



TOTAL INSULATION



Energy efficiency for construction projects...
Always in harmony with the environment...



PRODEX® Comfort in harmony with the environment

www.prodexcr.com

PRODEX®



● PRODUCT DESCRIPTION:

Prodex® is a reflective thermal insulation material developed under the highest quality standards and designed to save energy by eliminating the radiant heat produced by roofs, walls and floors. Additionally, it protects your house, business or project, offering **COMFORT** throughout the year.

● BENEFITS:

- ✓ Allows saving energy in air conditioning.
- ✓ Protects your construction from the heat in warm climates.
- ✓ Keeps the temperature comfortable in cold areas.
- ✓ Does not promote the development of fungus or bacteria.
- ✓ High quality finishes.
- ✓ Decreases the noise caused by rain.
- ✓ Waterproof, hygienic and resistant to agrochemicals, acids, bases, oils, coatings and detergents.
- ✓ Light and easy to handle and install.
- ✓ Toxic gas free.
- ✓ CFC free (*). Does not harm the ozone layer.
- ✓ Allergen free.



100% closed cell polyethylene foam laminated with aluminum on one or both sides and various thickness levels.



* CFCs (chlorofluorocarbons) These substances reach the stratosphere, where they are dissociated by ultraviolet radiation, releasing the chlorine in their composition and triggering the ozone depletion process. It has been proven that the appearance of the ozone layer hole over Antarctica during the beginning of the Austral spring is related to the photochemistry of chlorofluorocarbons (CFCs).



ROOF INSULATION SOLUTIONS



PRODEX[®]

THERMIC

AD ALUMINIUM + ALUMINIUM

10, 5 and 3mm thick closed cell polyethylene foam laminated with pure aluminum on both sides.

TWO DIFFERENT PRESENTATIONS

AP ALUMINIUM + POLYESTER

10, 5 and 3mm thick closed cell polyethylene foam laminated with pure aluminum on one side and white polyester film on the other.

AD ALUMINIUM + ALUMINIUM

Three thickness levels

AD 10 mm

AD 5 mm

AD 3 mm

- ✓ Increases energy savings in temperature controlled environments with air conditioning or heating systems.
- ✓ High flame resistance (Class A fire retardant).
- ✓ 5 and 3mm lateral seals to ensure the foam will not be exposed in the installation process.

| AD INSULATORS | THICKNESS (mm) | WIDTH(m) | LENGTH(m) | M ² POR ROLLO | SQM. PER ROLL | USABLE WIDTH |
|-----------------|----------------|----------|-----------|--------------------------|-------------------------|--------------|
| AD10/DOUBLE ALU | 10mm | 1.22m | 20m | 24.4m ² | 0,414 kg/m ² | 1.17 m |
| AD5/DOUBLE ALU | 5mm | 1.22m | 20m | 24.4m ² | 0,242 kg/m ² | 1.17 m |
| AD3/DOUBLE ALU | 3mm | 1.22m | 20m | 24.4m ² | 0,204 kg/m ² | 1.17 m |

AP ALUMINIUM + POLYESTER

Three thickness levels

AP 10 mm

AP 5 mm

AP 3 mm

- ✓ Offers excellent finishes in installations without ceilings and/or suspended ceilings.
- ✓ Excellent resistance against tearing and high temperatures.

| AP INSULATORS | THICKNESS(mm) | WIDTH(m) | LENGTH(m) | SQM. PER ROLL | WEIGHT PERSQM. | USABLE WIDTH |
|------------------|---------------|----------|-----------|--------------------|-------------------------|--------------|
| AP10/1 ALUM SIDE | 10mm | 1.22m | 20m | 24.4m ² | 0,34 kg/m ² | 1.17 m |
| AP5/1 ALUM SIDE | 5mm | 1.22m | 20m | 24.4m ² | 0,214 kg/m ² | 1.17 m |
| AP3/1 ALUM SIDE | 3mm | 1.22m | 10m | 12.2m ² | 0,184 kg/m ² | 1.17 m |

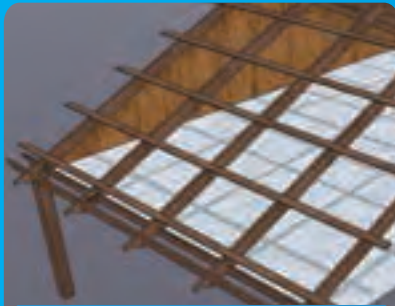
HOW TO CHOOSE YOUR PRODUCT



1 Before you choose the most convenient type of insulator for your construction, you need to define the distance between rafters.



