under Insulated.

The Main Culprit - Poor Quality Insulation

With fiberglass insulation you are rarely, if ever, getting what you pay for. Here is what we mean by that.

According to tests conducted by a major fiberglass manufacturer, the actual performance of fiberglass batts can be anywhere form **14% to 45% less than their labeled R-value** when gaps and voids associated with normal batt installation are considered.¹

So of course most people go out and buy more fiberglass



insulation, or pay a contractor to do it, and simply install more fiberglass insulation over the existing insulation. A process known as "capping."

But there is a problem, a very serious problem, with that approach. Researches at Oak Ridge National Laboratories

found that capping fiberglass with more fiberglass "Fails to restore the lost R-value"²

In other words it is a waste of your time and money to go out and buy more fiberglass insulation to put over your existing fiberglass insulation.

But, the very same researchers, in the very same report, also found that capping fiberglass with cellulose not only adds R-value, it actually restores the effective R-value that fiberglass loses during cold weather.

The only real way to raise the insulation value in your attic is to use blown cellulose. It covers all the nooks and crannies, goes where fiberglass can't, and can easily cover exposed wood beams (exposed timber) which is a major source of heat loss and will even raise the insulation value of any existing fiberglass insulation you may have. No other insulation on the market today can do that.



Notice how the fiberglass (yellow) insulation is compressed at the edges and leaves the wood beam exposed. Notice how the blown insulation is covering not only the fiberglass but the timber as well.

¹ Johns-Manville Research and Development Center. "Effects of Insulation Gaps."

² Oak Ridge National Laboratory. "Evaluation of Cellulose Insulation" & Energy Design. Update: Fixing Fiberglass Problems with Cellulose.

You Have To Have

PROPER VENTILATION

Have You Ever Tried To Suck Water Through A Clogged Drinking Straw? Notice How Difficult It Was And How You Have To Remove The Obstruction?

The Same Thing Applies To Your Attic - No Air Flow Means Serious Problems.

Improper Air Flow In An Attic **WILL** lead To

- Ice Dams
- Moisture Build Up
- Wood Rot
- Mold & Mildew
- Damage To Both The Interior And Exterior Of Your Roof
- "Cooked" Shingles

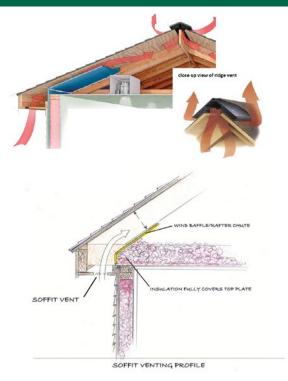
No amount of insulation can fix these problems. In short, you have to have proper ventilation. The ventilation of a home must be in balance. You must balance intake with exhaust, otherwise they compete with one another and you have no air flow. No airflow means serious problems.

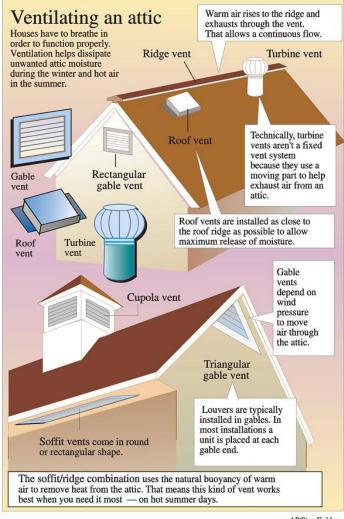
There are four critical components to a roof in order to ensure proper ventilation. They are:



1. Soffit Vent and associated baffle; 2. Roof Vent

3. Ridge Vent; 4. Gable Vent.





AP/Stan Kohler



When you have no air flow or improper air flow you allow either heat or cold temperatures to build up within in the roof structure. The resulting damage that can happen is extensive and very costly to repair. Would you rather spend a few hundred dollars ensuring proper ventilation or 10's of thousands of dollars replacing joists, beams, and your roof?

One of the single largest culprits to poor air flow that we have noticed over the years is blocked and clogged soffit vents. By simply installing an inexpensive baffle, you can prevent the soffit vents from being clogged while simultaneously directing proper air flow up to the exhaust.

As you can see, properly insulating a home is about more than just throwing up some more insulation in your attic. It is a holistic system which requires all parts to be working together – ignoring any one part of the system results in a system which just does not work... **PERIOD.**

What causes ice dams

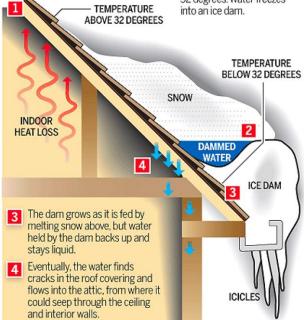
An ice dam is a ridge of ice that forms at the edge of a roof and prevents melting snow from draining off the roof. The water that backs up behind the dam can leak into a home and cause damage to walls, ceilings, insulation and other parts of the house.

