

Bradford™  
gold batts

# Improved comfort all year round

Thermal insulation for walls and ceilings



More comfortable home, all year round



Helps reduce energy costs



Australia's most trusted insulation brand



70 year product performance warranty



## Protection from one of the harshest climates on earth

**Common building materials such as bricks, roof tiles and metal roofing allow most of the heat they receive to pass through them. Without insulation, homes can bake in summer as the external heat enters the house through the roof, walls and windows.**

Properly installed insulation is the most cost effective way of making a home more comfortable and energy efficient.

Insulation installed in the ceiling and walls can reduce the amount of heat that enters the home in summer and minimise the need for air conditioning.

Similarly in winter, a well-insulated house reduces the need for heating because the warm air stays contained inside the home.

This can mean big savings on energy bills, which is becoming increasingly important to homeowners.

The Building Code of Australia sets the minimum level of insulation in a new home for basic energy efficiencies. Advising your customers to upgrade their insulation to a higher R-Value can increase the energy efficiency of their home and improve their level of comfort all year round.



# Upgrade to higher R-Values for higher customer satisfaction



## BRADFORD GOLD & BRADFORD GOLD HI-PERFORMANCE PERFORMANCE YOU CAN TRUST

- Keeps homes warmer in winter and cooler in summer
- Helps reduce home owner's ongoing energy costs
- Made in Australia under ISO9002 Quality Systems and complies with AS4859.1 "Materials for the Thermal Insulation of Buildings"
- Backed by CSR, Australia's leading building materials company
- Non combustible
- Environmentally sound, made from up to 80% recycled glass



Bradford provides a comprehensive warranty with a 70 year product performance guarantee on all Bradford Gold and Bradford Gold Hi-Performance products.

## For maximum thermal comfort levels and energy efficiency, upgrade your customers to the best, **BRADFORD GOLD HI-PERFORMANCE**

Install the very best product in the homes you build. Bradford Gold Hi-Performance has a higher density and is suitable for use in all climate zones, particularly those zones with extreme weather.

It has the highest R-value rating available, and the higher the R-value, the more it resists heat flow, so the homeowner gets the best performance possible.



**Bradford** have been making and supplying insulation in Australia for over 80 years, so it's little wonder that they are the country's most trusted name in insulation.



## ENJOY PEACE OF MIND

Bradford Gold and Bradford Gold Hi-Performance insulation easily meet the NCC's requirements in relation to fire. Deemed non-combustible as per AS 1530.1 and has a 0 index for spread of flame, ignitability, heat evolved and 0 - 1 index for smoke when tested to AS/NZ 1530.3 fire testing requirements.

## BREATHE EASY

Bradford is the only approved insulation partner of the National Asthma Council Australia's Sensitive Choice® program. Bradford Gold and Bradford Gold Hi-Performance insulation are suitable for use in the homes of asthma and allergy sufferers.



## ENVIRONMENTALLY SOUND

Bradford Gold and Bradford Gold Hi-Performance insulation are made from glasswool, the most common residential insulation in the world. It is manufactured in Australia from up to 80% recycled glass, using FBS-1 bio-soluble formulation, which has been assessed as non-hazardous under the National Occupational Health & Safety Commission's guidelines.



## BEST PRACTICE INSTALLATION

Regardless of the type of insulation selected, if it's not installed properly the insulation won't deliver on the promised benefits. To achieve best practice installation you need to ensure the entire area is covered without any gaps in the insulation, do not compress the insulation, as compression will reduce the R-Value achieved.

For external walls it is recommended to use a vapour permeable wall wrap around the outside of the building, before installing the insulation.

If wall wrap is not used, stringing is recommended to ensure the insulation does not bridge the cavity. Simply staple a polypropylene string to the underside of the top plate as far back as the thickness of the insulation, then tension and staple it to the bottom plate.

To prevent putting pressure on the plasterboard lining, ensure the batts do not protrude past the stud surface.

Cut the insulation around penetrations so there are no air gaps. You can use offcuts to fill any gaps, however it is not recommended to use more than four offcuts in one space.

