

NCC Compliance Report

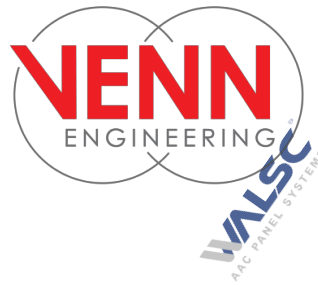
WALSC AAC Façade Wall System Non-Combustibility Assessment

Prepared for
Sipo Building Solutions Pty Ltd


Reference: VE-SIP200214A

17 February 2020

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Document Control

Issue	Date	Author	Revision notes
A	17/02/2020	 Grant Wood BE MIEAust CPEng	-

Contact Information

VENN Engineering Pty Ltd
ABN 39 626 802 257
PO Box 3084 Austinmer NSW 2515
P: +61 426 241 673 (Grant)
E: admin@venn.engineering
W: www.venn.engineering



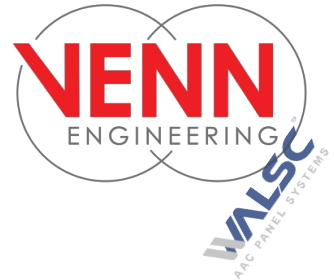
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2.0 Client

This National Construction Code (NCC) compliance report has been prepared for the following client.

Company: Sipo Building Solutions Pty Ltd
Address: D3, 27-29 Fariola Street, Silverwater NSW 2128
Contact: Ian Wang - ian.w@sipo.com.au

3.0 Purpose & Scope

The purpose of this compliance report is to evaluate the compliance of the WALSC AAC Façade Wall System with respect to deemed-to-satisfy requirement Part C1.9 of the NCC Volume 1 (refer to Appendix A which is section 7.0 of this report) relating to non-combustible building elements for buildings required to be of Type A or B construction.

The report only covers those matters outlined above and shall not be interpreted as covering any other matter or product.

4.0 Documentation

Table 1 below lists all the documents that were referred to for the purpose of completing this report.

Table 1 - Documentation

Author	Description	Date	Reference
WALSC AAC Panel Systems	Façade Wall System for Apartment and Commercial Buildings Design and Installation Guide	Oct 2019	-
Australian Building Codes Board	2019 National Construction Code – Building Code of Australia Volume 1	May 2019	-

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5.0 System Description

The WALSC AAC Façade Wall System is a non-load bearing external wall system. It consists of a drained cavity external wall system with autoclaved aerated concrete (AAC) panels, aligned vertically, on the external side of the cavity and steel stud frame with wall wrap, insulation and plasterboard on the internal side. Horizontal steel tophats form the cavity. Figure 1 below provides an overview of the system.

The system is intended to be used on buildings with a rise in storeys of more than 3 and where the building is reinforced concrete framed. The system is supported on the slab edge of each storey and fixed to the soffit of the slab above.

