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REPORT NO: ACA – 120508

INSULATION AUSTRALASIA COMPLIANCE PROGRAM - STAGE 2: DEMONSTRATING COMPLIANCE

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**EXECUTIVE SUMMARY**

To be considered for Insulation Australasia (IA) membership, applicants must substantiate compliance to the relevant Australian and New Zealand Standards, and National Construction Code (NCC). Compliance with the NCC and the insulation product standard AS/NZS4859.1 is demonstrated by fulfilling *evidence of suitability* requirements.

A three-stage process has been identified to ensure all necessary compliance aspects are considered to the satisfaction of the IA Board.

This report represents the second stage of the three-stage process for complying with the Insulation Australasia guidelines as outlined in the scope of this document.

Stage 1 - Acronem Consulting Australia report *ACA 120319 Insulation Australasia – Stage 1: Checklist of Requirements to AS/NZS 4859.1 & NCC 2012* provides a checklist for each product classification, listing the compliance requirements of AS/NZS 4859.1, and the National Construction Code 2012.

Stage 2 involves the identification of options for achieving compliance with the IA guidelines and Stage 1 requirements. Stage 2 involves the integration of services provided by testing authorities, certification bodies, and industry professionals. It includes timeframe estimates, outlines the processes associated with dealing with certification bodies. The information provided allows IA members to make informed decisions regarding the most appropriate compliance route for their business.

It is expected that each member will have a different preferred method of demonstrating their overall performance to the IA Guidelines through the certification process. So long as all the core requirements of the Stage 1 Check Lists and the IA Guidelines are achieved the choice of Certification Body and the form of certification is secondary consideration.
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# 1 INSULATION AUSTRALASIA COMPLIANCE PROGRAM

Insulation Australasia (IA) is a product agnostic industry association established in September 2011 to promote the pivotal role of thermal insulation in building energy efficiency. Underpinned by industry best-practice in product compliance and installation methods, IA membership is open to manufacturers, importers and installers. To be considered for membership, applicants must substantiate compliance to the relevant Australian and New Zealand Standards, and National Construction Code (NCC) requirements.

Within the context of the NCC and the insulation product standard AS/NZS4859.1, evidence of suitability may be demonstrated via a number of means. Variations in the methods used by registered authorities and certifying professionals has resulted in variable quality in the evidence of suitability presented to the IA Board.

To address this variability, and demonstrate compliance with requirements to the satisfaction of IA, provisions are proposed to ensure:

The following list provides a starting point for the checks and balances that an independently accredited 3rd party organisation must ensure are addressed during the accreditation process to ensure a high level of compliance is achieved.

1. Test certificates submitted must be checked to ensure they are from a laboratory or testing organisation that is NATA accredited to carry out that test or similarly internationally accredited to carry out that test.

2. Product Tests must be checked to ensure they are carried out on as to be supplied finished product and that the product description accurately matches the product in question and that the test certificate submitted is not more than 3 years old.

3. Product test samples must be selected in accordance with the stated test methodology.

4. Product packaging and labelling requirements: to prevent falsified labelling claims, all statements on labelling must be verified by the certifying organisation to AS/NZS 4859.1 labelling requirements via the provision of a sample label.
5. Annual review audits: certifying organisations must maintain their annual audit schedules and update their online Certifications Lists accordingly to ensure all certificates are current and in date.

6. Manufacturers must be checked annually as part of the review audit process to ensure certified products have not been modified or altered without the required re-submission of test data.

7. Full manufacturing and product re-audits must occur every three (3) years to ensure ongoing full compliance in compliance to ISO Guide 65 (the international standard which specifies general requirements for third-party operating a product certification system).

8. Performance calculation certificates, particularly for system based products quoting Total R-Values must be endorsed by an accredited laboratory that is qualified to carry out such work.

9. It should also be cross checked to ensure the systems quoted are in fact achievable in terms of construction. (E.g. someone should not be able to claim an 80mm reflective airspace is achievable under a 40mm roof batten).

