

A STABILIZED, ENVELOPE INSULATION SYSTEM



THERMACARE STABLE™
NOW AND IN THE FUTURE



SILVERCOTE.COM





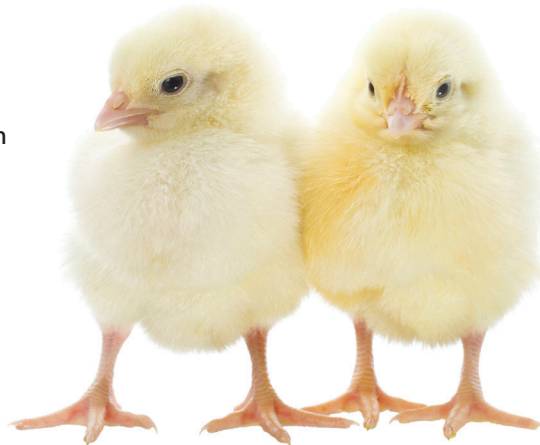
IT'S ALL ABOUT THE BIRD.

Everything starts with the bird. It's about quality, health and maintaining optimal house conditions. The welfare of the bird is critical in the chicken business. A well-controlled, airtight, efficient house will ensure desired feed conversion and development. Paws will stay clean and help disease-free through proper ventilation, ammonia and litter control. In short, you need housing that provides the right dynamic temperatures and optimal relative humidity, at the lowest cost for your broilers, pullet and breeder houses.

How can we deliver that? ThermaCare Stable by Silvercote.

ThermaCare Stable is a revolutionary airtight, envelope solution with stabilized insulation for ceiling and walls. It requires no future insulation and radically improves bird performance. You and your flock will additionally enjoy the benefits of a superior, better-controlled environment that allows chickens to grow to their full potential. Thanks to our stabilized insulation system, your heating and cooling costs will not be impacted by shifting, settling, or decomposing insulation. What's more, our insulation and durable sill seal resists darkling beetles and other potential pests. You might say we've thought of everything.

- Optimal feed conversion
- Even bird size
- Healthy paws
- No temperature stress
- Evenly spread



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Optimum performance cannot be achieved if the proper brooding temperature cannot be maintained. ThermaCare Stable contributes optimal conditions so that your birds will reach their full potential.
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THE OPTIMAL HOUSE.



The environment determines the quality of the bird. A stable, optimized, well-ventilated poultry house will:

1. reduce operational costs
2. create sustainable environments that ensure ideal temperatures
3. produce healthy birds

ThermaCare Stable is a key component to the creation of an ideal airtight house environment. It helps protect your flock from radiant heat and condensation. It also ensures better litter conditions that will eliminate a number of potential health problems. The better you are able to help maintain a constant optimal environment for your chickens, the better they will perform. Best of all, once the ThermaCare Stable envelope insulation system is installed through a certified installer program, there will be no need to install additional insulation in the roof and walls because there is no shifting, settling, sagging, or decomposing. ThermaCare Stable delivers a superior total life-cycle solution that maintains consistent housing conditions for your birds.

- No need to install additional insulation
- Optimal airtightness
- Better tunnel ventilation
- Optimal litter management
- Better even temperature and relative humidity throughout the house
- Ideal light control



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The more you control the house environment, the more you can ensure better bird performance, as well as reduced energy costs.

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**THERMACARE STABLE:
NOW AND IN THE FUTURE**



At Silvercote, we understand your needs and what it takes to be successful. We know that you want to provide the best environment to ensure bird health and lower your energy costs. Optimal conditions are dependent upon two things: stabilized insulation and air tightness. Our revolutionary ThermaCare Stable envelope insulation system ensures both.

ThermaCare Stable provides you with a continuous stabilized insulation in wall and ceiling, ensuring a clean, healthy, regulated environment that protects your birds from radiant heat, litter problems, condensation and uncontrolled drafts. The benefit to you: healthy uniform chickens.

Our stabilized envelope system minimizes utility costs over the lifetime of your house. And once the ThermaCare Stable envelope insulation system is installed through our certified installer program, there is no need to install additional insulation because there is no shifting, decomposing, or settling. Depending on the needs of your chickens, our Ag Dura ceiling fabric can be used to create a dark or light house.

