

ACE POLYSTYRENE EXTERNAL CLADDING SYSTEM

PRODUCT SPECIFICATION BOOKLET

WEATHER RESISTANT, SOUND REDUCING, WATER RESISTANT, STRONG, LIGHTWEIGHT, FLEXIBLE AND VERY ENERGY EFFICIENT!







For placing orders & inquiries please contact our team via phone or email, or contact your local representative.

(02) 8652 1888 or 0435 021 888

orders@acepolystyrene.com.au

3A Contaplas St, Arndell Park NSW 2148.





Who We Are

ACE Polystyrene Products Pty. Ltd. is a family-owned Australian manufacturing business that has been part of the building and construction industry since 2000. We take pride in being 100% Australian owned and operated, providing locally manufactured polystyrene products.

In recent years, builders and homeowners have increasingly sought ways to reduce energy consumption and adopt environmentally friendly practices. One effective solution for achieving these goals is the use of polystyrene panels in construction.

Our ACE Grey Foam Panels are manufactured to meet Australian compliance standards. They are M Grade density, fire retardant, and (CodeMark) certified BAL29 (AS1530.8.I-2007), with thermal ratings (R-value) ranging from I.92R to 3.48R. Builders and homeowners consistently appreciate the benefits these panels provide in their projects.

Our Mission: At ACE, we are committed to producing the highest quality products that are ideal for a wide range of applications in the building and construction industry. Our goal is to make polystyrene a practical choice as its popularity continues to grow across various sectors. Our business model sells exclusively through trade retail outlets.



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Why CHOOSE ACE



WHY CHOOSE ACE





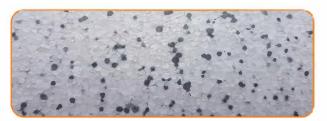








ACE Polystyrene Foam provides durable, weather-resistant, soundproof, and water-resistant materials for construction. Our lightweight and strong products are energy-efficient and meet Australian standards, suitable for residential and commercial use, including insulation panels and custom



OUR PRODUCTS

Founded in 2014, ACE Polystyrene initially manufactured waffle pods, foam blocks, and panels. Over time, our management decided to focus exclusively on blocks and panels for the construction field. Our products include:

- Wall systems
- Insulation panels
- Geotech blocks
- Landscaping fillers
- Custom sizes and designs

We produce blocks in low, medium, and high densities to meet diverse project requirements.







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OUR PRODUCTS

ACE STANDARD FOAM PANELS

Sizes Available

2500mm x 1200mm x 10mm 2500mm x 1200mm x 20mm 2500mm x 1200mm x 30mm 2500mm x 1200mm x 40mm 2500mm x 1200mm x 50mm 2500mm x 1200mm x 75mm 2500mm x 1200mm x 100mm 5000mm x 1200mm x 75mm

Custom Sizes

Length Up to 5000mm Width Up to 1200mm Thickness Up to 1200mm

ACE Wall Panels are grey foam panels made from a high quality, high strength polystyrene FR EPS Graphite.

These panels are M Grade Fire Retardant, light in weight yet still very strong and sturdy. They are Weather Resistant, offer excellent thermal insulation as well as low moisture absorbency.

ACE Wall Panels are not only a wall panel system, but also are perfect for insulating cool rooms, ceilings as well as in flat and inverted roofs.

Suitable for Residential & Commercial Applications.

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ACE STANDARD FOAM PANELS















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CUSTOM FOAM

Grooved panels



Curved panels





Blocks



CNC CUTTING



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OUR SUPPLY CHAIN







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Wall Cladding System

Popular amongst homeowners, designers and builders around Australia, external cladding is the ideal choice in homes for its functional and aesthetic properties.

ACE Grey Foam Panels are (CodeMark) certified BAL-29 (AS1530.8.I-2007) and thermal rated, meaning things remain cool in the summer months and warm in the winter.









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Landscaping Blocks

Polystyrene construction foam blocks are a cost-effective way to fill voids in landscaping.