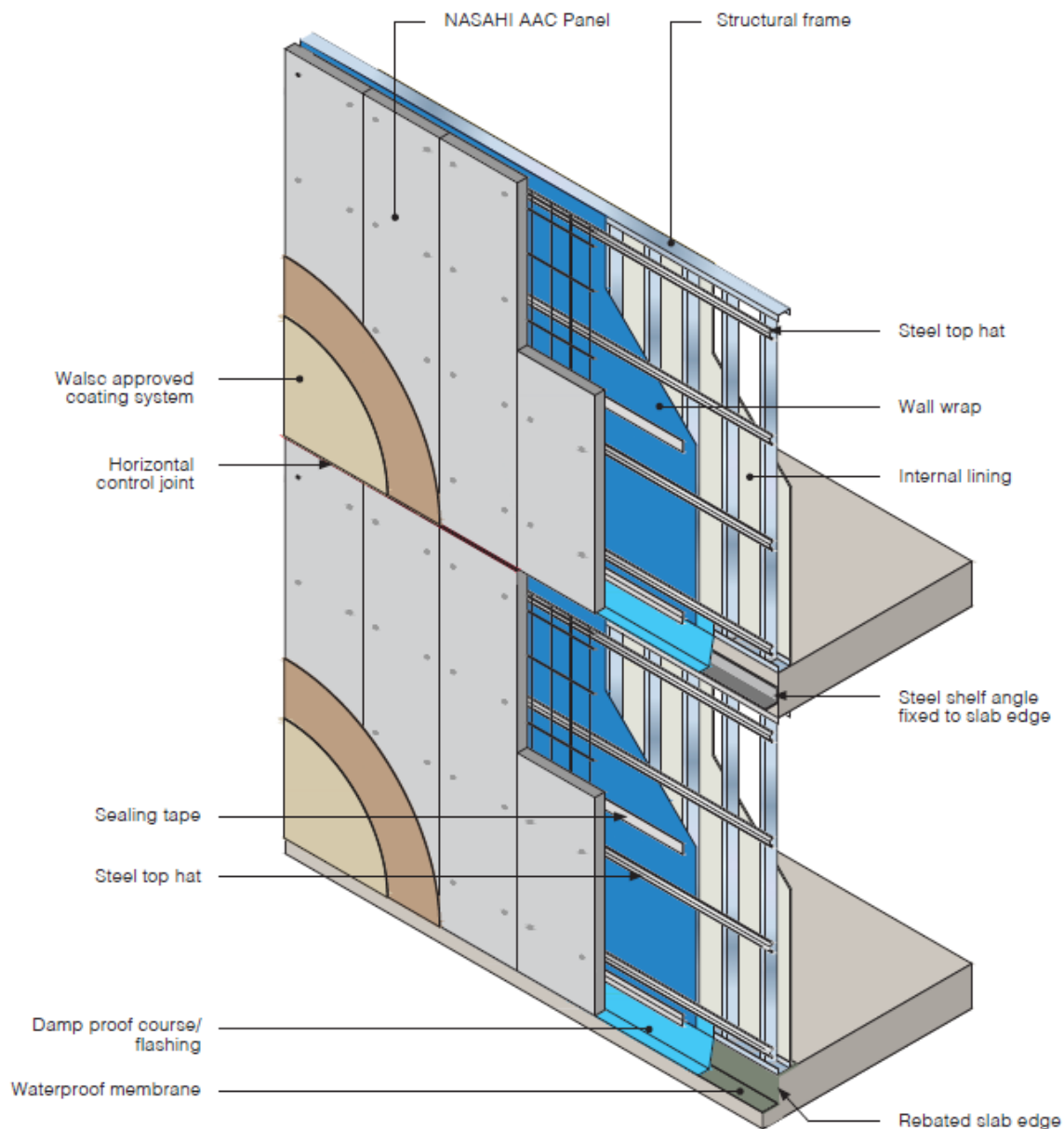


Figure 1 - Façade Wall System Overview (courtesy of WALSC AAC Design & Installation Guide)

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6.0 Assessment



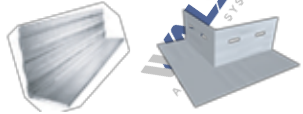
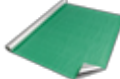
Part C1.9(a)(i) of the 2019 NCC Volume 1 requires that all components incorporated into an external wall of a building that is required to be Type A or B construction must be non-combustible. There are some exceptions which are listed in points (d) & (e) of Part C1.9.

In the sections below, the combustibility of each individual component of the WALSC AAC Façade Wall System is considered (section 6.1) and an overall assessment of the system is provided.






6.1 Individual Component Assessment

Table 2 below provides comments on the combustibility of each individual component of the WALSC AAC Façade Wall System as listed in the Design & Installation Guide.



Table 2 - Individual component assessment

Component	Image	Non-combustibility compliance comment
NASAHI AAC Panel		The NASAHI AAC panel consists of areated autoclaved concrete (AAC) with embedded steel reinforcing. AAC material is very similar to conventional reinforced concrete and is non-combustible. Therefore this component is considered non-combustible.
Steel Top Hat		The top hat that forms the cavity is made from galvansied steel. The steel and the galvanizing (zinc) is non-combustible therefore this component is considered to be non-combustible.
Shelf Angle & Corner Shelf Angle		The shelf angle are asusmed to be galvanised steel. The steel and the galvanising is non-combustible therefore this component if considered to be non-combustible.
Wall Wrap		The brand and product name of the wall wrap used in the system is not specified in the design and installation guide. Therefore, this component can not be specifically assessed. However, Part C1.9(e)(vi) of the 2019 NCC Volume 1 allows sarking-type materials (eg. wall wraps) with a maximum thickness of 1mm and a maximum flammability index (AS1530.2) of 5 to be used where a non-combustible component is required. Therefore, provided that the selected wall wrap complies with this requirement, this component will comply with Part C1.9 of the 2019 NCC Volume 1. Examples of wall wraps that meet these requirements are Tyvek HomeWrap and Bradford White EnviroShield RW.