- ThermaCare Stable proven by university studies: No shifting, settling, sagging or decomposing
- Minimize the utility costs over the lifetime of your house
- Continuous stabilized insulation blanket from sill seal to sill seal
- Continuous air-barrier from sill seal to sill seal
- Ideal light control and ideal ceiling surface due to the extra dense Ag Dura fabric and light weight Stable R
- Even temperature and relative humidity throughout the house
- Optimal litter management
- Get what you pay for through certified installer program

THERMACARE STABLE: NOW AND IN THE FUTURE

Our envelope system does it all. It creates a comfortable growing environment for birds, combats rising energy costs and boosts productivity. Our proprietary fiberglass technology virtually eliminates any internal convection within the insulation to provide superior thermal performance, day after day, month after month, year after year. ThermaCare Stable will not shift or settle. It is designed to remain effective for the life of the building.



Ag Stable R:

A blown-in insulation that creates a fiberglass blanket. It is a proprietary patented blown-in fiberglass with water-activated bio-based binder. Impervious to shifting, settling, decomposing or to wind washing. Ag Stable R is a lightweight insulation and when combined with Ag Dura fabric and Ag banding ensures the ceiling will not sag over time. Stable R is also non-combustible (ASTM E136) and formaldehyde free.



* Knauf insulation with ECOSE® technology is certified Greenguard Gold.

ThermaCare Stable provides



**Bright/Dark
Clean
Finished
Appearance**



**Custom
Sized
Fabric &
Insulation**



**Air
Tightness**



**Vapor
Retarder**



**Formaldehyde
Free**



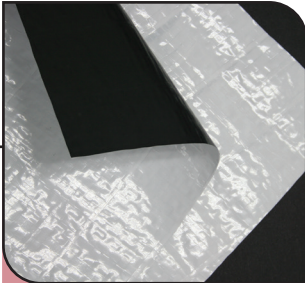
**No
Shifting
in the
ceiling**



**No
Settling
in the
ceiling**



**No
Sagging
in the
walls**



Ag Dura fabric:

A durable lightweight fabric, with an extra dense and sturdy weave, designed for an agricultural ceiling, or a heavy-duty vapor barrier for the walls. It will allow you to create a dark or light house because it offers both black and white sides.



Ag 3M[®] tape:1

Custom propriety woven seal tape for our Ag Dura Fabric to insure long lasting durable adhesion creating airtight seams.



Ag Banding:

Specially designed banding to support the fabric, hold the insulation in place and withstand the harshness of the poultry environment.




ECOSE[®] technology kraft faced fiberglass blanket:2

Our fiberglass blankets, for the walls, with ECOSE[®] technology are faced with kraft paper and provided with two staple tabs to avoid sagging over time.

¹ 3M[®] is a registered trademark and is used with their permission.

² ECOSE[®] is a registered trademark of Knauf Insulation and is used with their permission.



2008 test house where cellulose was
blown alongside Stable R.

DON'T ARGUE THE FACTS!

ThermaCare Stable is a game changer. But don't take our word for it. University studies show the importance of blown-in stabilized fiberglass and faced blankets over time in ceilings and walls. Our proprietary and patented blown-in ceiling blanket, Stable R will not settle, shift or decompose — keeping utility costs under control. ThermaCare Stable avoids condensation, cold and hot spots on birds (radiant heat) and prevents the loss of thermal performance. ThermaCare Stable envelope insulation system, will contribute to an improved bird's performance — they will grow to their full potential.

Sagging: Stable R blown-in insulation creates a fiberglass blanket that will not settle, meaning no loss of R-value or thickness. There is no reason to re-insulate a Stable R ceiling over time.

Settling: Stable R blown-in fiberglass will not settle, meaning no loss of R-value. There is no reason to re-insulate Stable R over time.

Shifting: Stable R blown-in a fiberglass blanket adheres to itself and its environment, preventing movement over time. It is a blown, stabilized, fiberglass with a water-activated bio-based binder. It acts as a consistent stabilized insulation blanket once installed by a certified installer.

