

# WRAP UP FOR THE RIGHT PROTECTION

Your guide to selecting a residential wall wrap to suit your building's construction and location.



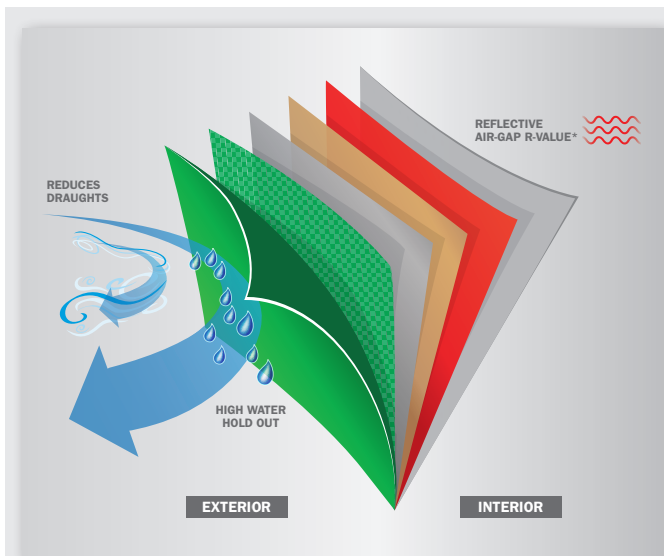
# KNOW THE BENEFITS – WALL WRAP

A typical ventilated brick veneer or lightweight clad wall assembly will experience a loss in the thermal performance of the wall insulation due to air-flow through the assembly, regardless of the type of insulation installed. (Building Science Corporation, 2013) This loss is a result of the infiltration of air changing the temperature of the air trapped around the insulation, which in turn changes the effectiveness of the insulation to achieve its designed R-Value.

The installation of wall wrap (either permeable or non-permeable) can help reduce air-flow around insulation and through the building cavity, allowing the insulation to work more efficiently. Consideration of condensation management then becomes important in the selection process based upon location and building design.

## WARMER CLIMATES LOWER LEVELS OF WALL INSULATION

Bradford  
thermoseal™



## THERMOSEAL WALL WRAP

Thermoseal Reflective Foil wall wraps are non-permeable, vapour barrier products designed to reduce the transmission of moisture into the home. They are able to contribute a reflective air gap R-Value to the wall system when positioned to adjacent to an inward or outward facing air cavity.

### These products are recommended for use in warmer climates:

- Where the risk of condensation formation exists as the temperature of the outside environment rises, while the inside of the home is cooled.

### Key product features:

- Improves the R-Value of the wall system by contributing a reflective air-gap R-Value
- Reduces the transmission of moisture through the building structure\*
- Improves energy efficiency by reducing draughts allowing insulation to work more effectively
- Protects the building frame from decay by reducing the entry of wind driven rain and dust.

\*If the membrane is to provide a continuous vapour barrier, all joins, penetrations and discontinuities should be sealed.



# KNOW THE FACTS – CONDENSATION

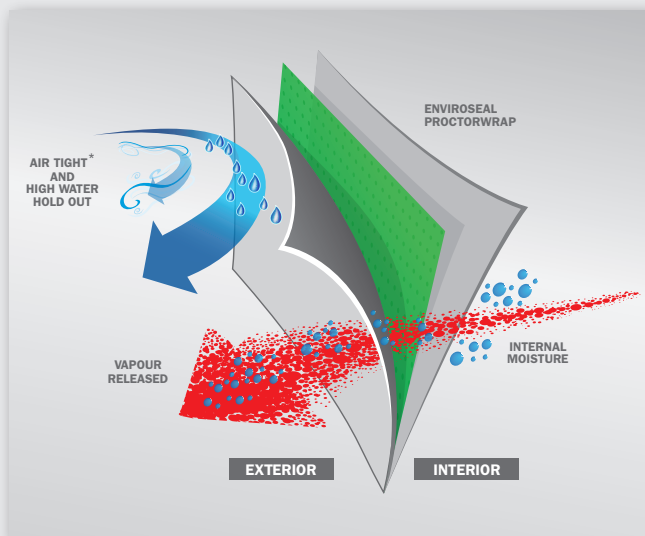
The drive for energy efficient buildings has resulted in higher levels of insulation in the roof space and walls, as well as reduced air leakage due to modern energy conscious building practices. As a result, this has dramatically changed the temperature and moisture balance within buildings, which has changed the location and frequency of where and when condensation is likely to form. When the surface where condensation wants to form shifts from outside to inside the home, condensation can potentially cause damage to the building frame, cladding and insulation, potentially allowing mould to grow, impacting your families health.