10. Fit for purpose audits: the certification body must ensure that the relevant section of the Building Code of Australia is cited and referenced when assessing fit for purpose applications.

11. Where a company uses a StandardsMark™, the mark must include that company’s accreditation number, which should also appear on the certifying company’s website.

Using the latest IA agreed interpretation of the NCC and AS/NZS 4859.1 requirements for each product classification, these targets are now achievable.

2 SCOPE

Stage 2: Demonstrating Compliance identifies acceptable certification/accreditation outcomes for demonstrating compliance with IA Guidelines and the Stage 1 Checklists as applicable.

For each of the outcomes identified, information is provided regarding certifying organisation details, work structure, initial costs. Detailed cost estimates and timeframes are highly dependent on product range, manufacturing footprint and level of existing quality/compliance systems.
3 ACCREDITATION / CERTIFICATION

The IA Guidelines represent a certification system related to member’s products where specified requirements, rules and procedures apply. As the scheme owner, IA presents the Guidelines containing requirements on conformity assessment procedures including the selection, determination, review, and finally certification as the verification activity.

This document will be used to guide Insulation Australasia members testing, certification and appraisal process requirements,

It will be used to develop a common understanding of the regulatory compliance requirements for documents between Insulation Australasia Members, and;

- Registered Testing Authorities:
  o registered by the National Association of Testing Authorities (NATA), to test in the relevant field; or
  o outside Australia registered by an authority recognised by NATA through a mutual recognition agreement; or
  o recognised as being a Registered Testing Authority under legislation at the time the test was undertaken.
- Product Certification Body (CB) accredited by JAS-ANZ
- Certification authorities,
- Appraisal organizations,
- Professional Engineers, and
- Other appropriately qualified persons.

Such documents include:

- Certificate of Conformity issued under the ABCB (CodeMark) scheme,
- Certificate of Accreditation issued by a State or Territory accreditation authority, or
- Report issued by a Registered Testing Authority, showing that the material or form of construction has been submitted to the tests listed in the report, and setting out the results of those tests and any other relevant information that demonstrates its suitability for use in the building.
- Certificate from a professional engineer or other appropriately qualified person that certifies that a material, design, or form of construction complies with the requirements of the NCC; and sets out the basis on which it is given and the extent to which relevant specifications, rules, codes of practice or other publications have been relied upon.

3.1 Minimum Mandatory Requirements

As outlined in the Stage 1 Check Lists, products must achieve the minimum mandatory requirements of:

- AS/NZS 4859.1 including manufacturing requirements for
  o Statistical Sampling (suite of testing to relevant AS’s)
  o Suppliers Quality Management System, and
- NCC 2012 including evidence of suitability such as
  o Report from a Registered Testing Authority
  o Certificate of Conformity
  o Certificate of Accreditation
  o Certificate from appropriately qualified person
  o Certificate from JAS-ANZ accredited Certification Body (CB)
  o Any other form of documentary evidence describing the properties and performance.

3.2 Insulation Australasia Requirements

The IA Guidelines represent additional requirements to those of AS/NZS 4859.1 and the NCC. Compliance with the IA Guidelines requires an assessment by an independent accredited 3rd party organisation to ensure a high level of compliance is achieved and maintained.

The majority of requirements of the IA Guidelines are addressed by members achieving:

- CodeMark Certification of their product(s); or
- Product Certification through an independently accredited 3rd party organisation.

In both of these options the minimum compliance requirements of each product/application are determined using the Stage 1 Check Lists. Use of these Check Lists ensures consistency and completeness of 3rd party (testing laboratory, certification authority, appraisal organization, or consultant) evaluations in accordance with the IA Guidelines.
Where a 3rd party assessment does not already meet all the requirements of the IA Guidelines, it is a simple matter to extend the scope of the assessment to satisfy these requirements. For example, the certification process may need to be extended to accredit items such as:

- Methods of insulation installation and accreditation of installers.