- Stable R proven by university studies:
No shifting, settling or decomposing
- No re-installation of insulation needed
- Small percentage of the overall housing cost,
large return on investment over time
- ECOSE® technology Kraft faced fiberglass
blanket with tabs will not sag over time
- ECOSE® technology Kraft faced fiberglass
blanket and Stable R blown-in fiberglass resist
darkling beetles and are non-combustible (ASTM
E136)

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The use of non-stabilized insulations need to be avoided, not only will they settle, sag and shift the insulation value will deteriorate year after year and have a direct impact on the performance of the house and birds and increase the utility bills year after year.

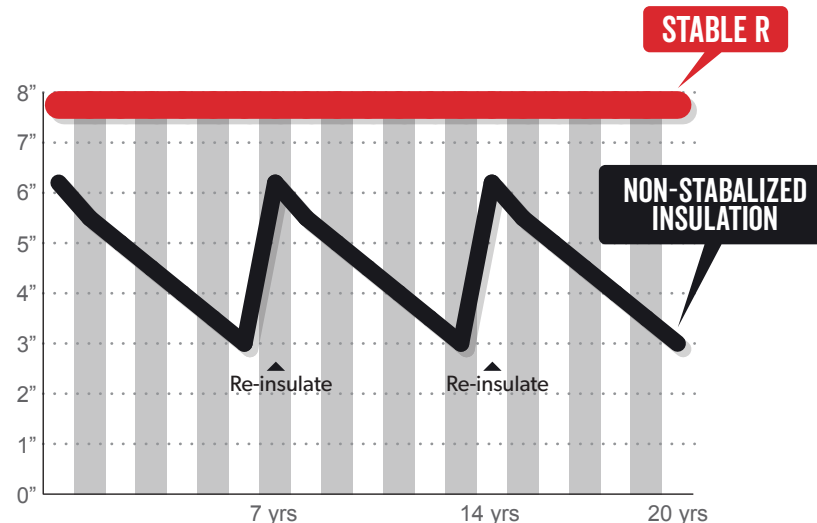
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**PRICE IS WHAT YOU PAY.
VALUE IS WHAT YOU GET.**



What's the value of ThermaCare Stable? Healthier birds. Lower costs. No need for re-insulation of the ceiling in the future. We are the true envelope solution for growers. ThermaCare Stable is made with durable components to ensure long-term, airtight, thermal performance for your chicken houses. University studies have proven that Stable R will not settle, decompose or shift over time, despite all the vibrations in your house caused by the tunnel ventilation, feeders, air exchange and other variables. Once Stable R is installed by a certified installer, the stabilized blanket in the ceiling will keep its performance over the lifetime of your house and won't need to be re-blown after time. With ThermaCare Stable, there's no need to worry about rising costs due to the deterioration or sagging of the insulation in the walls or ceiling. Your flock will grow to their full potential year after year.

- ✓ Small percentage of the overall housing cost, large return on investment over time
- ✓ Minimize the utility costs over the lifetime of your house
- ✓ Get what you pay for with our certified installer program
- ✓ Performance over the life-time of your house



A leaking sill seal is the equivalent to leaving a man door wide open.



**SUSTAINABILITY,
NOW AND FOR THE FUTURE.**



Part of what makes ThermaCare Stable a comprehensive solution is the fact that it has multiple benefits: it's good for you, your birds and the environment. In creating a perfect growing environment we are able to help you minimize your carbon footprint. Not only by using less fossil fuels and electricity for heating and cooling, but also by minimizing your Green House Gas emissions from your litter. Stable R and ECOSE® kraft faced-blankets are made from renewable and abundant resources, such as recycled glass and sand. We're proud to be putting glass bottles back to work rather than into landfills. Our products are made with a minimum of 50% post-consumer recycled glass — about 26 million bottles each month, all collected at curbside. Additionally, the Stable R will not need to be re-insulated over time — which is good for your wallet, as well as the environment. Through the development of revolutionary solutions like ECOSE® Technology, we continually focus our efforts on providing solutions that reduce energy consumption and save resources to positively affect the lives of people today and tomorrow.