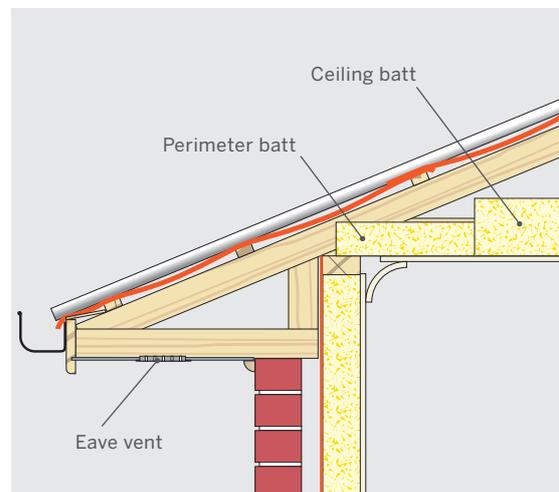
Ensure there is at least 50mm clearance around any ceiling mounted downlights and the transformers. There is an increasing number of recessed downlights that are now manufactured to allow insulation to cover them. This will be clearly shown on the downlight packaging and light fitting, if this is not visible then default back to AS3999 with at least 50mm clearance around downlight.

## PERIMETER CEILING BATTS

The installation of thick Bradford Gold Hi-Performance batts near eaves can be challenging as there needs to be a 20mm air gap between the insulation and the underside of a roof.

When the roof structure doesn't accommodate the thickness of these batts at the eaves, the installation of higher density, lower profile perimeter batts is recommended.

To compensate for the lower R-Value at the perimeter of the roof, you may need to select a higher R-Value for the bulk of the ceiling.



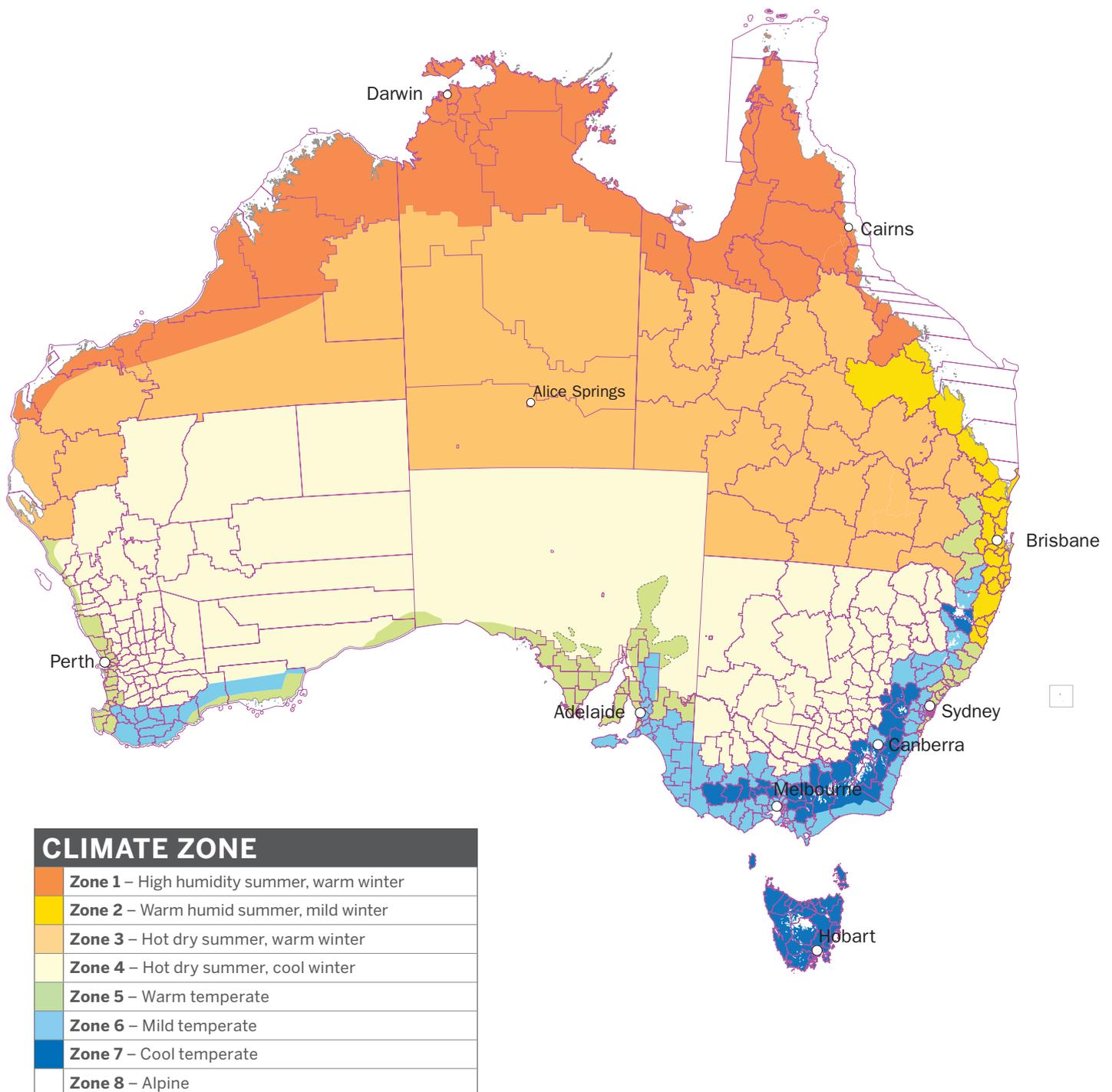
Note: When installing perimeter batts from below it is recommended that a support mechanism (such as stringing) be used.