Lightweight polystyrene blocks are easy to handle and put in place without using heavy lifting gear. This makes them easy to handle in difficult terrain and cost-effective when compared to traditional fill products.









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Sun Hoods

Sun hoods enhance the architectural appearance of modern building design.

Also providing shade and weather protection over windows and doors. ACE Grey Foam allows for quick installation and finished with a choice of textures and colour finishes.









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Custom Sizes

Custom sizes are a favourite among designers and builders across Australia. We can create any shape to meet your decorative needs using our range of ACE Polystyrene blocks, available in various densities from low to very high. Whether you're looking for unique architectural elements or tailored solutions for your projects, our foam panels can be customised to suit your specific requirements.

Experience the versatility and quality that our custom sizes offer, making it easy to bring your vision to life. Let us help you transform your designs with our innovative foam solutions!







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Architectural Features

Enhance your space with stunning architectural features that bring character and style to any design. Our custom ACE Polystyrene blocks offer unparalleled versatility, allowing for intricate shapes and unique designs that elevate your project. Whether you're looking to create splades, column bullnose, architectural design, letters and numbers.

ACE Polystyrene blocks are ideal for both residential and commercial applications. Transform your environment with our innovative solutions, and let your creativity shine through exceptional architectural elements that make a lasting impression.







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Underground & Concrete Slabs

A cost effective solution to fill a void and increase your building's energy efficiency because heat loss and temperature variations are mainly caused through the floor of the property.

See our certified compression test results to see the heavy loads ACE Grey Foam can endure.







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EXAMPLES

BEFORE



AFTER



BEFORE



AFTER



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EXAMPLES









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SPECIFICATIONS - BAL 29

ACE Grey EPS Foam Panel is an Insulated Wall Foam Panel that joins exterior cladding hand in hand with great insulation properties, so you can achieve great energy ratings and efficiency. ACE Grey EPS Foam Panel is made of high quality expanded polystyrene, which positions the ACE Grey EPS Foam Panel cladding to have insulation options which range from 1.92 R to 3.96 R.

ACE Grey EPS Foam Panel Insulated Wall Panel is a very lightweight, energy efficient product, and once it has been coated, the panel provides a weather resistant, great looking, seamlessly rendered finish.

ADVANTAGES

ACE Grey EPS Foam Panel complies with the requirements of the BCA (CodeMark).

BAL29 BUSHFIRE ATTACK LEVEL

ACE Grey EPS Foam Panel has passed extensive fire testing (in accordance with AS1530.8.I-2007), undertaken by global testing company Exova, that enables ACE Grey EPS Foam Panel to comply in BAL29 areas (Bush Fire Attack Level).

Great Insulation

All materials used for insulation are rated for their performance in restricting heat transfer. This rating is expressed using an R-value. The greater the R-value the greater the insulative properties.

A Fire Retardant

The ACE Grey EPS Foam Panel contains a flame retardant and will not sustain a fire. The spread of flame index is zero, meaning that it is not an ignition source in the case of a fire. If a fire should occur, the fumes released will be of the same harm levels as other traditional building materials, including timber.

Simple to Use and Install

ACE Grey EPS Foam Panel panel sizes are 2500×1200 and 5000×1200 which allows installers to quickly, simply and cost effectively cover external walls. When building, our panel will enable you to get a finished product in a short amount of time.

Environmental Consideration

ACE Grey EPS Foam Panel requires very little energy to produce when compared to other materials. Having the environment in mind - our product contains no CFC's or HCFC's, and none are used in the manufacturing process. ACE Grey EPS Foam Panel is recyclable, or it can be used in walls or roofs for added insulation.

A Seamless Finish

A reinforced render is applied to the ACE Grey EPS Foam Panel at approximately 4.8mm-8mm in thickness. This allows renderers to achieve a seamless, plumb finish. We recommend that any render used over ACE Grey EPS Foam Panel should be specified by a coating manufacturer.















warringtonfire

Summary of assessment

Sponsor name ACE Polystyrene Products Document no FAS220074 SOA2.0

Sponsor address 2/44 Harley Crescent, Condell, NSW 2200 Australia

Issue date 11 April 2022 Expiry date 30 April 2027

Description of assessed system

The assessed system is an external framed wall system.