- ECOSE® Technology batts and rolls are made of at least 50% post-consumer recycled glass
- Direct impact on reducing your carbon footprint
- No re-installation of insulation needed in the ceiling and walls



Our insulation products have an inherent impact on energy consumption as they save hundreds of times more energy in use than is required to manufacture them.



Certified Installer loading blowing machine hopper with Stable R



**CERTIFIED THERMACARE STABLE INSTALLER:
TO ENSURE LIFETIME PERFORMANCE.**

At Silvercote, we understand your needs and concerns. That's precisely why we developed ThermaCare Stable. It is a high-quality, envelope insulation system backed by our Certified Installer Program. Installers who have obtained this qualification have had on-the-job training by one of our insulation specialists. Each year we will be revisiting our certified installer to check the optimal application of our products. For your peace of mind, you will be able to see their certification on the job site — and you will receive a certificate once the job is done. Our Silvercote insulation specialists can also be contacted by your installer if they have any questions regarding the installation of ThermaCare Stable. We want to ensure the best possible installation for your ideal growing environment for the life of the houses.

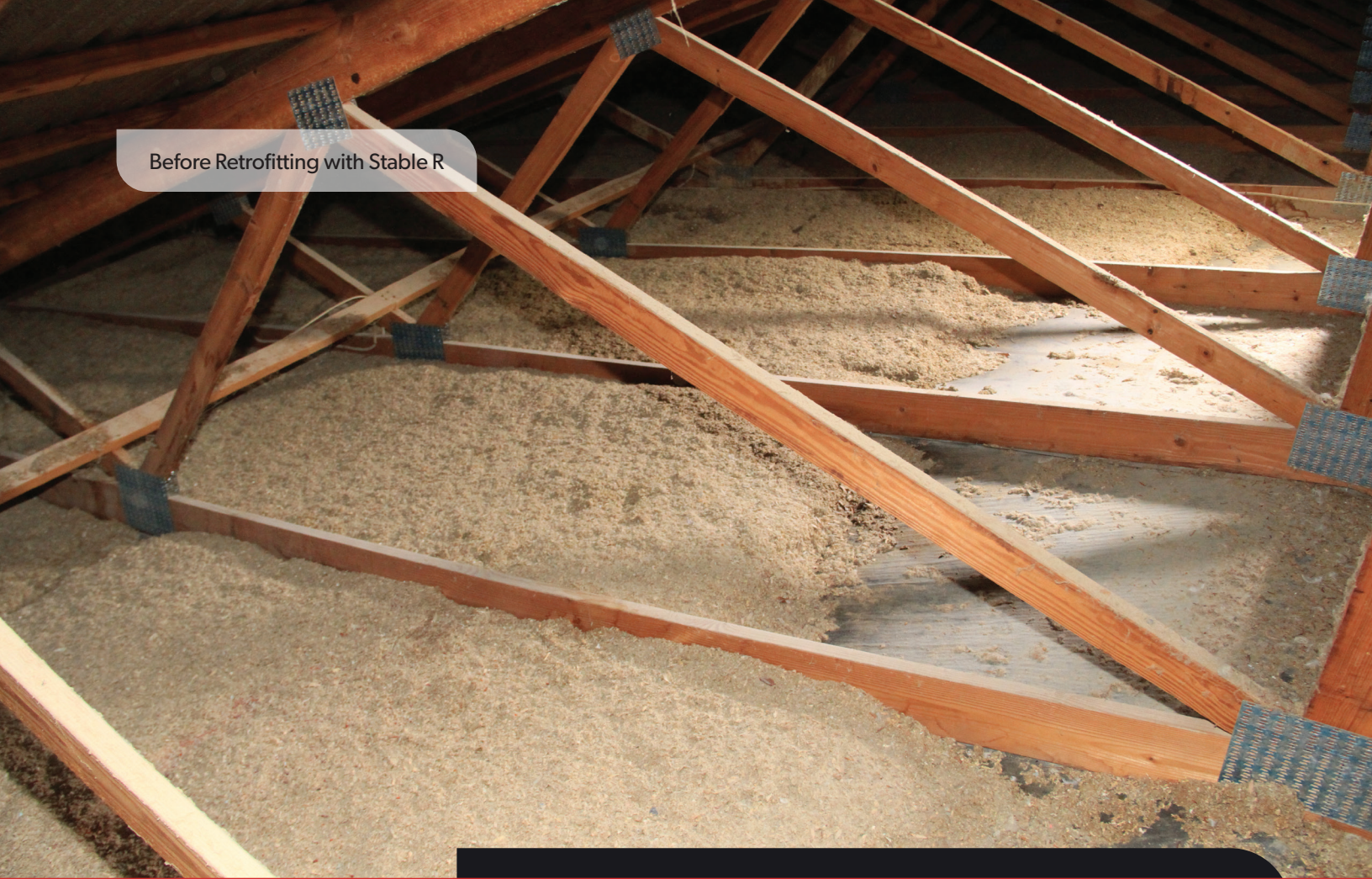
- Get what you pay for
- Training and support on jobsites
- Approved equipment list
- Field test protocols
- Clear installation guidelines



