

PREMIUM COLLECTION

INSULATED STEEL  
GARAGE DOOR

**Enviropanel™**

The energy  
saving door



Enviropanel™ is a total insulated door system that doesn't cut corners.

Each insulated panel is produced with an energy efficient thermal barrier that effectively separates the inner and outer skins of the panel.

THERMAL BREAK BETWEEN  
INTERNAL & EXTERNAL SKINS

THERMAL BARRIER SEAL  
BETWEEN PANELS

JAMB EDGE SEAL TOP & SIDES

BOTTOM WEATHERSEAL

COMPREHENSIVE WARRANTY



**Doors & Openers®**

THERE'S SO MUCH MORE BEHIND A B&D DOOR

Call **13 62 63** or visit [www.bnd.com.au](http://www.bnd.com.au) for further information



# Enviropanel™



Deep cushioning 'U' shape vinyl seals the gap between the door and floor.



Thermal barrier joints seal off the gaps between each panel.

## ENVIROPANEL™ - THE INSIDE STORY

The door sections are made using two steel skins for the front and back, with a true thermal break which does not transfer the cold and heat from the exterior skin to the interior skin, thus achieving optimal insulation performance. The two skins are laminated with liquid moisture cured, CFC free, Urethane adhesive and sandwiched around a rigid Expanded Polystyrene (EPS) insulated core. EPS is a more stable, higher quality and environmentally friendly insulating material, ideally suited for garage door applications.

*A thermal break is an element of low conductivity placed in an assembly to reduce or prevent the flow of thermal energy between conductive materials.*

## A COMPLETE SEAL SYSTEM

Drafts, or air migration will quickly negate any insulation you have and as the saying goes, "A fridge is only as good as the quality of its seals".

The Enviropanel™ insulated garage door system is available with up to three separate seals to combat air migration, which also keeps out the dirt and dust.

- ✓ Thermal barrier joint seal running the full width of the door, that seals off the inherent gaps between each panel.
- ✓ A deep cushioning 'U' shape flexible vinyl extrusion attached to the bottom panel to seal the gaps between the door and floor.
- ✓ Jamb Edge Seal System to seal any gaps there may be between the door and the opening.



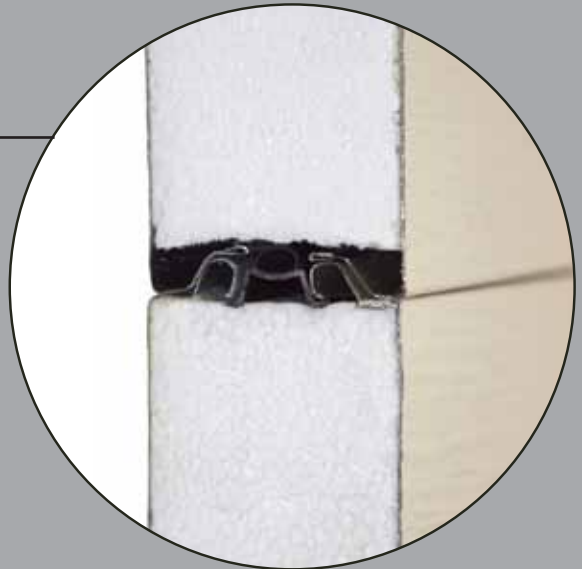
## THE SYSTEM



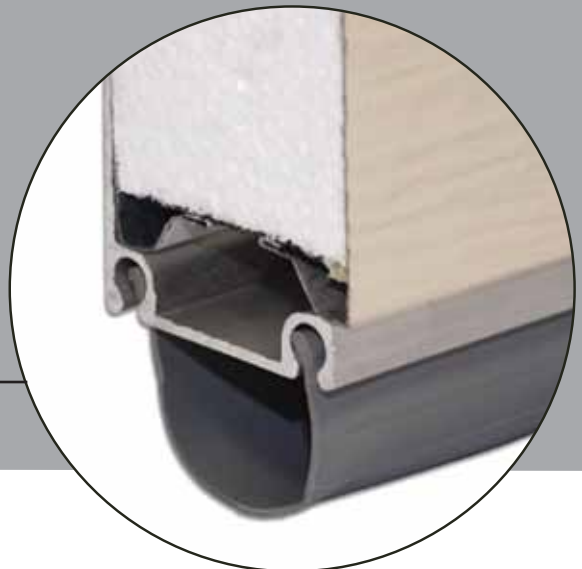
DOOR JAMB EDGE SEAL CAN BE FITTED TO TOP AND SIDES OF THE OPENING.



