

What is ECOSE™ Technology?

A revolutionary new natural and more sustainable binder made from rapidly renewable organic material, not petroleum-based chemicals commonly used in other insulation binders.

Why is it brown?

We didn't choose brown, it just came naturally. Brown is the natural color of fiber glass insulation made with ECOSE™ Technology.

How is ECOSE™ Technology revolutionary?

ECOSE™ Technology is made from rapidly renewable organic materials and does not contain phenol, formaldehyde, acrylics or artificial colors.

How is ECOSE™ Technology better for the environment?

By eliminating nonrenewable petroleum-based chemicals, ECOSE™ Technology has up to 70% lower embodied energy, shrinking our carbon footprint and reducing manufacturing emissions.



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**Knauf Air Handling Insulation
with ECOSE™ Technology**
Bonded with Nature.



Knauf Duct Liner E-M, Eclipse Air Duct Board, Air Duct Board-M, and Rigid Plenum Liner products are certified for indoor air quality by The GREENGUARD Environmental Institute, a global, non-profit organization, providing the world's leading guide to certified low emitting interior products and building materials through independent, indoor air quality laboratory testing. www.greenguard.org.



Knauf Duct Wrap products are certified for indoor air quality as a low emitting product by The GREENGUARD Environmental Institute to both the GREENGUARD Certification ProgramSM and the more stringent GREENGUARD For Children and SchoolsSM standard. www.greenguard.org.

The GREENGUARD INDOOR AIR QUALITY CERTIFIED Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute.



At Knauf Insulation, we manufacture a wide variety of products that serve a common goal, helping to make the most of our planet's energy resources. A family-owned global company, we understand and are committed to high standards in quality, performance and environmental responsibility. Every step we take today toward energy conservation helps ensure better lives for generations to come.



LEED Eligible Product Use of these products may help building projects meet green building standards as set by the Leadership in Energy and Environmental Design (LEED) Green Building Rating System. Credit 4.1 - 4.2 Recycled Content Credit 5.1 - 5.2 Regional Materials

These quality products from Knauf Insulation set the new industry benchmark for sustainable air handling insulation. This represents a level of sustainability never before achieved.



Knauf Eclipse™ Air Duct Board and Air Duct Board-M with ECOSE™ Technology

Knauf Eclipse Air Duct Board and Air Duct Board-M are designed for commercial and residential air handling installations for cooling, heating, or dual-temperature service where good temperature control and noise absorption are required.

They are made with fiber glass bonded with ECOSE Technology and formed into rigid, rectangular boards faced on one side with a fire-resistant foil-scrim-kraft (FSK) vapor retarder and a lightweight black fiber glass mat on the airstream surface. Available in EI-475 or EI-800. Both types are available with a butt edge or a factory-molded shiplap edge. The airstream surface of Knauf Eclipse Air Duct Board and Air Duct Board-M are treated with an EPA registered, antimicrobial agent that prevents growth of mold, fungus or bacteria in accordance with ASTM C 1071, G21 and G22.

- Deep black mat airstream surface minimizes visibility at venting points.
- Consistent density helps prevent tenting, making fabrication and handling fast and easy in the shop and on the job site.
- Reduces noise generated by air turbulence and mechanical equipment for quiet, efficient air delivery, plus provides excellent temperature control.
- Molded shiplap edge on all thicknesses, gives a tighter seal and stronger joint.
- GREENGUARD® Certified for superior indoor air quality (IAQ) performance.
- Air Duct Board-M with Hydroshield® Technology for enhanced water hold-out.
- Air Duct Board-M has greater airstream surface durability.

The new air handling products from Knauf Insulation combine:

- Sand, one of the world's most abundant and renewable resources,
- Post-consumer recycled bottle glass and
- ECOSE™ Technology, a revolutionary new highly sustainable, natural binder.

This is the next generation of sustainable insulation, made with ECOSE Technology...naturally from Knauf.

Knauf Friendly Feel® Duct Wrap with ECOSE™ Technology

Knauf Friendly Feel Duct Wrap with ECOSE™ Technology is used as an external insulation on commercial or residential heating or air conditioning ducts. It is suitable for the exterior of rectangular or round sheet metal ducts and spaces, or surfaces where temperature and condensation must be controlled.