Depending upon the type of building construction, insulation levels and climate zone in which you are building, the selection of the right building wrap is critical to ensure the energy efficiency of your home and long term health of your family.

## COLDER CLIMATES HIGHER LEVELS OF WALL INSULATION

Bradford  
enviroseal™

PROCTORWRAP™  
LET YOUR BUILDING BREATHE



## ENVIROSEAL PROCTORWRAP

Enviroseal ProctorWrap products are highly vapour permeable products that allow water vapour to pass through them, whilst preventing the entry of liquid water and dust from outside. When used in colder climates where there is more moisture inside the home than outside, they allow moisture in the air to pass through the membrane before condensing to water (condensation) safely on the outside of the building frame where it does not damage the home.

### These products are recommended for use in colder climates:

- Where the risk of condensation formation increases as the temperature of the outside environment falls, while the inside of the home is heated.

### Key product features:

- Reduces the risk of condensation formation inside the building frame in cold climates\*
- Improves energy efficiency by reducing draughts allowing insulation to work more effectively
- Protects the building frame from decay by reducing the entry of wind driven rain and dust.

\*If the membrane is to provide a continuous condensation layer, all joins, penetrations and discontinuities should be sealed.



VAPOUR  
PERMEABLE



## SELECTING THE RIGHT BUILDING WRAP FOR RESIDENTIAL HOMES AND TOWNHOUSES

APPLICATION	PRODUCT	DUTY CLASSIFICATION <sup>1</sup>	MATERIAL CHARACTERISTICS		
VAPOUR BARRIER	THERMOSEAL	Brick veneer or light weight clad	Resiwrap	Extra Heavy Duty	Resiwrap is a tough, multipurpose polyweave building membrane ideal for use where harsh weather conditions may be experienced during construction. Resiwrap provides an inward facing reflective air-gap R-Value, suitable for use where there is a void in the stud cavity.
			Wall Wrap	Medium Duty	Wall Wrap is an economical but tough polyweave building membrane for use where there is a void in the internal stud cavity.
			Wall Wrap XP Boost your wall insulation	Medium Duty	Wall Wrap XP is polyweave building membrane for use where there is insulation filling the internal stud cavity and an external building air cavity exists. Wall Wrap XP provides an outward facing reflective air-gap R-Value using a unique patterned outward facing antiglare surface to complement the stud wall insulation.
			Wall Breather <sup>#</sup>	Medium Duty	Wall Breather is manufactured with tiny holes to allow air exchange between each side of the membrane, is 'unclassified' as a water barrier and provides an inward facing reflective air-gap R-Value. Note: This product is not recommended for use in colder climate applications in conjunction with higher levels of insulation – for lightweight clad applications, refer to cladding material manufacturers recommendations prior to use. Low permeability - 0.018µg/N.s
LOW VAPOUR PERMEABILITY					

HIGH VAPOUR PERMEABLE	ENVIROSEAL PROCTORWRAP	Brick veneer or light weight clad	Residential Wall (RW)	Light Duty*	Residential Wall (RW) is a lightweight vapour permeable spunbond polyolefin membrane, with a 'soft' textile construction designed to reduce 'wind flapping' noise when exposed to applications that allow airflow through the cavity. Suitable for use with brick, timber or steel, this is a non-reflective, highly permeable product – 4.5µg/N.s.
			Commercial Wall (CW)	Light Duty*	Commercial Wall (CW) is a lightweight vapour permeable product, with a tough spunbond polyolefin membrane designed for medium to high density construction where a tougher membrane is required during construction. Suitable for use with brick, timber or steel, this is a non-reflective, highly permeable product – 4.2µg/N.s.

1. Duty Classification in accordance with AS/NZS4200.1 \*In accordance with bursting strength. # Not recommended for condensation or vapour control due to tiny holes which allow air transfer.

## NEED TO KNOW MORE

CSR Bradford offer a range of technical services including condensation modelling for project or climate specific applications, as well as general product and project technical support.

For more information please contact CSR Bradford on **1300 850 305** or [bradfordenquiries@csr.com.au](mailto:bradfordenquiries@csr.com.au) or visit [www.bradfordinsulation.com.au](http://www.bradfordinsulation.com.au).

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