Recommended for the following distances between rafters:



3 mm From 0 to 1.20 meters



5 mm From 1.20 to 2.20 meters

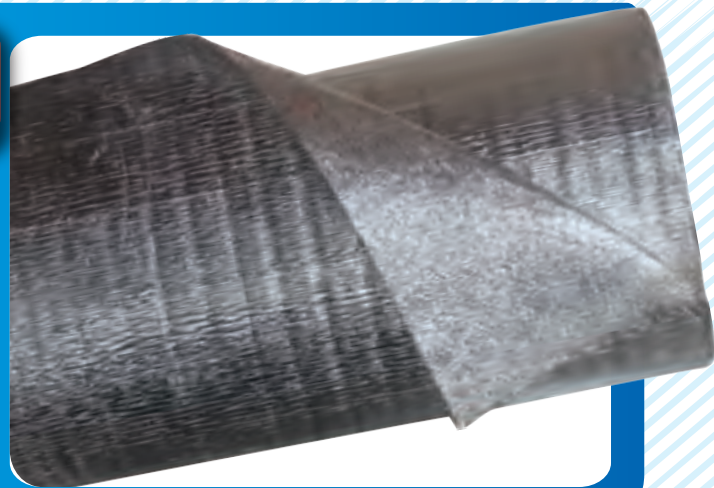


10 mm From 2.20 to 3.50 meters

2 Select the product that benefits you the most.



AD



AP



INSTALLATION METHOD

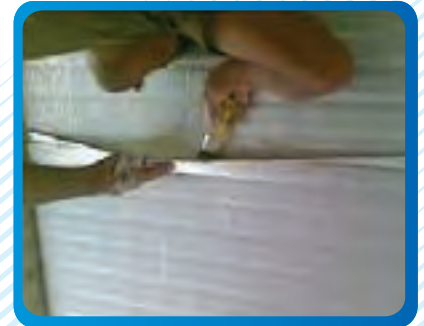


3 Define overlap method required

1. APPLICATION USING CONTACT CEMENT (yellow glue)



Both 3 and 5 mm AP/AD products can be joined together transversely with the use of contact cement to obtain a complete protection against radian heat, guaranteeing that the heat trapped inside the roof does not enter your construction.



2. FAST ACTION APPLICATION



You can request your 3 and 5mm products with built-in Fast Action tape for a fast and easy installation. This reduces labor, material and equipment expenses.