This thermal and acoustical insulation is made from highly resilient, inorganic glass fibers and bonded by ECOSE Technology. It is available unfaced, with a multi-purpose foil-scrim kraft (FSK) jacket and with a white or black metalized polypropylene-scrim-kraft (PSK) jacket.

- Ideal for cooling, heating or dual temperature service.
- Meets the most stringent IAQ tests—GREENGUARD For Children & Schools™ and California's Section 01350 standard.
- Both FSK and PSK facings offer exceptional durability and performance for exposed applications.
- KwikStretch® Markings allow for easier, faster measurement of stretch-out lengths.
- White and Black PSK facings are a desirable solution for exposed ductwork because of their appearance and resiliency.

Knauf Duct Liner E•M with ECOSE™ Technology

Specifically designed as an interior insulation material for sheet metal ducts used in heating, ventilating, and air conditioning. Provides an optimum combination of efficient sound absorption, low thermal conductivity, and minimal airstream surface friction.

Knauf Duct Liner E•M is a flexible, mat-faced insulation made from inorganic glass fibers bonded by ECOSE Technology with an encapsulant edge coating. It is faced with a tightly bonded mat to give the airstream surface a smooth, tough surface, resisting damage during installation and operation. The encapsulant edge coating eliminates airstream surface flaring.

- Consistent base blanket is easy to cut and use with all fabrication processes.
- Stands up to abuse—Duct Liner E•M's tough mat facing is durable enough to withstand the usual wear and tear.
- Excellent sound absorption reduces noise from fans and mechanical equipment as well as cross-talk and air movement.
- GREENGUARD® Certified for superior indoor air quality (IAQ) performance.
- Low thermal conductivity provides better temperature control and lowers operating costs.

Knauf Rigid Plenum Liner with ECOSE™ Technology

Knauf Rigid Plenum Liner is specifically designed as an interior insulation material for heating, ventilating, and air conditioning plenums and sheet metal ducts. It offers an optimum combination of efficient sound absorption, low thermal conductivity, and minimal air surface friction.

It is a heavy-density fiber glass board insulation made from inorganic glass fibers bonded by ECOSE Technology. Its base board is amber with a natural brown top layer of fiber glass. A black polymer overspray is applied to the airstream side for a smooth, tough finish.

- Greatly reduces noise from fans and mechanical equipment, as well as noise from cross-talk and air movement.
- Tough and resilient, withstanding damage from normal handling and shop abuse.
- Low thermal conductivity.
- Fire-resistant, non-corrosive.
- Energy conservation.
- Better temperature control.
- Lower operating costs.
- GREENGUARD® Certified for superior indoor air quality (IAQ) performance.

Knauf Eclipse™ Air Duct Board and Air Duct Board-M with ECOSE™ Technology



- Meets the fire and smoke safety regulations of most federal, state, and local building codes.
- Dark black glass mat airstream surface ensures a smoother airstream surface for a cleaner cut and added durability.
- Portability allows for fabrication and assembly in shop or at job site.

Knauf Friendly Feel® Duct Wrap with ECOSE™ Technology



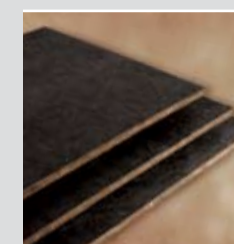
- Conserves energy, lowers operating costs.
- Variety of facings for exceptional durability and performance in exposed applications.
- Significantly reduces heat gain/loss when applied with proper compression.

Knauf Duct Liner E•M with ECOSE™ Technology



- Better acoustical performance with a lower density.
- Durable, with no airstream erosion.
- Has a consistent base blanket and a tough mat surface.

Knauf Rigid Plenum Liner with ECOSE™ Technology



- Greatly reduces noise from fans and mechanical equipment, as well as noise from cross-talk and air movement.
- Withstands damage from normal handling and shop abuse.

For more information call (800) 825-4434 ext. 8283

or visit us online at www.knaufinsulation.us