# AUSTRALIA'S SMART CHOICE IS GOLD

## WHAT R-VALUE IS REQUIRED?

The Building Code of Australia (BCA) has outlined energy efficiency provisions for new homes which include the inclusion of insulation in ceilings, walls and some floors. The value of insulation required to meet the deemed-to-satisfy provisions for energy efficiency are intended to be seen as a minimum standard – not best practice. The table on the following page outlines the Bradford Gold products that can be used to meet the minimum standard in the various climate zones around Australia as shown below.

Note that other provisions within the BCA, such as a reduction in ceiling area insulated due to the installation of recessed down lights or other fixtures, may affect the level of insulation required. Similarly, to meet the deemed-to-satisfy provisions in the BCA other measures for energy efficiency, such as glazing requirements, must also be met.



The values in this table can also be used as a guide when installing insulation into alterations and additions, or retrofitting existing homes with no insulation.

## MINIMUM R-VALUE OF INSULATION NEEDED TO MEET BCA DEEMED-TO-SATISFY REQUIREMENTS

CLIMATE ZONE	1 & 2 < 300m	2 > 300m, 3, 4, 5, 6, 7	8
<b>Ceilings</b>			
Dark coloured roof tiles or metal roof (solar absorptance > 0.6) and no sarking	5.0	5.0	6.0
Dark coloured roof tiles (solar absorptance > 0.6) with ES Roof Tile sarking, with VENTS	3.5	5.0	6.0
Light coloured roof tiles or metal roof (solar absorptance between 0.4 – 0.6) and no sarking	4.1	5.0	6.0
Light coloured roof tiles (solar absorptance between 0.4 – 0.6) with ES Roof Tile sarking, with VENTS	2.5	5.0	6.0
Dark coloured metal roof (solar absorptance > 0.6) with ResiWrap sarking, with VENTS	3.5	5.0	6.0
Dark coloured metal roof (solar absorptance > 0.6) with Anticon 60, without VENTS	2.5	3.0	4.1
Light coloured metal roof (solar absorptance between 0.4 – 0.6) with ResiWrap sarking, with VENTS	3.0	4.1	6.0
Light or off white/cream coloured metal roof (solar absorptance ≤ 0.4) with Anticon 60, without VENTS	2.5	2.5	4.1
Off white/cream coloured metal roof (solar absorptance ≤ 0.4) and no sarking	4.1	4.1	6.0
Off white/ cream coloured metal roof (solar absorptance ≤ 0.4) with ResiWrap sarking, with VENTS	2.5	3.5	6.0
<b>Walls</b>			
90mm studs, brick veneer with Enviroseal RW Wall Wrap	2.5	2.5	**
90mm studs, lightweight cladding with Enviroseal ProctorWrap*	2.5	2.5	**

\*If metal framing is used, a thermal break tape must be used over the Enviroseal RW Wall Wrap. Contact Bradford for a solution.

Note that the use of high levels of insulation to meet energy efficiency and comfort requirements can lead to an increased incidence of condensation in walls and attic spaces in cold climates. The insulation is effective at keeping the warmth within the home but vapour is able to pass through plasterboard and fibrous insulation. To address potential condensation problems within the roof, Bradford recommends for metal roofs to include the installation of Anticon roofing blanket under metal roofs and an Edmonds Airomatic or Maestro BAL smart ventilator. For pitch roofs greater than 10 degrees or in buildings requiring vapour release, the building membranes should be highly permeable, such as Enviroseal Proctorwrap, and the inclusion of an Edmonds roof ventilators will also help minimise the risk of condensation occurring. Contact Bradford Technical personnel for detailed information.

## HIGHER THE R-VALUE, THICKER THE BATT, BETTER THE HOME PERFORMANCE.

It should be noted that the above are minimum values only, and that upgrading your customer's insulation to a higher material R-Value can provide a better level of resistance to heat in their home. Ensure there is adequate space available for the increased thickness as compressing the batts will affect their ability to meet R-value. Understanding the difference between R-Values is important as it can mean the difference between putting an average product in to the home with average benefits, and getting the best product for the home.