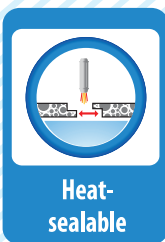


ADF= Aluminum + Aluminum + Fast Action
APF= Aluminum + Polyester + Fast Action

Fast Action = adhesive tape included



3. THERMAL WELDING OVERLAP APPLICATION

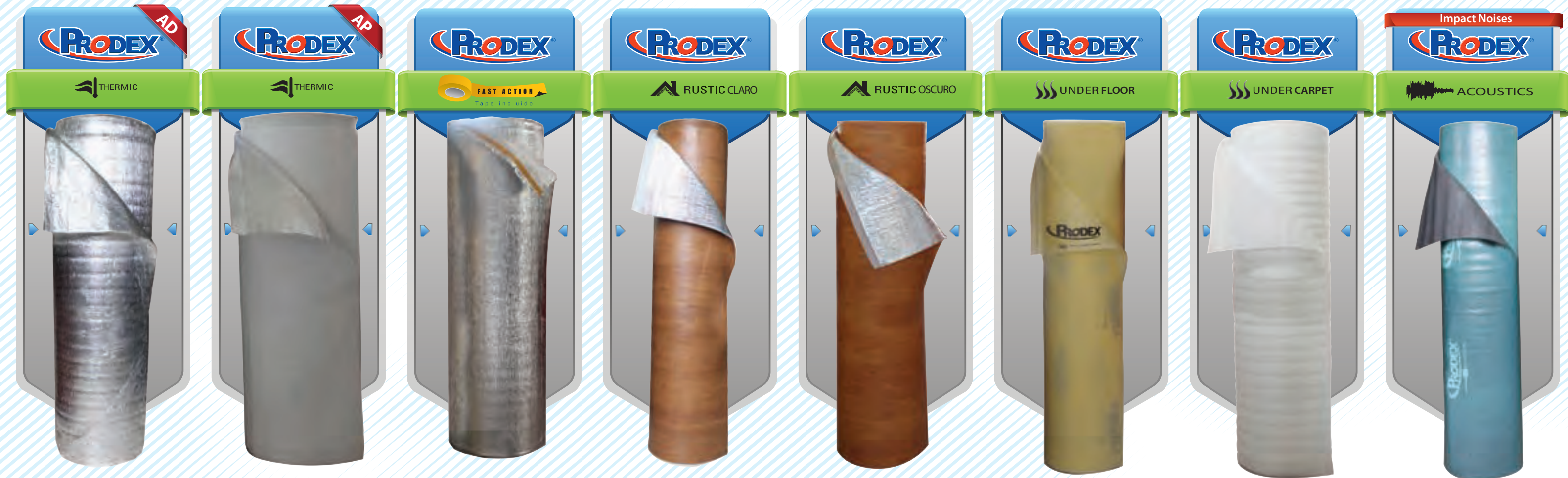


10mm AD/AP products can be joined together transversely by welding the foam (thermal welding) with a hot air pistol. Product rolls are made with a 5mm thick by 5cm width border that allows the insulator to be evenly aligned when installed along the roof, offering an excellent finish and guaranteeing a 100% waterproof seal.



PRODEX®

Comfort in harmony with the environment



Total Insulation

INSTALLATION METHOD

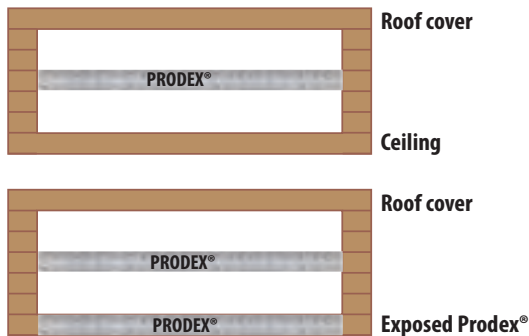


THERMAL RESISTANCE "R" VALUES

Thermal Resistance "R" Values for recommended construction systems

| | |
|---|-------|
| Thermal resistance values with downward heat flow: | |
| With one Prodex® sheet using two 2.64 in air chambers | 15.67 |
| With two Prodex® sheets using two 2.64 in air chambers | 21.10 |
| Thermal resistance values with lateral heat flow: | |
| With one Prodex® sheet using two 2.64 in air chambers | 7.0 |
| With two Prodex® sheets using two 2.64 in air chambers | 9.58 |
| Thermal resistance values with upward heat flow: | |
| With one Prodex® sheet using two 2.64 in air chambers | 6.0 |
| With two Prodex® sheets using two 2.64 in air chambers | 8.24 |