4 3RD PARTY CERTIFICATION PATHS

The development of the IA Guidelines, linked to independently accredited 3rd party organisations provides IA administrative control over process while avoiding involvement in the assessment of products. This is a similar structure to that adopted in the ABCB and DBH CodeMark scheme. By separating these processes potential conflicts of interest within Insulation Australasia are avoided and a well-defined independent framework for complaint handling is maintained.

Within the certification process the roles of the manufacturer and the certification body are complementary. The manufacturer is responsible for conformity of the product and the certification body is responsible for the operation of the certification scheme.

Seven different paths for achieving 3rd party product assessments have been identified within the scope of this work. These include:

- CodeMark Certification through;
  - Certmark Australasia
  - Global-Mark
  - SAI Global
- Product Certification/Appraisal through;
  - Benchmark Certification
  - BRANZ
  - Global-Mark
  - SAI Global
However, not all of these options lie within the scope of the IA Guidelines of providing certification by an independently accredited 3rd party organisation. This relates to BRANZ being recognised as a registered testing laboratory and not as an independently accredited certification body. Details of BRANZ Appraisals are discussed in Section 4.3.

### 4.1 JAS/ANZ Accredited Certification to AS/NZS 4859.1 and NCC Requirements

Joint Accreditation System of Australia and New Zealand (JAS-ANZ) is a self-funding international organisation with authority to act as the joint accreditation body for Australia and New Zealand for certification of products.

JAS-ANZ is an Accreditation Body that is a member of the International Accreditation Forum, Inc. (IAF). The IAF is the overarching international body whose members are required to operate at the highest standard in accordance with ISO/IEC Guide 65:1996 - *General Requirements for Certification Bodies operating Product Certification Systems*. ISO/IEC Guide 65:1996 is an International Standard which sets out criteria for bodies operating certification of products, services and processes.

JAS-ANZ accreditation is accessible to any company seeking qualification to provide product certification services as a Certification Body (CB).

#### 4.1.1 Definition

The IAF is responsible for accrediting JAS/ANZ which in turn accredits Certified Bodies to provide certification services (Product Certification or CodeMark) to IA members.

Product Certification through this internationally recognised framework reduces the risks for a business and its customers by providing an assurance of competence that products are manufactured and work is performed to the necessary standards.

Certified Bodies (CB’s) in Australia and New Zealand achieve their accreditation through JAS-ANZ accreditation of their procedures to ISO/IEC Guide 65.

Just as IA members products are required to achieve conformance with the IA Guidelines, the CB’s accrediting this performance must achieve their own certificate of accredited conformity.
assessment based on regular surveillance to assure the equivalence of their accreditation programs.

### 4.1.2 Certified Bodies (CB)

Three JAS-ANZ accredited CB’s are qualified to issue certificates of approval to AS/NZS 4859.1 and the NCC. These include:

- BSI Group (Australia & New Zealand) Pty Ltd, trading as Benchmark Certification (see Appendix D for details).
- Global-Mark Pty Ltd (see Appendix F for details).
- SAI Global Certification Services Pty Ltd, trading as SAI Global (see Appendix E for details).

### 4.1.3 Details

CB’s will issue a Certificate of Approval to confirm a company’s product complies with a standard. By using a JAS-ANZ accredited CB for their product certification, IA members may use the JAS-ANZ symbol in conjunction with that of their own name or logo and that of their CB, clearly identifying the part of the document to which the symbol applies.