An ice dam might form when ...

- There is snow on the roof.
- Average outside temperature is below 32 degrees.
- Roof surface temperature is above 32 degrees at its higher end and below 32 degrees at its lower end.

How it forms

- Indoor heating rises through the ceiling into the attic and warms the roof surface.
- Snow on the heated part of the roof melts and flows down until it reaches that part of the roof that is below 32 degrees. Water freezes



Which Insulation Is Best For You

There Are Many Different Types Of Insulation On The Market Today & They All Claim To Be The Best - So How Can You Possibly Figure Out

What Insulation Is Best For You?

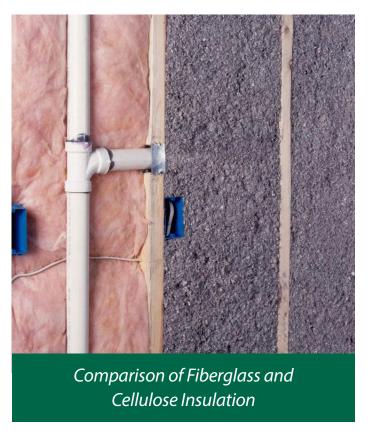


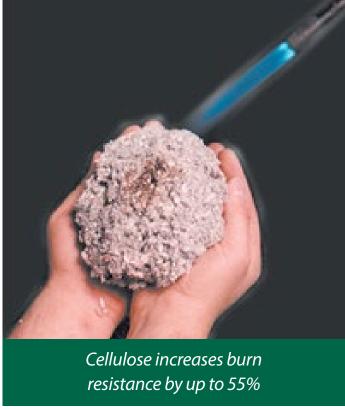
You Don't Have To... We Have Already Done All The Hard Work And Research For You.

The kind of insulation you choose for your home makes a major difference in how effective it is in saving you money and protecting your home. So, for years we struggled with trying to find the perfect insulation for our clients. The number of choices on the market today is mind boggling. Believe us when we tell you that it took us a long time to

investigate and research each and every one.

You see, we believe in delivering only the highest quality products and materials to our clients. It is why we are "specialty" contractors and not general contractors. We only focus on those things that we know we can do perfectly and give our clients the absolute best VALUE for their money.





As a result, we found that:

No Other Insulation On The Market Today Can Compete With Applegate Cellulose Insulation... PERIOD.

- Applegate Cellulose insulation is made from 82% recycled newspaper
- It is mixed with natural borate for fire, pest, and mold prevention
- Laboratory Proven To Be More effective Than Fiberglass Insulation
- Laboratory Proven To Be Much Safer Than Fiberglass Insulation

Appelgate Cellulose uses only leftover newspapers purchased directly from local newspaper companies. Made from a renewable natural resource which diverts waste from landfills, Cellulose insulation not only limits greenhouse gas emissions during manufacturing, but also prevents waste paper from releasing environmentally harmful gases as it decomposes.

Applegate Cellulose is non-toxic and much safer to you health. According to Dr. Arthrur Furst, one of the world's foremost toxicologists, "the dust from cellulose insulation materials can be considered as any household dusts. Cellulose, per se, is non-toxic. Biologically, cellulose is innocuous.³

By comparison, according to the Washington Post; "In December of 1993, a panel of top public-health experts voted unanimously to add fiberglass to the National Toxicology Program list of substances that we may 'reasonably anticipate' to cause cancer."

Why We **Refuse** To Use Spray Foam Insulation:



We absolutely refuse to use spray foam insulation simply because it uses CHEMICALS that must be heated and then sprayed into your home. It requires the use of safety suits and respirators. While they claim that it is perfectly safe when hardened we remain skeptical.

In fact according to resent reports spray foam insulations such as UFFI (urea formaldehyde foam insulation) may crumble and break down over time. This soft material is quite fragile and easy to damage during normal household activities. Disintegrating UFFI produces fine airborne particles that can become respiratory irritants. Some people with chemical sensitivities and existing respiratory illnesses may also be more susceptible to the gases produced by UFFI.

BOTTOM LINE: We exclusively use Applegate cellulose insulation because it's more efficient, safer, easier to work with, and has better sound reducing and insulation properties than any other product on the market today.