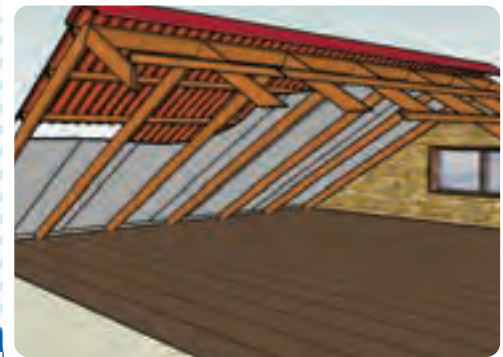
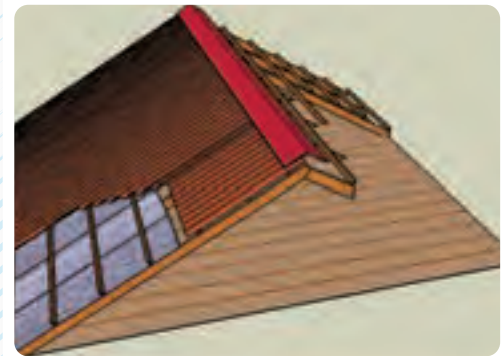
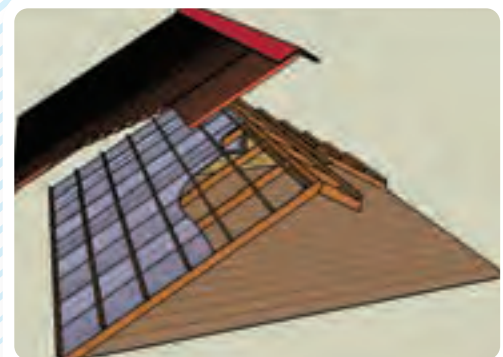
Test method according to ASTM 1116 using a 2x6 in wood frame



Border conditions: 60°F and 90°F, average inner temperature: 75°F
Emitancia 0.03 ASTM 1371-98

"R" FACTORS FOR RECOMMENDED CONSTRUCTION SYSTEMS R FACTOR (*) = THERMAL RESISTANCE

*R Factor: thermal resistance of an insulator that represents the material's ability to oppose the heat flow.



INSTALLATION METHOD

TECHNICAL SPECIFICATIONS

- ✓ 100% closed cell polyethylene cell structure
- ✓ Density: 20 – 30 kg/m²
- ✓ Vapor barrier
- ✓ Emittance: 0.03
- ✓ Waterproof
- ✓ Fungus resistant
- ✓ LAMBDA(*) value: 0.032 w/mk

*LAMBDA:

Thermal conductivity coefficient that expresses the quantity or heat flow that goes through the surface unit of a sample.

FLOOR INSULATION SOLUTIONS



PRODEX[®]

UNDER FLOOR



DETAIL OF A PRE-TENSIONED COMPOSITE FLOOR WITH PRODEX[®] UNDERFLOOR



- 01 Laminated or wood floor
- 02 Prodex[®] UnderFloor
- 03 Pre-tensioned composite floor topping

PRODEX[®]

UNDER CARPET



DETAIL OF CARPETED FLOOR WITH PRODEX[®] UNDERCARPET



- 01 Carpet
- 02 Foam over baseboard area
- 03 Prodex[®] UnderCarpet
- 04 Post-tensioned composite floor topping

1 LAMINATED FLOORS: Prodex[®] Underfloor

Product Description:

2mm thick 100% closed cell polyethylene foam laminated with polyethylene on one side.

Recommended use:

It can be used in both post-tensioned and pre-tensioned composite floors for new buildings and remodeling projects. The insulation is placed on the existing composite floor system, leaving enough material to cover the baseboard area over the wall. Then, the laminated floor can be placed according to the manufacturer's recommendations.

Main Benefit:

This is a 100% waterproof product that keeps moisture from the bottom side of the laminated floor, acting as a membrane that corrects the irregularities of the composite floor, offering a continuous support for the laminated floor.



2 CARPETS: Prodex[®] Undercarpet

Product Description:

3mm thick 100% closed cell polyethylene foam.

Recommended use:

It can be used in both post-tensioned and pre-tensioned composite floors for new buildings and remodeling projects. The insulation is placed on the existing composite floor system, leaving enough material to cover the baseboard area over the wall. Then, the carpet can be placed according to the manufacturer's recommendations.

Main Benefit:

This is a 100% waterproof product that prevents vapor transmission, extending the carpet's average life by avoiding the growth of fungus and bacteria and acting as a membrane that corrects the irregularities of the composite floor and offers a continuous support for the laminated floor.