WALSC AAC PANEL SYSTEMS
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		based on the manufacturers technical information (refer to Appendix B sections 8.1 and 8.2).
Sealing and Waterproof Tape		<p>The brand and product name of the sealing/waterproof tapes used in the system is not specified in the design and installation guide. Therefore, this component can not be specifically assessed. However, Part C1.9(e)(vii) of the 2019 NCC Volume 1 allows bonded laminate materials to be used where non-combustible components are required provided that:</p> <ul style="list-style-type: none"> A. each lamina and any core is non-combustible; and B. each adhesive layer is 1.0mm thick maximum and the total thickness of the adhesive layers is 2.0mm maximum; and C. the Spread-Of-Flame Index (AS/NZS1530.3) and the Smoke-Developed Index (AS/NZS1530.3) of the bonded laminated material as a whole do not exceed 0 and 3 respectively. <p>Therefore, provided that the selected tapes satisfy the above three requirements, this component will comply with Part C1.9 of the 2019 NCC Volume 1.</p>
AAC Panel and tophat fixing Screw		The screws used to the fix the steel top hats to the stud frame and the NASAHI AAC panels to the tophats are made from steel. This is non-combustible therefore this component is considered non-combustible.
Plasterboard		Part C1.9(e)(i) allows plasterboard to be used where non-combustible material is required. Therefore, the plasterboard that forms the internal lining component of the system complies with Part C1.9 of the 2019 NCC Volume 1.
Stud Frame		The steel stud framing and connecting screws are made from galvanised steel. This material is non-combustible therefore this component is considered non-combustible.
Insulation		<p>The brand and product name of the wall wrap used in the system is not specified in the design and installation guide. Therefore, this component can not be specifically assessed. However, this component can be considered to be non-combustible if the selected insulation has passed the test requirements of AS1530.1.</p> <p>Based on the manufacturers technical information examples of insulation products that are non-combustible are:</p>

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		combustible (satisfying AS1530.1) are Knauf Earthwool External Wall Batts or Bradford Gold Wall Batts (refer to Appendix B sections 8.3 and 8.4)
Walsc AAC Adhesive		The WALSC AAC adhesive is a cementitious material made from portland cement (50-60%), graded sand (38-49%) and other additives (1-2%) – refer to Appendix B section 8.5. These are typically non-combustible. Therefore, this component is considered to be non-combustible.
Pressure Equalisation Slot		The design and installation guide states that the pressure equalisation slots are to be of the brand 'Weepa'. Weepa provide a stainless-steel version of their product. Stainless steel is non-combustible. Therefore, provided the stainless-steel version of the Weepa product is selected for use, this component is considered to be non-combustible.
Approved Corrosion Protection Paint		Where an AAC panel is cut and the embedded reinforcement is exposed, the design and installation guide states that the exposed reinforcement shall be painted with this component. It is likely that this paint would not meet the requirements of being non-combustible if tested to AS1530.1. However, Part C1.14(l) of the 2019 NCC Volume 1 allows a paint to be excluded from requiring to be non-combustible.
Sealant		Part C1.9(d)(iii) allows sealants to be used where non-combustible material is required. Therefore, the sealants that are used in the control joint component of the system complies with Part C1.9 of the 2019 NCC Volume 1.
Render coating		Render coatings are a cementitious type of material. These are typically non-combustible. Therefore, this component is considered to be non-combustible.
Paint finish		It is likely that a paint finish would not meet the requirements of being non-combustible if tested to AS1530.1. However, Part C1.14(l) of the 2019 NCC Volume 1 allows a paint to be excluded from requiring to be non-combustible.

