

THERMAX[®] AG-THERM[™]
INSULATION / FINISH BOARD



Build On Our Knowledge[™]



**The insulation and
interior finish designed for
agribusiness/rural applications.**



Build On Our Knowledge

THERMAX[®] AG-THERM[™] INSULATION / FINISH BOARD

THE INSULATION & INTERIOR FINISH DESIGNED FOR AGRIBUSINESS / RURAL APPLICATIONS

Thermax Ag-Therm Insulation / Finish board is a glass fiber reinforced polyisocyanurate foam core product faced with nominal 1.25 mil embossed white acrylic coated aluminum on one side and a nominal 1.0 mil smooth aluminum on the opposite side. The product is designed as an insulation with an aesthetically pleasing washable white surface.



APPLICATIONS

The product can be used as a building **interior finish and insulation** for wall and ceilings in the following exposed applications not intended for human occupancy:

- **Animal Confinement:** swine, poultry, turkey, horses & cattle.
- **Produce Storage:** potatoes, tobacco, apples, etc.
- **Machine or Equipment Storage**
- **Milk Parlors**
- **Mushroom Growing**
- **Work Areas**



THERMAX® AG-THERM™ FEATURES AND BENEFITS

SUPERIOR INSULATION VALUE

Ag-Therm is first and foremost an insulation which **helps to foster optimum animal growth (maximize weight gain) by reducing heat gain or loss inside the confinement environment.**



It helps to control temperatures in produce storage structures where temperature is critical to produce life. Also, Ag-Therm provides for a more comfortable work environment when working on equipment.

PRODUCT THICKNESS AND STABILIZED R-VALUE

Nominal Board Thickness	1/2"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"
R-Value @ 75°F mean temp.	3.6	5.4	7.2	9	10.8	12.6

Nominal Board Thickness	2"	2 1/4"	2 1/2"	2 3/4"	3"
R-Value @ 75°F mean temp.	14.4	16.2	18	19.8	21.6

Stabilized R-values were determined by ASTM C 236/ C 518 in accordance with the procedures in Federal Specification HH 1-1972, ASTM C 1289 and the State of California Insulation and Quality Standards. R means the resistance to heat flow. The higher the R-value the greater the insulating power.

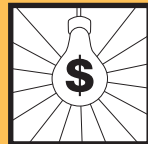
1.25 MIL EMBOSSED ALUMINUM WITH WHITE ACRYLIC SURFACE FINISH

- Ag-Therm with the tough acrylic coat aluminum surface can be **pressure washed up to 1000 psi for maximum cleaning of confinement buildings or other uses.**



NOTE: SPRAY TIP MUST BE GREATER THAN 15 DEGREES AND 3 FT. MINIMUM DISTANCE FROM SURFACE.

- The white surface reflects light and **helps reduce light energy cost and improves the work and growing environment.**



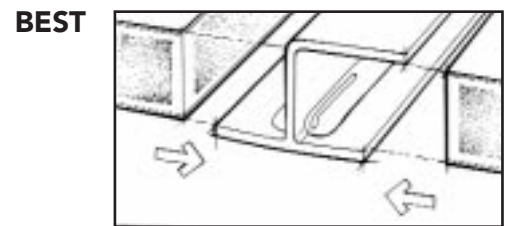
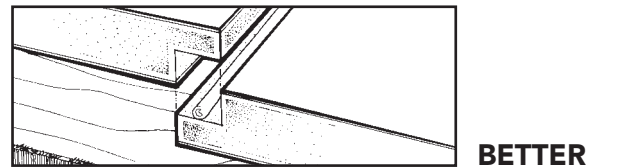
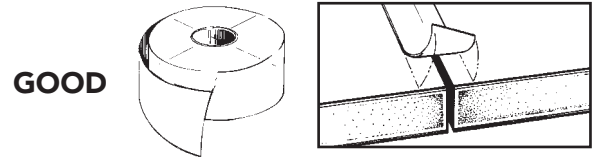
- Moreover, the tough aluminum/ acrylic surface finish **helps protect the insulation core and structure from the harsh environment and moisture common in animal confinement and produce storage buildings.**



WATER/MOISTURE VAPOR RESISTANT PRODUCT WITH THERMAX JOINT CLOSURE SYSTEMS

Thermax Ag-Therm is impermeable to water and moisture vapor and must be installed with one of the following joint closure systems:

- Thermax white coated aluminum foil tape adhered over the butt joints.
Joint quality: **GOOD**
- Factory produced ship lap joint used with sealant.
Joint quality: **BETTER**
- Thermax white PVC clip strip system used with sealant.
Joint quality: **BEST**



This high water/moisture resistant product/joint system prevents moisture condensation within and behind the insulation and minimizes structural wood decay and metal corrosion.