ENERGY EFFICIENT THERMAL BARRIER JOINT SEAL BETWEEN EVERY PANEL.



DEEP CUSHIONING FLEXIBLE VINYL 'U' SHAPE BOTTOM WEATHERSEAL.



P R E M I U M C O L L E C T I O N

## THERMAL BREAK REDUCES HEAT/COLD TRANSFER 15.5%

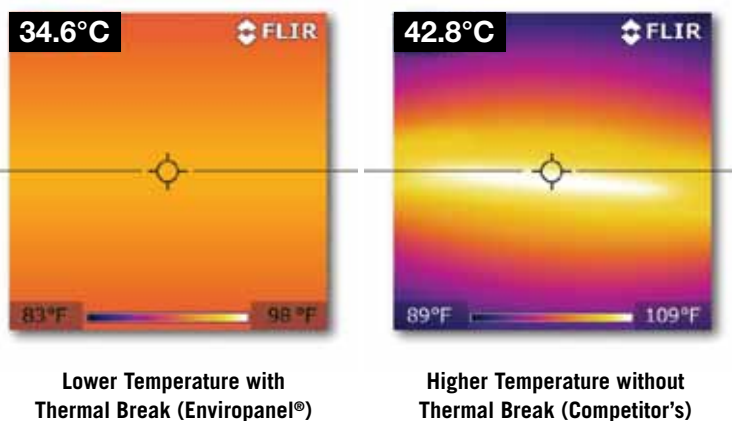
An independent laboratory performed a comparison test on the Enviropanel™ and a competitor's insulated door. The competitor's door is typical of the industry standard for insulated garage door construction. Both doors were 5cms thick, used identical EPS insulation cores and identical steel skins front and back, however the Enviropanel™ features a specially designed thermal break.

After two hours of direct exposure to 57°C, temperatures were measured for thermal transmission from the front to the back of the door. The Enviropanel™ measured 34.6°C as compared to 42.8°C on the competitor's door. This is a substantial 15.5% difference at the most critical area of the door, the section joints. The interior surface comparative temperatures of the centre of the door panels were also sizeable, measuring 7.2% lower than the competitor's.

The reason for these large differences is that the Enviropanel™ **Thermal Break** does not have metal-to-metal contact from one side of the door to the other, like that of the competitor's door. This reduces the thermal transmission of the door, which improves its overall insulation value and effectiveness.

This study confirms that the Enviropanel™ with **Thermal Break** dramatically out performs other insulated garage doors, as shown by the actual infrared thermal images.

## INFRARED IMAGE COMPARISON



## R & U VALUES

The R-value is used in the building industry to specify the thermal rating of particular building products. This is defined as a material resistance to the flow of heat. It is expressed as the thickness of the material divided by the thermal conductivity. The U-value is essentially another way of expressing the thermal rating which is simply the inverse of R-value.

The Enviropanel door results in a higher R or U value for the complete door system compared to other insulated doors in the market. This is due to the Enviropanel's additional features that contribute to a complete insulated door. This includes; compression seals between the panels, opening jamb and lintel seals and a physical thermal break between the front and back of the panels. The Enviropanel is the only insulated door in the market that has all of these additional features.



# THERE'S SO MUCH MORE BEHIND A DOOR

## A GREENER CHOICE

Let's be honest, not every choice we make can be completely 'green' and the same must be said for insulated doors, but we can limit the potential environmental impact of our choices.

Expanded Polystyrene (EPS) is made from expanded beads that are similar to those found in a 'bean bag' and contain approximately 98% air. The beads are injected into a moulding machine that applies steam and pressure, which fuses the beads together.

- ✓ EPS does not utilise Chlorofluorocarbon (CFC) or Hydro Chlorofluorocarbon (HCFC) or Formaldehyde in its manufacturing process so there is no potential for out gassing or the release of harmful toxic chemicals trapped within the material over the life of the door.
- ✓ EPS is inert, stable and does not produce methane gas or contaminating leachates.
- ✓ EPS is odourless, non-toxic and can easily be recycled
- ✓ Team the Enviropanel™ up with one of our Controll-A-Door® automatic garage door openers, for ultimate convenience.