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6.2 System Assessment

Based on the assessment of each individual components, the WALSC AAC Façade Wall System, as detailed in the design and installation guide, complies with Part C1.9 of the 2019 NCC Volume 1. This is provided that:

1. The selected wall wrap has a maximum thickness of 1mm and a maximum flammability index (AS1530.2) of 5. Tyvek HomeWrap and Bradford Enviroseal RW are two examples that meet these requirements.
2. The selected sealing tapes consist of having:
 - a. each lamina and any core is non-combustible; and
 - b. each adhesive layer is 1.0mm thick maximum and the total thickness of the adhesive layers is 2.0mm maximum; and
 - c. the Spread-of-Flame Index (AS/NZS1530.3) and the Smoke-Developed Index (AS/NZS1530.3) of the bonded laminated material as a whole do not exceed 0 and 3 respectively.
3. The selected insulation meets the test requirements of AS1530.1. Knauf Earthwool External Wall Batts or Bradford Gold Wall Batts are two products that suitable.
4. The stainless-steel version of the Weepa pressure equalisation slots is used instead of any other Weepa product.

This assessment does not relieve the responsibility of building designers (architects and engineers) to provide specific advice relating to the combustibility of the external wall for each individual building that the WALSC AAC façade wall system is used on. Each building is likely to contain unique construction details and ancillary structures which are not detailed in the design & Installation Guide.

6.3 Limitations

The opinions expressed in the assessment are only valid until:

1. The 2019 NCC Volume 1 is not the most recent version of the National Construction Code. At the latest this is 1st May 2022; or
2. superseded by more recent technical information or by other certification, such as CodeMark third-party certification; or
3. the particular referenced parts of the NCC are superseded in the NCC or in State and territory Building Regulations; or
4. the particular referenced Standards are superseded; or
5. new information is released regarding the combustibility of any individual component as listed in section 6.1 of this assessment.

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7.0 APPENDIX A – Part C1.9 of 2019 NCC Volume 1

C1.9 Non-combustible building elements

- (a) In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible:
- (i) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation.
 - (ii) The flooring and floor framing of lift pits.
 - (iii) Non-loadbearing internal walls where they are required to be fire-resisting.
- (b) A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in—
- (i) a building required to be of Type A construction; and
 - (ii) a building required to be of Type B construction, subject to C2.10, in—
 - (A) a Class 2, 3 or 9 building; and
 - (B) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys.
- (c) A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification C1.1.
- (d) The requirements of (a) and (b) do not apply to the following:
- (i) Gaskets.
 - (ii) Caulking.
 - (iii) Sealants.
 - (iv) Termite management systems.
 - (v) Glass, including laminated glass.
 - (vi) Thermal breaks associated with glazing systems.
 - (vii) Damp-proof courses.
- (e) The following materials may be used wherever a non-combustible material is required:
- (i) Plasterboard.
 - (ii) Perforated gypsum lath with a normal paper finish.
 - (iii) Fibrous-plaster sheet.
 - (iv) Fibre-reinforced cement sheeting.
 - (v) Pre-finished metal sheeting having a combustible surface finish not exceeding 1 mm thickness and where the Spread-of-Flame Index of the product is not greater than 0.
 - (vi) Sarking-type materials that do not exceed 1 mm in thickness and have a Flammability Index not greater than 5.
 - (vii) Bonded laminated materials where—
 - (A) each lamina, including any core, is non-combustible; and
 - (B) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm; and
 - (C) the Spread-of-Flame Index and the Smoke-Developed Index of the bonded laminated material as a whole do not exceed 0 and 3 respectively.

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8.0 APPENDIX B – Component Data Sheets