The scope of the assessment includes the expected bushfire attack level (BAL) rating of the described system if tested in accordance with AS 1530.8.1: 2007 as appropriate for external walls.

Assessed system performance

The element of construction described above was assessed by this laboratory on behalf of the report sponsor in accordance with the stated test standard in Table 1 and achieved the results outlined in Table 2. A complete description of the assessed construction can be found within the referenced assessment report.

Table 1 Test standard and assessment report details

Referenced report	Test standard	Referenced report issue date	Referenced report expiry date
FAS220074 R2.0	AS 1530.8.1: 2007	8 April 2022	30 April 2027

Table 2 Formal assessment summary

Reference test	Description	Variation	BAL rating
EWFA 45109900.1	The test assembly consisted of a nominal 3000 mm wide \times 3000 mm long \times 206 mm thick wall system. The wall system consisted of two 90 \times 45 mm timber stud frames; the central frame offset 250 mm back to incorporate an 800 mm \times 800 mm timber aluminium framed window. The unexposed side was faced with 10 mm Gyprock plasterboard while the exposed side had 4.8 mm (measured) MACRENDER HBS render applied over 75 mm Ace Grey EPS foam panel cladding and a further Mactexture coat trowel applied over the render, 2 days after rendering.	Optional batten fix for 75 mm thick EPS foam panels or "direct fix" of EPS panels without battens Optional use of 35 mm thick timber battens or EPS spacers. Optional steel or timber wall framing	BAL: A-29

Conditions / validity

- This document is provided for general information only and does not comply with the regulatory requirements for evidence of compliance.
- The main assessment report must be provided for regulatory requirements and evidence of compliance.
- Reference should be made to the relevant assessment report or regulatory information report
 to determine the applicability of the test result to a proposed installation. Full details of the
 constructions and justification for the conclusions given, along with the validity statements,
 are given in the assessment reports.
- The results of the assessment report may be used to assess BAL rating, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all conditions
- All work and services carried out by Warringtonfire Australia are subject to and conducted in accordance with our standard terms and conditions. These are available on request or at https://www.element.com/terms/terms-and-conditions.

SEE MORE DETAILS OF BAL-29 CERTIFICATE FOR ACE FOAM PANEL, PLEASE SCAN HERE:









Energy Efficiency – External Walls - Contributes to the overall

H6D2(1)

H7D4 H2P3

Not Applicable

Deemed-to-Satisfy Provision(s):

Not Applicable

energy efficiency of the building. Refer A3

H7D4 (NSW, QLD, SA)

Construction in bushfire prone areas - BAL-29 Refer A3

Weatherproofing - Refer Limitation & Condition 3

H2P2

Rising damp - Refer Limitation & Condition 9

Structural stability and resistance - Wind actions

Building classification/s:





Certificate of Conformity

CMI Certification Body:

ABN: 81 663 250 815 JAS-ANZ Accreditation No. 244502104K PO Box 273, Palmwoods Qld 4555

External wall cladding for residential Class 1 & 10.

Type and/or use of product:

ACE Polystyrene External Cladding System is an Exterior cladding lightweight wall system made with M Grade fire retardant, Polystyrene foam & (EPS) panels 75mm and 100mm

ACE Polystyrene External Cladding System

THIS IS TO CERTIFY THAT

Certificate number: CM40376

BCA 2022

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S)

Volume Two H1P1(2)(c)

Australia P: +61 7 5445 2199

Not Applicable

Performance Requirement(s):

Volume One

Certificate Holder:



State or territory variation(s): ABN: 12 603 227 005 Villawood NSW 2163 203 Woodville Road, Australia Pty Ltd

SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B

This product has not been tested to AS 1530.1-1994 and cannot be considered a non-combustible product.
Construction abile be next accordance with the <u>LCE Polystrems External Cladding System. Technical & Installation Manual, Version 2, July 2023.</u>
To satisfy HZP2 via verification, the relevant design is required to meet the criteria of HZV1 to the satisfaction of the Appropriate Authority as defined by the BCA. The site specific building must;

(a)(i) has a risk score of 20 or less, when the sum of all risk factor scores are determined in accordance with Table H2V1a; and

(a)(ii) is not subjected to an ultimate limit state wind pressure of more than 2.5kPa; and (a)(iii) includes only windows that comply with AS 2047.