The system also minimizes condensation or the common rain inside the structure due to cold weather condensation on uninsulated metal roofs.



DESIGN FLEXIBILITY

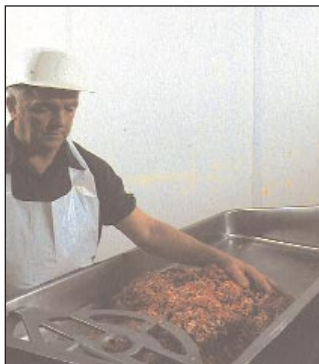
Thermax Ag-Therm comes in a range of thicknesses from 1/2" to 3" and lengths up to 30 feet. **This allows for sizing to meet specific building designs and R-value requirements which will reduce material and labor costs.**



UNITED STATES DEPARTMENT OF AGRICULTURE (USDA)

Thermax Ag-Therm meets the USDA/FSIS guideline requirements for use in federally inspected food processing establishments.

Based on the aforementioned Ag-Therm can be used in food processing facilities where the product does not come in contact with food.



AG-THERM ASSURED FIRE PERFORMANCE/INSURANCE PREMIUMS

Thermax Ag-Therm is Classified by Underwriters Laboratories Inc. for the Insulated Wall-Ceiling Constructions Category (UL 1040) and the Interior Building Constructions Category (UL 1715, UBC 26-3). **These classifications are recognized by the Insurance Services Office (ISO) and other insurance authorities as a basis to obtain the lowest possible insurance rates in insulated structures.**



**Underwriters Laboratories Inc.®
classified**

Thermax Ag-Therm is Approved by Factory Mutual Research Corporation as Class 1 Wall and Ceiling panels for use as an exposed insulation / interior finish when installed as described in the current edition of the FMRC Approval Guide (FMRC Standard 4880). **This assures a basis to gain the lowest possible insurance rates through the Factory Mutual System.**



Subject to the conditions of Approval as Class 1 wall and ceiling panels when installed as described in the current edition of the FMRC Approval Guide.

AG-THERM ASSURED WIND UPLIFT PERFORMANCE/INSURANCE PREMIUMS

Thermax Ag-Therm is Classified by Underwriters Laboratories Inc. for Wind Uplift Resistance (UL 580) and is shown to be equal to or superior to glass fiber insulation in wind uplift performance. Moreover, Thermax Ag-Therm is listed in many UL roof deck construction numbers in the UL Roofing Materials and Systems Directory. **These classifications will allow for lower insurance premiums.**



**Underwriters Laboratories Inc.®
classified**

ASSURED INSULATION PERFORMANCE

Ag-Therm is continually tested by the National Association of Home Builders Research Center to verify insulation performance. **Accordingly, Celotex offers a 15 year limited warranty on R-value (thermal resistance).**



STRENGTH (SPANABILITY)

Ag-Therm has an allowable clear span of 5 feet (1" or greater) over/under roof purlins or roof trusses. And 8 feet (1" or greater) on walls/attached to girts **which saves on installation time and design cost.**

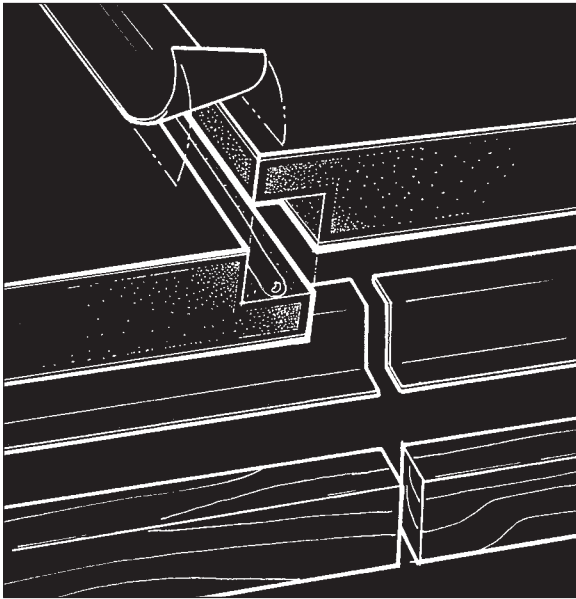


INSTALLATION

ROOF/CEILING APPLICATION - ATTACHED TO PURLIN OR TRUSS

Thermax Ag-Therm interior Insulation / Finish Board can be installed **EXPOSED** to the interior on the inside or outside of wood or metal purlins or trusses.