8.1 Tyvek HomeWrap

DuPont™ Tyvek® HomeWrap®

PHYSICAL PROPERTIES DATA SHEET

Properties	Test Method	Requirement	DuPont™ Tyvek® HomeWrap® (1055B)
Australian Building Code and AS/NZS4200			
Duty Classification	Table 1, AS/NZS 4200.1:2017	Light wall	Light wall
Vapour Permeance	ASTM E96 – B	>1.14µg/N.s	> 2.0µg/N.s
Vapour Resistance	ASTM E96 – B	<0.88MN.s/g	<0.5MN.s/g
Vapour Control Classification	AS/NZS 4200.1:2017 Table 4	Class 4	Class 4 (low)
Emittance Classification	AS/NZS 4201.5	Non-Reflective	Non-Reflective
Mechanical Strength			
Edge Tear (MD & CD)	TAPPI T470	45N	202N & 203N
Tensile (MD & CD)	AS 1301.448s	-	4.4kN/m & 4.7kN/m
Resistance to Dry Delamination	AS/NZS 4201.1	-	Pass
Resistance to Wet Delamination	AS/NZS 4201.2	-	Pass
Moisture Shrinkage	AS/NZS 4201.3	<0.5%	Pass
Water Control Classification	AS/NZS 4201.4	Water Barrier	Water Barrier
Folding Endurance (MD & CD)	AS/NZS 1301.423	2.0 (log ₁₀ 100) & 1.7(log ₁₀ 50)	Pass
Electrical Conductivity	AS/NZS 3100	Electrically non-conductive	Electrically non-conductive
Burst Strength	AS 2001.2.19	>200N	284N
Flammability Classification	NZS/AS 1530.2	Low (≤5)	Low (≤5)
Surface Water Absorbency Classification	AS/NZS 4201.6	Low/High	Low
Air Control Classification	BS6538:Part3	≥0.1 MNs/m ²	Air Barrier
Weight / Width			61gsm / 2740mm
Certification / Appraisals			CodeMark

Test results shown represent roll averages. Individual results may vary either above or below averages due to normal manufacturing variations while continuing to meet product specifications.

For more information about DuPont™ Tyvek® Building Envelope Systems, please visit us at www.Construction.Tyvek.com

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8.2 Bradford Enviroseal



Technical Datasheet

Visit bradfordinsulation.com.au for the latest version of this datasheet
29 Nov 19

ENVIROSEAL RW



DESCRIPTION: Light Wall, Vapour Permeable Wall Wrap
SUITABILITY: Residential brick veneer and lightweight clad walls

IMPORTANT INFORMATION

- This product is only recommended for the applications listed in this datasheet unless advised otherwise by an official Bradford technical representative.
- This product is not recommended in tropical climate zones where the humidity outside is higher than the inside of the building.
- This product is not designed to withstand prolonged exposure to UV or weather. Once installed the exterior wall must be applied as soon as possible.
- Prior to installation this product should be stored in a cool dry place away from sunlight, and should not come into contact with wet concrete or alkaline based materials.

PRODUCT DESCRIPTION

Bradford Enviroseal™ RW is a triple layer polyolefin non-woven textile weather barrier that is calendared together. This product is also available with pre-applied integrated tape release liners.

- This product meets the requirements of the AS/NZS 4200.1 and is suitable for use in Australian residential applications.


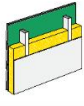
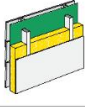
CLIMATE ZONE

This product is recommended for use in warm to cold climate zones where there are higher levels of insulation used in the wall cavity and vapour permeable and water barrier properties are required.

CLASSIFICATION

This product meets the requirements of AS/NZS 4200.1		RESULT
Product Identifier		Enviroseal RW
Duty Classification (AS/NZS 4200.1)		Light Wall
Burst Strength (AS 2001.2.19)		≥ 200 N
Edge Tear Resistance (TAPPI T470)	Machine	≥ 90
	Lateral	≥ 90
Water Control Classification (AS/NZS 4201.4)		Water Barrier
Vapour Classification (ASTM E96)		Class 4 Vapour Permeable
Vapour Permeability (ASTM E96)		> 11403 µg/N.s
Emissivity (AS 4201.5)	Inward Facing	Non Reflective (0.9)
	Outward Facing	Non Reflective (0.9)
Flammability Index (AS 1530.2)		≤ 5 (Low)
Electrical Conductivity (AS/NZS 3100)		Non Conductive
Resistance to Dry Delamination (AS/NZS 4201.1)		Pass
Resistance to Wet Delamination (AS/NZS 4201.2)		Pass
Shrinkage (AS/NZS 4201.3)		≤ 0.5%
Nominal Thickness		< 1.0 mm
Classifications in accordance with AS/NZS 4200.1. This product should be installed in accordance with AS 4200.2		

APPLICATION TABLES

	Brick Veneer Wall		Lightweight Clad (Direct Fix)
	Insulation		Insulation
	Summer R2.5 Winter R3.0 R3.2		Summer R2.5 Winter R2.6 R2.9
	Lightweight Clad (Battened)		
	Insulation		
	Summer R2.5 Winter R2.8 R3.1		

APPLICATION DETAIL

Bradford Enviroseal™ RW is suitable behind both residential brick veneer and lightweight clad walls in warm to cold climate zones where condensation control may be required. Bradford Enviroseal RW is recommended where humidity is higher inside the building than outside. It is also recommended that the higher insulation R value used in construction that vapour permeable products are used to minimise the risk of condensation related damage. This product does not provide a reflective R-Value.