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It is our responsibility as the industry leader to provide simple details for complex issues and support our certified installers to give and ensure you the performance you pay for.

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A photograph of an attic space showing wooden rafters and joists. The floor is covered with a layer of loose, yellowish-brown insulation material, likely cellulose or fiberglass, which is unevenly distributed and appears to be settling or missing in some areas. A white text box is overlaid in the top left corner.

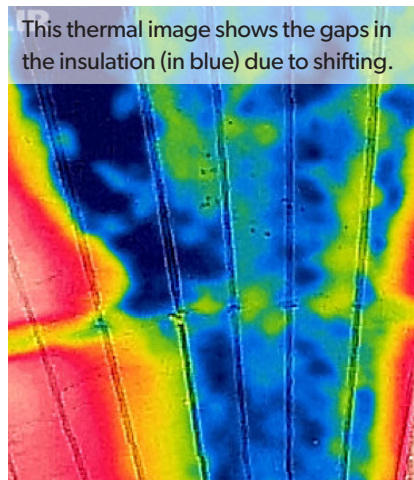
Before Retrofitting with Stable R

A photograph of a construction worker in a dark shirt and safety gear, wearing a respirator mask, working in an attic. The worker is using a large, flexible, corrugated tube to blow white, fluffy insulation material into the space between the wooden rafters. The insulation is being applied in a more organized and complete manner than in the top image. A large black text box with a red border is overlaid in the center, and a white text box is in the bottom left corner.

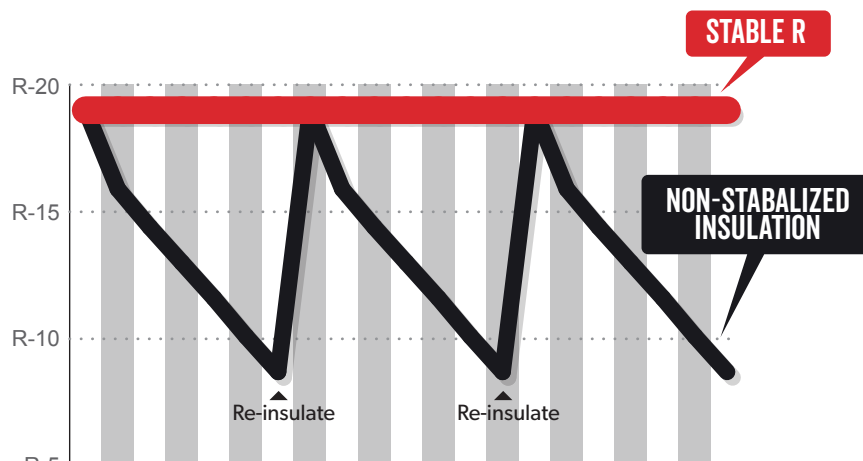
**RETROFIT:
ENJOY INSTANT SAVINGS**

Retrofitting with Stable R

Your insulation could be costing you money! Take a look at your currently installed insulation. You might be surprised at what you would find. During our visits to farms, we often discover shifted and settled insulation. It is the cause of major condensation problems, uneven hot and cold spots, or radiating heat penetrating the outer shell of the poultry house. Not only is this harmful to your flock, but it sends money straight through the roof, literally. Heating and cooling costs will rise over time because the shifting causes un-insulated areas. Condensation can increase as well, resulting in a major ammonia threat that creates poor pulmonary health and blistering of the paws. The good news is, retrofitting your ceiling with Stable R stabilized insulation is fast and easy. With no birds in the house in between two flocks, the Certified Installer is able to drive into the house and with a hose re-insulate the ceiling within hours.