REASONS Why We Refuse To Install Fiberglass Insulation

- Insulations are compared on the basis of R-Value, or resistance to thermal conduction, but gaps and voids inherent in glass fiber batt insulations result in installed performance well below published R-Values. Bottom Line: Cellulose outperforms glass fiber...

 PERIOD. (with an R-Value of 3.8 per inch vs. 2.1 to 3.1 per inch for glass fiber) and maintains it's high 3.8 per inch installed R-value through pneumatic application procedures that fill every nook and cranny.
- Heat also moves by convection. Convection occurs within low-density insulation, like blown glass fiber, and around the perimeter of batt type glass fiber insulation. The higher installed densities of cellulose eliminate convective air movement.
- Heat also transfers by radiation. Blown glass fiber is installed at such low densities that heat radiates right through it. The higher installed densities of cellulose effectively block radiant heat transfer.
- The same issues that reduce the thermal performance of glass fiber also mar its effectiveness in preventing sound transmission. A home insulated with cellulose will be much quieter than a glass fiber insulated home.

- It takes a lot of energy to make glass fiber insulation, up to 12,500 BTU's to make just one pound of it. It only takes 750 BTU's to make one pound of cellulose insulation, making cellulose the "greener choice."
- Glass fiber melts at temperatures above 1000 deg. F, well below the temperature of a house fire. Glass fiber insulation and kraft paper vapor barrier facings can allow fire to spread quickly, while cellulose works to prevent its spread.
- Glass fiber insulations are hydrophobic they can't manage moisture, allowing it to pass right through, where it can condense on cold surfaces.
- Glass fiber manufacturers claim up to 35% recycled content. But that includes scrap generated during manufacturing. Cellulose has a genuine 82%+ recycled content.
- Air, dust and moisture pass easily through glass fiber, which can feed mold and rot causing organisms. Highdensity cellulose blocks airborne moisture movement. Borates (minerals) in the insulation resist the growth of these organisms, improving building durability and longevity.
- Glass fiber is sometimes, but not always, cheaper to install, but it costs a lot more over time because it saves far less energy than cellulose insulation and may also require larger capacity heating and A/C systems. The money 'saved' by specifying glass fiber will be spent many times over during a building's life in increased energy consumption and decreased occupant comfort.

WANT MORE REASONS:

Watch these powerful videos to get a better feel for the superiority of cellulose:

http://www.youtube.com/watch?v=7HqCLFs4U54 (fires set in 3 structures to compare safety)

http://www.atlashomeimprovement.com/videos_applegate.html

http://www.greenbuildingadvisor.com/blogs/dept/guest-blogs/fiberglass-versus-cellulose (link to a 3rd party comparison)

WHO Can You Buy From

So far we have covered some of the most common reasons for looking into insulation as well as discussed the wide array of types and options available (the good, bad, and ugly). Now it's time to discuss who you should purchase from. This is a bigger part of the decision than most people think – It's actually quite critical. Again, we are going to be as impartial as we possibly can here, keeping in mind that we have been doing this a long time and have a pretty good view of how this industry works.

BIG NAME HOME IMPROVEMENT STORES

Your local "Big Box" retailers will likely sell insulation of some kind, usually fiberglass batts or in rare cases generic do it yourself spray kits. Pricing will be relatively cheap and so will the product. These products will be only for the extremely avid do-it-yourself'ers. There will likely be little or no instructions and certainly a limited (if any) warranty. Don't go looking for too much customer service or installation support either – typically what you will find is a few guys who have seen it installed or know a buddy who has it installed in his house. Not a good option for most people.

TRUCK AND LADDER CONTRACTOR

If you never listen to another word we say, please listen to this. Never take the advice of a Truck and Ladder Contractor when it comes to insulation. There are many of these guys doing roofing and insulation, but don't have the first clue when it comes to the "complete picture." These are the guys that work out of their truck and are contacted only by cell phone. All they care about is the up sell and quick buck that insulation and roofing can bring. Their guarantees are useless the moment you see the back of their truck drive away.



COMPETITOR PRODUCT DEALERS

We really need to be careful when speaking of the competition. Unfortunately for consumers, many of the 6 reasons you shouldn't buy from truck & ladder companies (listed on next page) apply to most of our competitors. However, the single biggest reason not to buy from a competitor is because they don't sell Applegate Cellulose insulation.



Here Are **6 reasons**Why You Should Never Buy Insulation From A Truck And Ladder Company

- It isn't their normal line of business. This is pretty easy to see why. Their day to day business is not making sure that you get the best solution for your problems, but rather patching roofs, or rushing through the process of "rolling out" more insulation. Don't be fooled there is a big difference between "rolling out insulation" and installing insulation.
- They have no product loyalty. They change brands and types as easily as you might change pain relievers.