- This product is suitable for use in BAL regions 12.5 to FZ in accordance with AS 3959.


For more information on how to install this product correctly see the Bradford Wall Wrap Installation guide at bradfordinsulation.com.au

PRODUCT DIMENSIONS

PRODUCT NAME	WIDTH (mm)	LENGTH (m)	m ² PER ROLL	WEIGHT (kg)	PRODUCT CODE
Enviroseal RW	1500	30	45	4.6	16764L
Enviroseal RW	1500	50	75	7.9	118153
Enviroseal RW-IT	1500	50	75	7.9	166632
Enviroseal RW	2750	25	68.75	8.6	138628
Enviroseal RW	3000	25	75	9.5	155884

*RW-IT is a variant of RW that includes integrated tape release liners

PRODUCT CONSTRUCTION



CONDENSATION RISK

There are a large number of factors that need to be considered in assessing and managing condensation risk including local climate, building use, position, thickness and type of bulk insulation, location and integrity of vapour barriers, and mechanical or passive ventilation both in the roof space and wall cavities where applicable. It is highly recommended that designers run a condensation risk analysis. CSR Bradford can assist in assessing condensation risk.


For further information on the risks of condensation please refer to the Australian Building Codes Board Handbook, 'Condensation in Buildings.'

Weather Exposure: This product is a secondary sarking material and is not designed to withstand prolonged direct exposure to the elements - accordingly, the exterior cladding should be installed without delay. Product exposed to harsh weather conditions, or UV for more than 6 weeks in wall applications, should be inspected for damage prior to installation of the exterior cladding and damaged product should be repaired or replaced to comply with the product warranty.

CSR Bradford Locked Bag 1345 North Ryde BC NSW 1670
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For further technical advice
call **1300 850 305** or
visit bradfordinsulation.com.au



8.3 Knauf Earthwool External Wall Batts



www.knaufinsulation.com.au

EARTHWOOL® EXTERNAL WALL BATT

May 2018



APPLICATIONS



DESCRIPTION

The Earthwool® External Wall batt range includes a selection of R-Values to provide builders, designers, installers and DIYers the opportunity to choose the best thermal performance for their project. Earthwool® External Wall batt will also absorb the transfer of unwanted sound from outside to inside the building. In addition to sound absorption, Earthwool® External Wall batt will improve the thermal comfort and energy efficiency of the building in which it has been installed thus keeping it cool in summer and warm in winter. Supersoft to handle and install, Earthwool® is made using up to 80% recycled glass and with ECOSE® Technology, a sustainable, bio-based binder that contains no added formaldehyde.

PERFORMANCE

Thermal Thermal conductivity: Thermal resistance:	ASTM C 518 and AS/NZS 4859.1: 2002. ASTM C 653 and AS/NZS 4859.1: 2002.
Fire Hazard Properties (AS/NZ 1530.3)	Ignitability: 0, Spread of Flame: 0, Heat Evolved: 0, Smoke Developed: 01.
Water Vapour Absorption	less than 5% by weight.
Microbial Growth	Does not support microbial growth.
Corrosion Resistance	No greater than sterile cotton.
Combustibility (AS 1530.1)	Non-combustible.