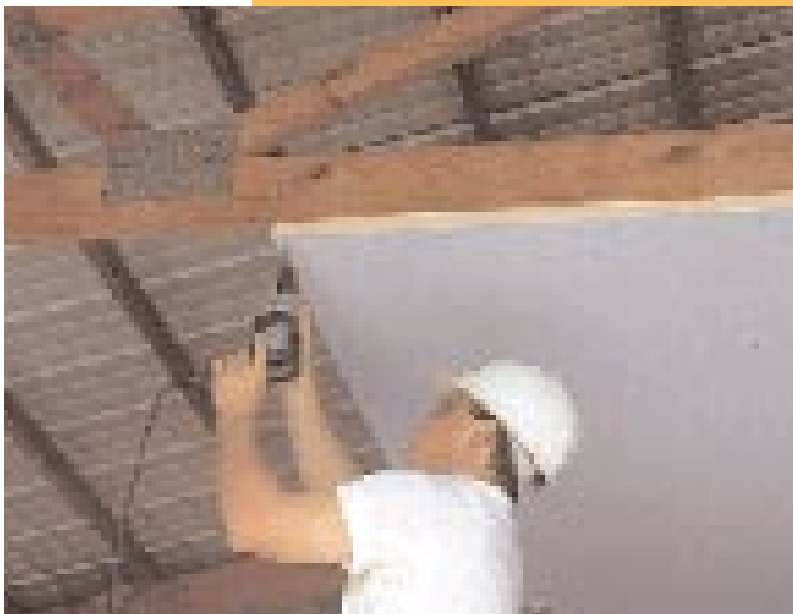
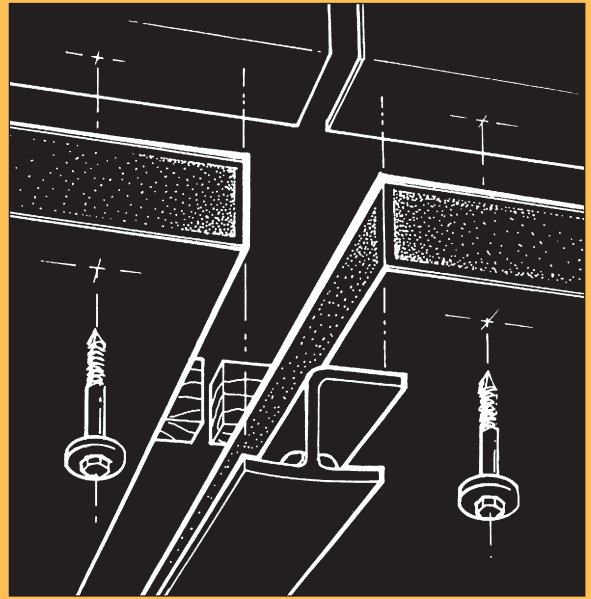
METAL & POST FRAME WOOD BUILDINGS: ABOVE PURLINS OR TRUSSES



JOINT TREATMENT OPTIONS

JOINT QUALITY	TECHNIQUE
BEST ✓	PVC Clip Strip Joint Closure
BETTER	Shiplap Joint
GOOD	Joint Taping