The Certificate of Approval will list:

- Company Name
- Certification Standard e.g. AS/NZS 4859.1.
- Scope of Certification e.g. Product List
- Type of Certification e.g. Product Certification
- Manufacture Address
- Certificate Review Dates e.g. Issue, Review, Expiry, Update(s)
- List of Products
  - Name
  - Code/Description
  - Declared Material R-value (as applicable)
  - Nominal Stabilised Thickness (as applicable)
  - Standard Mean Temperature (as applicable)
  - Surface emittance (as applicable)

A detailed description of the process and requirement is provided in Section 5.
4.2 Certification via CODEMARK Accreditation

CodeMark is a specific product certification scheme administered by Australian Building Codes Board (ABCB) and the New Zealand Department of Building and Housing (DBH).

The certification of building products is undertaken by Certification Bodies who have achieved JAS-ANZ accreditation for the CodeMark scheme. This is performed in a similar manner to that by which Certified Bodies are assessed to provide Product Certification to a particular Australian Standard.

Where a manufacturer sells their products nationally, rather than seeking the approval of each of the eight individual states and territories, CodeMark provides a national certification. This eliminates the uncertainty of whether the product has building approval in certain states or territories. CodeMark Certification for a product means a guaranteed acceptance by each of the State and Territory jurisdictions (regulatory bodies) and is a clear demonstration that the product meets its mandatory compliance requirements.

4.2.1 Definition

The CodeMark scheme is a third party scheme and is designed to provide national consistency in the certification of building products building products, systems and processes at plant, site and installation. It is particularly suited to new and innovative building products by providing a nationally and internationally accepted process for products to be assessed for compliance with the requirements of the National Construction Code of Australia (NCC) and New Zealand Building Code (NZBC). The scheme provides confidence and certainty to regulatory authorities and the market through the issue of a Certificate of Conformity.

While evidence supporting the use of a material or form of construction meets an NCC performance requirement or a deemed-to-satisfy provision, may be in the form of one or a combination of the following:

- A report issued by a Registered Testing Authority, showing that the material or form of construction has been submitted to the tests listed in the report, and setting out the results of those tests and any other relevant information that demonstrates its suitability for use in the building.
- A certificate from a professional engineer or other appropriately qualified person which;
certifies that a material, design, or form of construction complies with the requirements of the NCC; and
- sets out the basis on which it is given and the extent to which relevant specifications, rules, codes of practice or other publications have been relied upon.
- Any other form of documentary evidence that correctly describes the properties and performance of the material.

Relevant legislation requires building control authorities to accept CodeMark certified products. This assists all players in the building, manufacturing, design and construction industries including product manufacturers, designers, architects, certifying authorities, builders and consumers.

With CodeMark certification, any ambiguities that may ordinarily result from the provision of other forms of evidence of suitability are avoided.

‘CodeMark-ed’ building products have undergone a rigorous process including a comprehensive examination of their manufacture, testing and installation.

4.2.2 Certified Bodies

Three JAS-ANZ accredited CB’s are accredited to assess and issue building products with certificates of approval under the CodeMark scheme. These include:

- CertMark Australasia (see Appendix G for details).
- Global-Mark Pty Ltd (see Appendix F for details).
- SAI Global Certification Services Pty Ltd, trading as SAI Global (see Appendix E for details).

In order to receive JAS-ANZ accreditation for the CodeMark scheme the certification body is required to successfully undergo an extensive process that ensures they understand the scheme rules and are able to apply them consistently and effectively when examining building products.

4.2.3 Details

The first step to achieving CodeMark product certification for building products and systems is to contract the services of a certification body accredited for the CodeMark scheme.
The certification body will conduct an audit process which covers the product’s manufacture, testing and installation according to the CodeMark Scheme Rules. A listing of typical checks required to be performed by the CB are listed in Appendix A.

If the product meets the CodeMark requirements then the certification body will award the product with a CodeMark certificate which is valid for 3 years in Australia and can be renewed through a reassessment. Certificates of approval will clearly state the NCC clauses that the product has been assessed against. Claims of compliance can only be made to those clauses listed on the certificate. Details of the assessment procedure are provided in Appendix A.