BENEFITS

<ul style="list-style-type: none"> ✓ High thermal performance - year round comfort ✓ Sound absorbing ✓ Non-combustible ✓ Saves energy - lower energy bills ✓ No added formaldehyde 	<ul style="list-style-type: none"> ✓ Soft to handle and install ✓ 50 year warranty ✓ Compression packed - more product per pack ✓ Odourless.
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CERTIFICATION







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8.4 Bradford Gold Wall Batts

TECHNICAL DATASHEET

Revision level E

BRADFORD GOLD WALL BATTS

PRODUCT DESCRIPTION

Glasswool Wall Batts are manufactured to a controlled thickness so they can be used in suitably sized stud framing cavities. Glasswool Wall Batts should be retained in position with string or wall wrap during construction. It is recommended to use wall wrap in external walls behind insulation so that ventilation of the wall cavity is preserved. Glasswool Wall Batts will increase comfort and reduce energy bills in the home by keeping heat out during summer and heat in during winter. Glasswool Wall Batts are supplied in varying widths to suit standard timber and steel frame construction for 450mm and 600mm centres.

For safe handling instructions please refer to the Glasswool Safe Use Information Sheet (SUIS).

APPLICATIONS

Bradford Gold insulation for walls is specifically designed to deliver optimum performance in exterior cavity walls. The batts are specially stiffened and treated to provide a moisture resistant insulation – meeting the Building Code of Australia's minimum requirements for energy efficiency in homes. Bradford Gold wall batts are available in R-Value from R1.5 to R4.0.

BENEFITS

- Reduces heat transfers in your home
- Meets the highest Australian insulation standards
- Improved comfort all year round
- 70 year product warranty
- Saves on energy costs
- Made from up to 80% recycled content
- Reduces greenhouse gas emissions
- Non-combustible

PRODUCT TABLE

R-Value	Thickness (mm)	Size (mm)	Pieces per pack	Area per pack (m ²)	Coverage per pack (m ²)	Packs per multi	Bradford product code
BRADFORD GOLD WALL BATTS							
R1.5	75	1160 x 430	22	11.0	12.5	7	111727
R1.5	75	1160 x 580	22	14.8	16.7	7	111726
R2.0	90	1160 x 430	22	11.0	12.5	5	162560
R2.0	90	1160 x 580	18	12.2	13.6	6	16229
R2.2	90	1160 x 430	16	8.0	9.0	5	170351
R2.2	90	1160 x 580	16	10.8	12.2	5	170227
BRADFORD GOLD HP WALL BATTS							
R2.0	75	1160 x 420	12	5.8	7.0	6	152166
R2.0	75	1160 x 570	12	7.9	9.1	6	152192
R2.2	75	1160 x 420	6	2.9	3.5	5	152168
R2.2	75	1160 x 570	6	4.0	4.5	5	152194
R2.5	90	1160 x 420	8	3.9	4.4	5	152169
R2.5	90	1160 x 570	8	5.3	6.0	5	152196
R2.7	90	1160 x 420	5	2.4	2.8	5	152191
R2.7	90	1160 x 570	5	3.3	3.8	5	152197
R4.0	140	1160 x 430	5	2.5	2.8	6	125450
R4.0	140	1160 x 580	5	3.4	3.8	6	125449
R-Value	Thickness (mm)	Size (mm)	Pieces per pack	Area per pack (m ²)	Packs per multi	Bradford product code	
BRADFORD GOLD STEEL FRAME WALL BATTS							
R1.5	75	1200 x 450	22	11.9	7	127776	
R1.5	75	1200 x 600	22	15.8	7	127781	
R2.0	90	1200 x 450	18	9.7	6	127777	
R2.0	90	1200 x 600	18	13.0	6	127782	
BRADFORD GOLD HP STEEL FRAME WALL BATTS							
R2.0	75	1200 x 450	12	6.5	6	131367	
R2.0	75	1200 x 600	12	8.6	6	131368	
R2.5	90	1200 x 450	8	4.3	5	127778	
R2.5	90	1200 x 600	8	5.8	5	110045	
R2.7	90	1200 x 450	5	2.7	5	127780	
R2.7	90	1200 x 600	5	3.6	5	126512	

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Bradford Gold Wall Batts

PHYSICAL PROPERTIES

MAXIMUM SERVICE TEMPERATURE		350°C
FIRE HAZARD PROPERTIES	When tested in accordance to AS/NZS 1530 Part 3 – 1999	Ignitability: 0 Spread of flame: 0 Heat evolved: 0 Smoke developed: 0 - 1
MOISTURE RESISTANCE	When placed in a controlled atmosphere of 50°C and 95% relative humidity for four days	Less than 0.2% by volume
COMBUSTIBILITY	When tested in accordance with AS 1530 Part 1: 1994	Non-combustible
ELECTRICAL CONDUCTIVITY	Non-conductive when tested in accordance with AS/NZ 3100	Electrical resistance > 10MΩ at 500V

SAMPLE SPECIFICATION

The insulation material shall be Bradford Gold having a material R-Value; Rm..(specify R-Value)@ XXmm..(specify thickness). For installation specifications refer to the back of pack or installation guide.