 Generic, brand name, this type or those... they don't care.
- 3 They are out of business in a few years time.

 Statistically speaking, Truck and Ladder Guys have one of the highest turnovers in the home improvement industry. They don't have an office or infrastructure to

- support. It's very easy for them to close up and reopen under another name. In the meantime, what does that say for their guarantees?
- A No training in the installation of the product means they are basically "eyeballing, tacking and walking away". Forget any type of product support or explanation.
- Since insulation is an additional product, or gravy product, it's usually not explained to the customer correctly. There is no 100% perfect solution and homeowners need to be educated on their choices... not sold on a product.
- If there is a problem, try getting a quick response from these guys on the phone.



Why Applegate Cellulose And Atlas Are The Perfect Combination

The Benefits Of Using **Applegate** Cellulose:

- Can be blown in over existing insulation
- Save You up to 40% on heating and cooling costs
- Extends the life expectancy of your roof
- Helps prevent ice dams
- Prevents mold and mildew growth
- Helps stop air infiltration through walls and ceilings
- Provides up to 55% better fire resistance
- Won't lose R-value like fiberglass
- Non-Toxic & Contains No Formaldehyde or other dangerous chemicals
- Makes your home up to 35% quieter
- Extends the life expectancy of your furnace/ air conditioner
- Increases the value of your home

The Benefits Of Using **Atlas Home Improvement**

- We use only Applegate Brand cellulose insulation
- We add protection for all recessed ligting
- We properly install attic baffles to allow proper airflow from the soffit
- We address & correct ALL ventilation issues.
- We apply a special "Bio-Cide" treatment to your attic
 BEFORE the insulation is installed
- We build an "insulation box" around your attic access hole and insulate to an R-60
- We use Tarps inside your home and thoroughly clean up after ourselves.
- We provide you with a fully transferable Warranty
- ♦ We will NEVER cut corners or take short cuts...PERIOD.

A Word From The Creator:



Applegate Insulation Began

Because Of A Mistake?!

That's right, in 1952, I accidentally discovered the difference in insulations! I was installing electric resistance heating and guaranteeing heating bills. The first year I nearly went out of business because I wasn't controlling the insulation that was installed.

What happened was that my customers used whatever insulation was suggested to them - often fiberglass. After that first winter Iknew I had to become educated about insulation or there would be no second winter for me.

I had heard of a utility company that was successfully promoting electric resistance heating so I paid them a visit. It was then that I first heard about cellulose insulation. The utility company told me that it was necessary to use cellulose because it worked so much better than other insulations.

After conducting extensive research into the benefits

of cellulose insulation, I was convinced. I recommended only cellulose insulation to all my customers for the next 35 years. Our customers were delighted with their heating systems -but cellulose was the reason those systems were successful.

Premium quality insulation was tough to find, so in 1978 we built a plant in Michigan to manufacture our own. We soon found that other insulation contractors had the same need and before long we were running at 100% of capacity and turning away orders. To better serve our customers, we built a new, state-of-the-art plant. As our reputation spread as a dependable company with the highest quality insulation we acquired other manufacturing plants in Colorado, Pennsylvania, Georgia, Kentucky, Louisiana and Wisconsin. We installed our unique processes and now produce premium cellulose insulation throughout most of the U.S.



WHAT YOU SHOULD

DO NEXT



At this point you probably have a great many questions and we are here to answer them. Feel Free to call us **AND** make sure you visit us online to see what specials we are running this month.

Or, Better yet...call us to schedule an appointment for an absolutely **FREE**, **NO STRINGS ATTACHED**, **NO HIGH PRESSURE SALES**, investigation of your homes insulation needs.

We will come out to your home and investigate your home to see if you have ventilation problems and attic insulation problems. Then we will give you a complete breakdown of all the issues we discovered, educate you on your solutions, give you a fair firm price, and then let you decide. That's it. No Arm Twisting Or Hours Long Sales Pitches.

GIVE US A CALL **TODAY.**



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AtlasHomelmprovement.com













We believe that Atlas Customers always say it best!

Learn more about what actual customers have to say about Atlas Home Improvement



GUILD QUALITY

Atlas uses a 3rd party company to survey all customers upon completion of work.

www.guild quality.com/Atlas Homel mprovement



ATLAS VIDEO TESTIMONIALS

Listen to actual customers discuss what it was like to hire Atlas for their project.

www.atlashomeimprovement.com/testimonials_atlas.html



ATLAS WRITTEN TESTIMONIALS

Read notes from actual customers who have written to us over the years on a variety of project types.

www.atlashomeimprovement.com/testimonials.html

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