4.3 BRANZ Appraisal Product Approval,

BRANZ is an independent and impartial research, testing, consulting and information company providing services and resources for the building industry. Under the definitions of the NCC, BRANZ is a registered testing laboratory to ISO/IEC 17025:2005. It does not provide certification of building products as a JAS-ANZ accredited Certified Body. BRANZ maintains ISO 9001 for its overall operation and is accredited to perform:

- fire testing and fire resistance testing,
- thermal insulation testing to AS/NZS 4859.1, and
- weatherproofing testing.

BRANZ Appraisals represent one of the services provided by BRANZ which has also developed a reputation for research, testing, product development and consulting in a number of technical fields. Additional information on BRANZ is presented in Appendix C.

4.3.1 Definition

BRANZ Appraisals are independent assessments of building products, materials, systems or methods of design or construction. They are designed to assess products and systems for NCC compliance and fitness for purpose. While this assessment may be compared to that performed under the CodeMark scheme, BRANZ is responsible for developing the criteria for an appraisal based on the requirements of the NCC together with user expectations. These criteria are used to determine what tests and expert opinions are needed, as well as any other technical information.
BRANZ continuously monitors technical literature, quality control, installation, service performance and maintenance aspects of valid BRANZ Appraisals. BRANZ also provides these assessments outside of the BRANZ Appraisal framework.

BRANZ Appraisals provide the client with a marketing tool which can be used to facilitate product/system acceptance by users, specifiers and approving authorities. BRANZ Appraisals are often accepted by approving authorities in Australia and New Zealand. There are over 800 BRANZ clients who use the BRANZ Appraised logo as a marketing tool in a similar manner to the SAI Global StandardsMark™.

### 4.3.2 Details

The development of a BRANZ Appraisal follows a similar process to that outlined for other certifications.

It commences with the submission of an application containing information to convey what the product is and how it is to be used. Following this initial application, the Appraisal process is explained and the fees and costs can be outlined.

Each product will have specific evaluation plan, this provides detailed description of the required information, but it also determines the key evaluation criteria. It includes a complete technical specification of the product including all components required meet NCC requirements.

BRANZ experts will then develop assessment criteria for the appraisal based on NCC and user expectations. This determines what tests and expert opinions and other technical information are necessary. Requirements are outlined for site visits to inspect quality control, technical literature content and viewing the product in service. At this stage a quotation can be provided to perform the appraisal inclusive of all associated testing, expert opinions, inspections and reviews. The appraisal process can commence following the acceptance of the services agreement.

This is typically a four stage process involving the information collection, inspection of quality procedures and review of manufacturer’s technical literature resulting in the appraisal release.

Information collection addresses testing requirements, expert opinions, factory and site visits. This stage often presents delays due to the complexity of the work, and the availability of
sufficient information. These can often be avoided by the manufacturer committing to review their documentation and providing complete information at the application stage.

Product quality is an important aspect of a BRANZ Appraisal. Adequate quality control procedures must be in place for the manufacture of the product. Regardless of whether a certified quality system is in place, BRANZ will inspect the manufacturing procedures. Where no certified quality system is implemented, BRANZ will inspect against the BRANZ quality inspection plan.

The technical literature review, including the reporting of test results and installation procedures is a very important consideration for ensuring a product is used correctly. Manufacturer’s literature is usually referenced by the appraisal and will be checked thoroughly as part of the appraisal process.

BRANZ perform and internal audit on the total project following the collation and assessment of all the information by the project manager. A draft appraisal is then sent to the manufacturer for approval. An ongoing validity review plan is agreed before the appraisal is issued, listed on the BRANZ website and also listed in the BRANZ ‘Build’ magazine.

The validity plan monitors all aspects of the appraisal including quality control, specification, field performance, installation practicality, manufacturer’s literature and any changes to Codes and Standards. It typically involves annual manufacture and site visits, however the audit frequency may be more than once a year depending on the complexity of the product or its installation. A BRANZ Appraisal requires the payment of an annual validity fee, dependent on the work required to monitor manufacturing quality and product performance.