## IT'S ABOUT LONGER LIFESPAN

EPS is a 'closed cell' type insulation which provides better thermal retention and less moisture absorption which, if left unchecked, can cause rust and opener wear by altering the operational characteristics of your door. Garage doors are moving objects therefore inherent stresses can occur during opening and closing cycles, along with harmful UV rays can severely reduce the performance of an insulated material. EPS however is a stable material and has a very long lifespan because it does not degrade like other forms of insulation can.



*Better insulation in key areas of the home such as the garage, saves energy & money.*



*Enviropanel saves energy and will stand the test of time*

# Enviropanel™

## INSULATED STEEL GARAGE DOORS

It would have been easy for us to find a cheap product from any one of a number of countries, however we have a reputation for quality doors from a trusted brand, so went to the leader in insulated doors. Northwest Door® based in Tacoma, USA have a history of expertise and a proven track record.

At 2" thick (51mm) with an integrated thermal break and a complete draft seal system, Enviropanel™ insulated garage doors will save energy and stand the test of time.

If you are serious about making your garage space more usable and energy efficient, then contact your local B&D dealer today.

## APPEARANCE IS IMPORTANT

One of the critical aspects of a garage door is its flatness (the absence of 'oil canning'). The manufacturing process takes a finished EPS sheet cut by CNC equipment and places it between the two metal faces with engineered adhesives which are then roller/heat cured in a dimensionally controlled environment.

These precise manufacturing processes allow for the achievement of a much greater surface flatness over the length of the finished panel so your garage door will look great.

## JAMB SEAL COLOUR OPTIONS

Jamb Seals are available in a choice of four modern colours in the B&D colour range. Choose from Bright White, Almond, Sandstone and Brown.



## COLOUR CHOICE

Enviropanel doors are available in the standard B&D colour range, however, lighter colours are recommended to improve overall insulation performance.

## TWO MODERN PROFILES

Enviropanel™ insulated garage door systems are available in two modern styles with a classic embossed effect as standard.

If you require a simple look to subtly work with the rest of your homes architecture, our flat panel style is a great option. With precision cut insulation and quality manufacturing processes you wont be disappointed with the look and presence of your new flat panel Enviropanel™ door.

If you are looking for a more detailed style then our ribbed panel option is the perfect choice. The multiple mini-grooves along the length of the panel provide an added dimension to the overall look of the door and an interesting focal point to your home.

Flat Panel Profile



Ribbed Panel Profile\*



\* Ribbed profile not available on all door sizes.

YOUR **B&D REPRESENTATIVE** IS:

International Customers call **+61 2 9722 5555**  
fax **+61 2 9771 6385** or email [bndint@bnd.com.au](mailto:bndint@bnd.com.au)



**Doors & Openers®**

THERE'S SO MUCH MORE BEHIND A B&D DOOR

B&D Doors has offices servicing all states.  
For more details on this product or our other ranges,  
call **13 62 63** or visit [www.bnd.com.au](http://www.bnd.com.au)

- a) Enviropanel doors, in residential applications, are covered by a 12 month warranty, conditional on proper care, as recommended in the door's handbook. Full details of the warranty are available from [www.bnd.com.au](http://www.bnd.com.au) 12 month warranty only applies to doors purchased and installed in Australia or New Zealand. Warranty only valid if warranty conditions are met.
- b) For areas within one kilometre of a corrosive environment eg. salt air or industrial fallout, special care and maintenance are generally required for metal products. Consult B&D or your B&D Accredited Dealer for advice.
- c) The company reserves the right to make changes or improvements to the products or accessories without notice and without incurring any obligation to make similar changes or improvements to goods previously ordered. Specifications subject to change without notice.
- d) Prefixed Trademarks are trademarks of B&D Australia Pty Ltd.
- e) Details correct at date of publication.

03/12

An **alesco** Company

B&D Doors & Openers is a division of B&D Australia Pty Ltd, an Alesco Company ABN 25 010 473 971 © 2012 B&D Australia