PRODEX UNDERFLOOR & UNDERCARPET

Comfort with each step

FLOOR INSULATION SOLUTIONS



3 POST-TENSIONED COMPOSITE FLOORS: Prodex® Acoustics

Product Description:

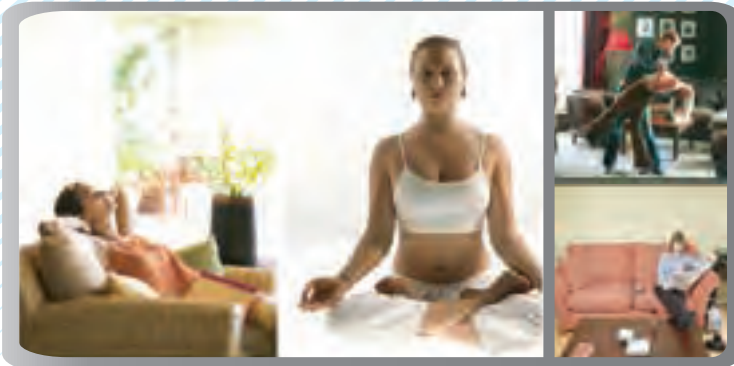
10 mm thick 100% closed cell polyethylene foam laminated with polyethylene on one side.

Recommended Use:

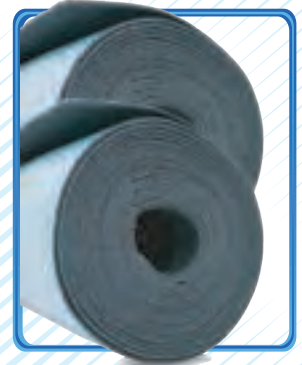
It can be used in new construction projects with post-tensioned composite floors. Prodex® Acoustics for impact noises is used over the floor's topping, leaving enough material to cover the baseboard area over the wall. Then, a 5 cm thick concrete topping supported with structural fiber must be placed to avoid the use of steel reinforcement.

Main Benefit:

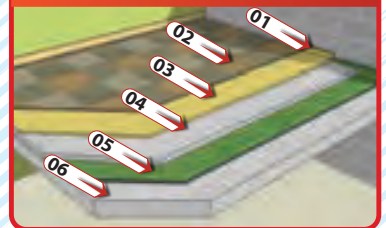
Impact noise isolation with a 19 bBA value (average)



LOWER NOISE. HIGHER QUALITY OF LIFE.



DETAIL OF A POST-TENSIONED COMPOSITE FLOOR WITH PRODEX® ACOUSTICS AND CERAMIC FLOOR TILES



- 01 Foam over baseboard area
- 02 Carpet
- 03 Prodex® UnderCarpet
- 04 Concrete topping (reinforced with nylon fiber)
- 05 Prodex® Acoustics insulator
- 06 Post-tensioned composite floor topping

4 PRE-TENSIONED COMPOSITE FLOORS: Prodex® ThermicFloor

Product Description:

5mm thick 100% closed cell polyethylene foam insulator laminated with aluminum on both sides.

Recommended Use:

It can be used in new buildings that require the use of air conditioning in order to reach the maximum level of energy efficiency.

Main Benefit:

It adds value to the thermal resistance of the floor, decreasing the U-value (U-value = overall heat transfer coefficient) and reducing the risk of condensation inside composite floors.



DETAIL OF A PRE-TENSIONED COMPOSITE FLOOR WITH PRODEX® THERMICFLOOR



- 01 Laminated floor
- 02 Pre-tensioned composite floor system
- 03 Prodex® reflective insulation system
- 04 Ceiling plate

WALL INSULATION SOLUTIONS



Product Description:

1.5 mm thick 100% closed cell polyethylene foam insulator laminated with aluminized polyester on one side and a perforation grid that allows vapor passage.

Recommended Use:

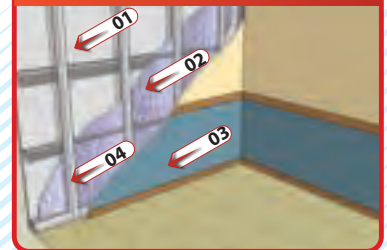
It can be used on new buildings and remodeling projects over walls or facades permanently exposed to sunlight that might generate heat gain inside the building.