The individual BRANZ Appraisal logo can use for advertising, in literature, on the product and packaging, and even on vehicles and buildings.

5 STEPS TO ACHIEVING CERTIFICATION

As outlined in Section 4, there are six options for achieving compliance with the IA Guidelines and the minimum mandatory requirements identified in the Stage 1 Check Lists. Achieving
compliance involves the integration of services provided by testing authorities, certification bodies and industry professionals.

Regardless of whether the type of certification sought is product certification or CodeMark compliance, the steps to achieving product certification through a CB will typically include the following components:

1. **Manufacturers Review:**
   An internal review your own products to ensure, as far as possible, that the information required by the CB is available. This includes details regarding:
   a. Manufacturers technical literature covering design, performance, compliance and installation instructions;
   b. Product test reports identified from the Stage 1 Check List;
   c. Manufacturing quality system;

   If these basic requirements are addressed and included in the initial documentation forwarded to the CB at the time of application, the certification process will progress faster by not having to address many areas of deficiency.

   Additional initial investigation will be required to select the most appropriate CB that best meets your requirements. This will be dependent on the type of Certification require, e.g. IA Guidelines and Product Certification to NCC & AS/NZS 4859.1 or CodeMark.

2. **Certification Application:**
   a. Complete and submit the forms supplied by your CB accompanied by all technical specifications of the product including, its manufacture, related test reports, assessments, intended use, product quality plan, etc.
   b. Your CB will then perform an initial review of the documentation and is likely to request additional information. This is where it is important to have performed a thorough internal review to ensure these requests have minimal impact on the cost and time required to achieve certification.
   c. Your CB will provide a detailed quotation for the assessment and certification which will include an overarching plan an approximate timeframe for its completion.
   d. Following a review of the quotation, you will need to submit a formal acceptance accompanied by the relevant application fee to your CB. This information is to be forwarded to IA as proof of commencement of your Certification process.
   e. Your CB may require a pre-evaluation visit to the factory and/or construction site to better understand the product and its application. This visit should also serve to
verify the product specification and other claims that are to be assessed, and will help to define the appropriate method of assessment.

3. Evaluation
   a. Your CB will perform a detailed evaluation of the product. Each review is conducted on a case-by-case basis. Depending on the completeness of the information already provided, this may include, additional product testing, product quality plan, factory visit(s) and construction site visit(s).

4. Testing
   a. Following a review of the documentation, if additional testing is required, the CB will provide a type test schedule, a list of NATA registered laboratories and initiate selection of the test samples.
   b. Your CB will typically forward the test samples to your preferred NATA laboratory with a copy of the test schedule and product documentation.
   c. The test laboratory will provide your CB with complete original test reports to be included in the assessment process.
   d. Your CB will complete the report assessment, and provide formal advice, outlining any corrective actions and/or additional work required to complete the certification. Note that this may include a request for a ‘product audit’ to ensure all corrective actions have been addressed.

5. Certification
   a. Where your CB deems that the product complies with the relevant requirements of the IA Guidelines, AS/NZS 4859.1 & the NCC, they will issue a Certificate of Conformity, including details of the product(s) covered under the certificate.
   b. Current certificates are listed on the CB’s web site, available for viewing by you and your customers.

6. Surveillance
   a. Your CB will re-evaluate certified products at intervals of not more than 12 months.
   b. Results of surveillance will determine whether re-testing, re-assessment, factory and/or construction site inspections or re-examination of literature is required. The level of surveillance will be dependent on:
      i. Previous performance;
      ii. Changes made to the NCC, Standards, or other documents used to assess certification;
      iii. Complaints or other feedback; and
      iv. The outcome of the original risk analysis.
   c. You shall notify your CB of any changes in the certified products and/or literature that may impact on the product certification.