- ✓ Go check your attic insulation
- ✓ Money can go through the roof
- ✓ Re-insulate between flocks fast and easy
- ✓ Positively impacts your utility costs



**THERMACARE STABLE:
KNOW THE FACTS**



Stable R is more expensive.

The initial installation costs of Stable R are higher, but University studies have proven that Stable R will not decompose, settle or shift over time. Un-stabilized insulation will have to be re-installed several times in the lifespan of a chicken house, with additional heating costs for the yearly decreasing R-value. You will be able to save the additional costs many times over. And enjoy the fact of not having to worry about the shifting insulation, hot and cold spots and additional condensation problems.

Insulation in the ceiling is more than enough.

The wall insulation and the vapor barrier have direct impact on the heating and cooling cost. Not only does it create a tighter house and reduce heat loss through the walls, but it can also eliminate any hot, cold spots and condensation. The tunnel ventilation and litter control will be more optimal at lower cost.

Will ThermaCare Stable contribute to drier litter?

Yes, it will! In creating a tighter house with less temperature influences from outside of the house, it is easier to manage a constant growing environment for your birds. The ThermaCare Stable envelope insulation system will help you to guarantee the optimal settings of your tunnel ventilation throughout the variations needed during a flock. Problems with ammonia due to high humidity, resulting in higher ventilation costs can be avoided.

What is the cause of condensation against the ceiling fabric?

When an un-stabilized insulation is used in the attic it will start to settle and shift out of the peak because of the vibration caused by the tunnel ventilation system. Even the attic inlets can cause un-stabilized insulation to shift. Once the insulation has shifted, all that is left is the ceiling fabric. This cold spot –sometimes 12' wide the whole length of the house – is an uninsulated part of the ceiling. The air above the ceiling fabric is much colder than the inside of the house, so the high humidity in the house leads to condensation against the cold surface of the ceiling fabric. In addition to the discomfort of the chickens, the droplets of water add to the moisture of the litter, resulting in caking and damp areas which lead to ammonia blisters on the paws. Plus, money for heating and cooling literally disappears through the roof.

How can I find a certified installer?

You can always contact your sales representative at Silvercote at 864-603-2836. They will be able to provide you with a list of certified installers for your area.

More facts on the next page ...

ThermaCare Stable: Know the Facts - continued

What causes condensation in a chicken house?

One of the main challenges when you want to control the moisture in a poultry house is trying to exchange cold outside air with warm humid inside air. The warm inside air is able to hold more water than the colder outside air. If air exchanges are too low the moisture can build up in the litter, adding to the ammonia concentration in the house. When the warm moisture-laden inside air touches any surface with a lower temperature the water (retained in the warm air) will condense into droplets. Making sure the attic and the walls are covered with a blanket of stabilized insulation prevents the moisture from condensing.

Is fiberglass fire safe?

ECOSE® technology Kraft faced fiberglass blanket and Stable R blown-in fiberglass are non-combustible. (ASTM E136). Fiberglass itself is inorganic and, as such, is noncombustible. In fact, unfaced fiberglass insulation is accepted as a fire block in wood frame walls. The Uniform Building Code says: Fire blocks may also be of gypsum board, cement asbestos board, mineral fiber, glass fiber, or other approved materials, securely fastened in place.

Do rolls over the peak create a solution for un-stabilized insulation shifting out of the peak?

When installing rolls of fiberglass over the peak of the ceiling, the roll insulation is not able to shift, but the other ceiling surfaces are prone to shifting which resulting in hot and cold spots. Nevertheless, un-stabilized insulation will still settle over time.



FOR MORE INFORMATION (864) 603-2836 · AG.INFO@SILVERCOTE.COM