Limitations and conditions: www.acepolystyrene.com Ph: (02) 9791 1188

Richard Donarski – CMI

Certificate number: CM40376-I01-R00

Date of issue:

not exceed 3.01kPa Ultin

31/08/2026 31/08/2023 Date of expiry:

Don Grehan – Unrestricted Building Certifier

O PAG

Page 1 of 6

This certificate is only valid when reproduced in its entirety.

SEE MORE DETAILS OF CODEMARK CERTIFICATE FOR ACE FOAM PANEL, PLEASE SCAN HERE:







WARRANTY

ACE Polystyrene Products warrants to the purchaser of the Product and the last purchaser prior to the installation of the Product for a period of 10 years from the date of purchase that ACE Grey EPS Foam Panel sheets (the "Product") will be free from defects due to defective factory workmanship or materials and, subject to compliance with the conditions below, will be resistant to cracking, rotting, damage from termite attacks to the extent set out in AC E's relevant published Specifications current at the time of installation.

Nothing in this document shall exclude or modify any legal rights a customer may have under the Trade Practices Act or otherwise which cannot be excluded or modified at law.

CONDITIONS OF WARRANTY

The warranty is strictly subject to the following conditions:

- i) ACE will not be liable for breach of warranty unless the claimant provides proof of purchase and makes a written claim either within 30 days after the defect would have become reasonably apparent or, if the defect was reasonably apparent prior to installation, then the claim must be made prior to installation;
- ii) this warranty is transferable;
- **iii)** the Product must be installed and maintained strictly in accordance with the relevant ACE Specifications current at the time of installation and must be installed in conjunction with the components or products specified in the specifications; Further, all other products, including coating and jointing systems, applied to or used in conjunction with the Product must be applied or installed and maintained strictly in accordance with the relevant manufacturer's instructions and good trade practice;
- iv) the project must be designed and constructed in strict compliance with all relevant provisions of the current Building Code of Australia, regulations and standards;
- v) the claimant's sole remedy for breach of warranty is (at ACE's option) that ACE will either supply replacement product, rectify the affected product or pay for the cost of the replacement or rectification of the affected product;
- vi) ACE will not be liable for any losses or damages (whether direct or indirect) including property damage or personal injury, consequential loss, economic loss or loss of profits, arising in contract or negligence or howsoever arising. Without limiting the foregoing, ACE will not be liable for any claims, damages or defects arising from or in any way attributable to poor workmanship, poor design or detailing, settlement or structural movement and/or movement of materials to which the Product is attached, incorrect design of the structure, acts of God including but not limited to earthquakes, cyclones, floods or other severe weather conditions or unusual climatic conditions, efflorescence or performance of paint/coatings applied to the Product, normal wear and tear, growth of mould,
- vii) all warranties, conditions, liabilities and obligations other than those specified in this warranty are excluded to the fullest extent allowed by law:
- **viii)** if meeting a claim under this warranty involves re-coating of Products, there may be slight colour differences between the original and replacement products due to the effects of weathering and variations in materials over time.
- ix) to claim a warranty, photographic evidence is required to approve work and product conditions throughout the build. Ensure that each stage is well documented: before, during and after installation.

DISCLAIMER

The recommendations in ACE's specifications manual are based on good building practice, but are not an exhaustive statement of all relevant information and are subject to conditions (iii), (iv), (vi) and (vii) above. Further, as the successful performance of the relevant system depends on numerous factors outside the control of ACE (e.g. quality of workmanship and design), ACE shall not be liable for the recommendations in that literature and the performance of the relevant system, including its suitability for any purpose or ability to satisfy the relevant provisions of the Building Code of Australia, regulations and standards.