HEALTH & SAFETY

Bradford Glasswool is not classified as carcinogenic. The International Agency for Research into Cancer (IARC) has determined that glasswool insulation products are non-carcinogenic, with no potential for causing cancer in humans. Bradford Gold Insulation is the only accepted insulation partner of the National Asthma Council Australia Sensitive Choice program. Bradford Gold Insulation is suitable for use in homes of asthma and allergy sufferers.

Bradford Insulation guarantees that all our products are low allergen, will not pack down, shrink, mould, rot or deteriorate and, when installed in accordance with our directions, are warranted for 70 years.

This product complies with AS4859.1 – ‘Materials for the thermal insulation of buildings’.



CSR Bradford
Locked Bag 1345 North Ryde BC NSW 1670
bradfordinsulation.com.au
Email: bradfordenquiries@csr.com.au

For further information
call 1300 850 305

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8.5 WALSC AAC Adhesive



NASAHI AAC Adhesive Material Safety Data Sheet (MSDS)

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name	NASAHI AAC Adhesive
Recommended Use	Applied as polymer modified cement-based bonding agent for NASAHI AAC panel wall and block wall.
Supplier	Walsc Australia Pty Ltd/Sipo Building Solutions Pty Ltd
Address	D3, 27-29 Fariola Street, Silverwater, NSW 2128
Telephone	02 9748 2832
Email Address	info@walsc.com.au/info@sipo.com.au
Website	www.walsc.com.au
Emergency Phone Number	000 Fire Brigade, Police and Ambulance (available in Australia only)
Poisons Information Center	13 11 26 (available in Australia only)




SECTION 2: HAZARDS IDENTIFICATION

The supplied **NASAHI AAC Adhesive** is classified as **Non-Dangerous Goods** on the basis of Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

The dust is generated when sawing, cutting, drilling and chasing, of which a small portion is respirable crystalline silica. The respirable crystalline silica is classified as **Hazardous Substance**.

Classification		Labelling			
Hazard		Pictogram	Signal Words	Hazard Statement	Precautionary Statement
Class	Category				
Eye Irritation	Category 2A		Warning	H319 Causes serious eye irritation	P264 Wash eyes thoroughly after handling
Specific Target Organ Toxicity - Single Exposure, Respiratory Tract Irritation	Category 3		Warning	H335 May cause respiratory irritation	P261 Avoid breathing dust
Skin Irritation	Category 2		Warning	H315 Causes skin irritation	P264 Wash hands thoroughly after handling

NASAHI AAC Adhesive Material Safety Data Sheet (MSDS)

Respiratory Sensitization	Category 1		Warning	H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled	P261 Avoid breathing dust
Skin Sensitization	Category 1		Warning	H317 May cause an allergic skin reaction	P261 Avoid breathing dust
Specific Target Organ Toxicity - Repeated Exposure	Category 2		Warning	H373 May cause damage to mucous membranes of the lung, nose, throat and upper respiratory system through prolonged or repeated inhalation.	P260 Do not breathe dust

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Ingredients	Proportion	CAS Number
Portland Cement	Approx. 50%-60%	65997-15-1
Graded Sand containing crystalline silica	Approx. 38%-49%	14808-60-7
Other additives	Approx. 1%-2%	

SECTION 4: FIRST AID MEASURES

Skin contact	Wipe away excess. Wash skin with water and a mild soap while removing contaminated clothing and shoes. Seek medical attention if irritation or redness develops.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult medical professionals for further information if eye irritation persists.
Inhalation	Keep patient calm. Remove from exposure to fresh air. Provide necessary breathing support. Consult medical professionals for further information if symptoms persist.
Swallow	Do not induce vomiting unless directed to do so by medical professional. Rinse mouth with flowing water and drink large amounts of water. Seek medical attention if symptoms persist.
Additional	Treat symptomatically.

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