Main Benefit:

Allows saving energy in air conditioning. The perforation grid used on Prodex® House Wrap allows vapor passage through its membrane, reducing the risk of condensation by thermal shocks and avoiding the development of fungus or bacteria in insulated walls.



DETAIL OF A DRY WALL WITH PRODEX® HOUSE WRAP



- 01 Dry wall external surface
- 02 Prodex® reflective insulator
- 03 Dry wall internal surface
- 04 Stud & track system

Decorate your ceilings

Excellent finishes!

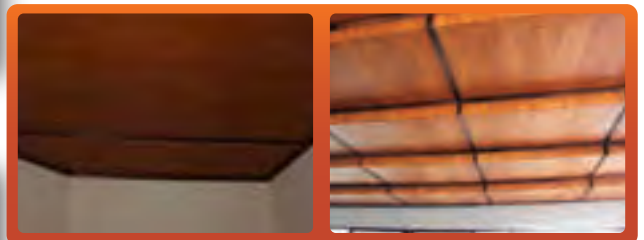
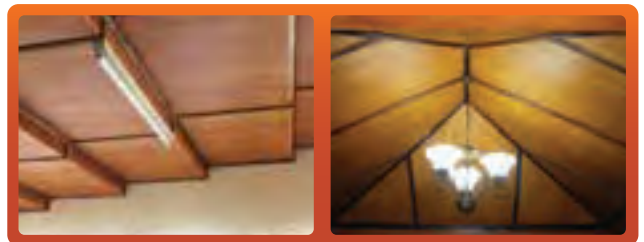


RUSTIC
Thermal Insulation
for wood finish ceilings

Light



Dark



3 GREAT BENEFITS IN ONE SINGLE PRODUCT

 **SAVE ENERGY**

 **INSULATE**

 **DECORATE YOUR CEILING**

PRODEX® OFFERS ENERGY SAVINGS TO BENEFIT OUR PLANET.

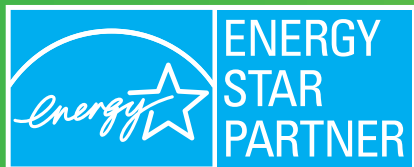
PRODEX® insulation products are recommended in green constructions because they have received the main certifications as a company focused on conserving the environment.

PRODEX® IS ENERGY EFFICIENCY.

Our products offer an opportunity to save energy, which has an impact on energy consumption by improving the efficiency of air conditioning, refrigeration, hot water tanks and heating systems.



PRODEX® HAS RECEIVED INTERNATIONAL CERTIFICATIONS AS AN ENVIRONMENTALLY FRIENDLY COMPANY



This program developed by the U.S. Environmental Protection Agency and the U.S. Department of Energy helps to save money and protect the environment through energy efficient products and practices.

Products certified by ENERGY STAR such as PRODEX® can help to reduce high energy bills and protect the planet.



PRODEX® is part of the International Green Construction Certification System. The companies that belong to this organization guarantee products focused in energy savings, water efficiency, CO2 emission reductions, environmental quality, resource management and impact sensibility. The mission of the USGBC is to transform the path for construction project to be designed and managed under an ecologically and socially responsible, healthy and prosper environment in order to improve the quality of life.



ISO 14001:2004 is a global standard for environmental management systems (EMS). This allows companies to demonstrate their commitment to environmental regulations. The goal of this international regulation is to provide the highest management levels of any organization with a framework to manage the impact of their activities on the environment.



Aluminum on both sides that reflects the heat radiation



Thermal Insulation



Hydrophobic insulation



Prevent condensation



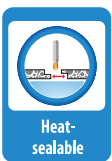
Do not filter water when being nailed



Maintain their thickness over time



Do not promote the passage of insects



Heat-sealable



CLASS A CLASS 1 Fire Rating



REAL WARRANTY 10 YEARS



Business Alliance for Secure Commerce



2350



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Phone number and Tech Support: (506) 2438-2322