METAL & POST FRAME WOOD BUILDINGS: BELOW PURLINS OR TRUSSES

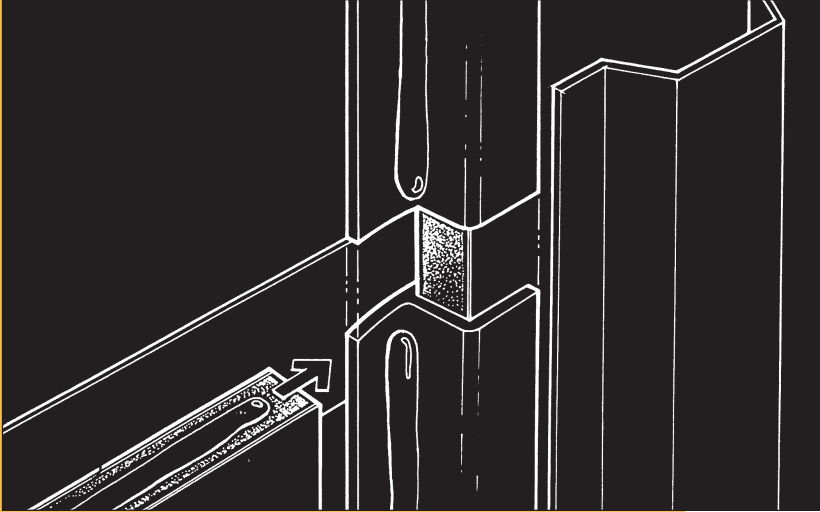


WALL APPLICATION - ATTACHED TO GIRTS

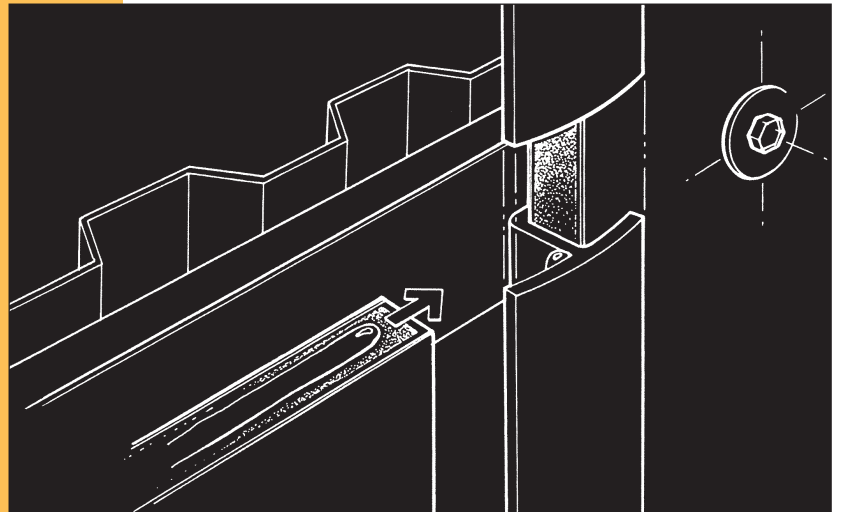
Thermax Ag-Therm interior Insulation / Finish Board can be installed **EXPOSED** to the interior on the inside or outside of wood or metal girts.



METAL & POST FRAME WOOD BUILDINGS: OUTSIDE GIRTS



METAL & POST FRAME WOOD BUILDINGS: INSIDE GIRTS



JOINT TREATMENT OPTIONS

JOINT QUALITY	TECHNIQUE
BEST ✓	PVC Clip Strip Joint Closure
BETTER	Shiplap Joint
GOOD	Joint Taping

WASHABILITY REQUIREMENT

Ag-Therm can be pressure washed up to 1000 psi with any spray tip greater than 15 degrees with a minimum of 3 feet from the surface.

CAUTION: Prolonged pressure washing at the board joints will cause the facer to disbond from the insulation board. Always point spray nozzle at the surface no closer than the minimum distance.

Additional Information

Further information concerning the products, systems, and test methods described in this publication can be obtained by contacting Celotex Corporation, Tampa, or one of its Regional Sales Offices listed below.

The systems in this book are for illustration purposes only. The structural integrity of such systems is the responsibility of the design engineers, architects, component manufacturers, applicators and erectors.

Insect Damage: In environments where insects and rodents are prevalent, regular extermination of pests is recommended to prevent damage to the insulation.

WARNING:

Celotex® Thermax® products should be used only in strict accordance with Celotex Application Instructions. When Thermax products are used alone or used with non-combustible building components, they will burn if subjected to a fire of sufficient intensity, but will not contribute to the rapid spread of fire. Thermax products and other insulations, when used with exposed combustible materials may contribute to the rapid spread of fire.

All common building materials like wood and Thermax Insulation products release toxic smoke if ignited.

Thermax foil-faced products when applied in accordance with Celotex' instructions, meet requirements of the model building codes, various insurance authorities and other regulatory bodies in a wide variety of recommended applications.

Characteristics, properties or performance of materials manufactured by Celotex Corporation herein described are derived from data obtained under controlled test conditions. Celotex makes no warranties, express or implied, as to their characteristics, properties or performance under any variations from such conditions in actual construction. Celotex Corporation assumes no responsibility for the effects of structural movement.

ANY DEVIATION FROM THESE INSTRUCTIONS VOIDS ALL WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Thermax Insulation Board products are protected by one or more of the following U.S. Patents:

3,903,346	4,028,158	4,169,921	4,346,133
3,940,517	4,043,719	4,284,683	4,386,983
4,411,949	4,572,865	RE30984	

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Build On Our Knowledge™

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