**Gold Ceiling R3.5** 185mm



**Gold Ceiling R4.1** 215mm



**Gold Ceiling R5.0** 240mm



**Gold Ceiling R6.0** 260mm

## THE BRADFORD GOLD INSULATION RANGE

There's a full range of Bradford Gold insulation to suit ceilings and walls of any home in Australia.

R-VALUE m <sup>2</sup> K/W)	THICKNESS (mm)	STANDARD SIZE (mm)	PIECES PER PACK	m <sup>2</sup> PER PACK	COVERAGE PER PACK (m <sup>2</sup> )	MULTI PACK	PRODUCT CODE
<b>TIMBER FRAME CONSTRUCTION</b>							
<b>BRADFORD GOLD FOR WALLS</b>							
R1.5	75mm	1160 x 430	22	11.0	12.5	7	111727
R1.5	75mm	1160 x 580	22	14.8	16.7	7	111726
R2.0	90mm	1160 x 430	22	11.0	12.5	5	15250
R2.0	90mm	1160 x 580	18	12.2	13.6	6	15229
R2.2	90mm	1160 x 430	16	8.0	9.0	5	170351
R2.2	90mm	1160 x 580	16	10.8	12.2	5	170227
<b>BRADFORD GOLD HI-PERFORMANCE FOR WALLS</b>							
R2.0	75mm	1160 x 420	12	5.8	7.0	6	152166
R2.0	75mm	1160 x 570	12	7.9	9.1	6	152192
R2.5	90mm	1160 x 420	9	4.4	5.0	6	181430
R2.5	90mm	1160 x 570	9	6.0	6.7	6	181471
R2.7	90mm	1160 x 420	5	2.4	2.8	5	152191
R2.7	90mm	1160 x 570	5	3.3	3.8	5	152197
R4.0	140mm	1160 x 420	5	2.4	2.8	6	181432
R4.0	140mm	1160 x 570	5	3.3	3.8	6	181416
<b>BRADFORD GOLD FOR CEILINGS</b>							
R2.5	140mm	1160 x 430	16	8.0	9.0	7	111720
R2.5	140mm	1160 x 580	16	10.8	12.2	7	111719
R3.0	165mm	1160 x 430	16	8.0	9.0	6	15226
R3.0	165mm	1160 x 580	16	10.8	12.2	6	15256
R3.5	185mm	1160 x 430	16	8.0	9.0	5	15241
R3.5	185mm	1160 x 580	10	6.7	7.6	8	41895
R4.1	215mm	1160 x 430	10	5.0	5.6	7	111716
R4.1	215mm	1160 x 580	10	6.7	7.6	7	111715
<b>BRADFORD GOLD HI-PERFORMANCE FOR CEILINGS</b>							
R5.0	240mm	1160 x 430	8	4.0	4.5	5	105417
R5.0	240mm	1160 x 580	8	5.4	6.1	5	105419
R6.0	260mm	1160 x 430	6	3.0	3.4	5	77871
R6.0	260mm	1160 x 580	6	4.0	4.5	5	77849
R7.0	290mm	1160 x 430	4	2.0	2.3	5	122546
R7.0	290mm	1160 x 580	4	2.7	3.0	5	125545
<b>STEEL FRAME CONSTRUCTION</b>							
<b>BRADFORD GOLD FOR WALLS</b>							
R1.5	75mm	1200 x 450	22	11.9	11.9	7	127776
R1.5	75mm	1200 x 600	22	15.8	15.8	7	127781
R2.0	90mm	1200 x 450	18	9.7	9.7	6	127777
R2.0	90mm	1200 x 600	18	13.0	13.0	6	127782
<b>BRADFORD GOLD HI-PERFORMANCE FOR WALLS</b>							
R2.0	75mm	1200 x 450	12	6.5	6.5	6	131367
R2.0	75mm	1200 x 600	12	8.6	8.6	6	131368
R2.5	90mm	1200 x 450	9	4.9	4.9	6	181412
R2.5	90mm	1200 x 600	9	6.5	6.5	6	181433
R2.7	90mm	1200 x 450	5	2.7	2.7	5	127780
R2.7	90mm	1200 x 600	5	3.6	3.6	5	126512

For more information call **1300 850 305** or visit [bradfordinsulation.com.au](http://bradfordinsulation.com.au)



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 ID Number: 100109