7. Renewals
   a. Every 3 years a full review of the conformance requirements and supporting documentation will be undertaken by your CB. This may highlight any changes
that are required to maintain certification. Factors reviewed as part of the renewal
process include:
b. Complaints or other feedback;
c. Previous performance;
d. Product changes;
e. Changes to the NCC, Standards or other documents used to assess certification;
f. Non-conformities; and
g. Risk analysis.

6 TIME & COST ESTIMATES

CB’s pay fees to JAS-ANZ to maintain their ability to provide product accreditation services to
manufacturers. Fees paid by the CB may be broken down in a similar manner as the fees they
charge for their Product Certification services. They typically include an application Fee (e.g.
Product Certification to AS/NZS 4859.1), a program fee (per product), a certificate fee (per
certificate issued), and an annual assessment fee. There are significant costs to maintain the right
to provide certification services.

CB’s in turn charge fees for their services to provide product accreditation to manufacturers
based on a structure that may typically include:

- The size/turnover of the manufacturer (to determine the royalty payment);
- The type of product (complexity of its compliance process);
- The number of locations (manufacturing facilities and whether they are local or
  overseas)
- The type of certification requested (IA Guidelines, Product Certification, CodeMark)

The total cost of achieving and maintaining certification will be different for each manufacturer
and depends very much on the type of product and what sites need to be audited, i.e.
manufacturing site, construction site, etc.

There is typically a fee to perform an initial product review and cost of the certification service.
This will include a review of your product information (technical literature, installation
documentation, diagrams, existing test reports, maintenance documentation, etc.) against the
applicable NCC clauses and/or Australian Standards. This initial review may cost in the area of
$2K per product family (product/application combination). Some CB’s will deducted these
amounts from the total application fee quoted if the project proceeds.
The time required to achieve Product Certification via any of these routes is highly dependent on product range, manufacturing footprint and level of existing quality/compliance systems. The complexity of any certification varies significantly from product to product, as does the time required to complete this process. Where all of the supporting information is available at the start of the project, the certification process can proceed uninterrupted. However, where the necessary product information is still under development, not available or is unsatisfactory, or additional testing is required, the time taken to complete the process will be extended.

Typical estimates of between 6 to 12 months are quoted. However, unless a complete set of documentation can presented at the time of initial application, any of the product certification processes outlined in this report can be expected to be completed on a timeframe of 12 months. While this estimate allows for all the necessary clarification, testing, inspections, corrective actions to be completed, all manufacturers must ensure they respond to all requests from their CB in a timely manner to ensure that the process runs smoothly.

7 RECOMMENDATIONS

Accredited certification is increasingly recognised around the world as an efficient and effective approach to regulation. The IA Guidelines utilise the existing network of JAS-ANZ accredited certification bodies to provide the required accreditation and certification infrastructure.

As outlined in Section 5, the process requirements for compliance with the Stage 1 Check Lists and the IA Guidelines are similar regardless of whether the CB is engaged to provide Product Certification or CodeMark certification.

The cost and timeframe to achieve each form of certification are highly variable. These can be minimised by ensuring that the product and process have been thoroughly reviewed to ensure they are ready to be submitted to a CB.

IA Guidelines require annual 3rd party surveillance and full manufacturing and product re-audits every 3 years. These requirements form a core requirement of the CodeMark scheme, and can be easily incorporated into a Product Certification process from any CB.
Already contained within the CodeMark scheme is the requirement for site and installation inspections. The IA Guideline requirement to verify a product is fit-for-purpose and is capable of being installed in the stated application is automatically addressed under a CodeMark Certificate of Conformance. IA Guidelines mandate this as a necessary additional requirement of product certification to AS/NZS 4859.1.

The CodeMark scheme provides for the certification of building products, systems and processes at plant, site and installation. It is particularly well suited to new and innovative building products for which there is no commonly accepted or Deemed-to-Satisfy solution available in the NCC.

Recommendations are unable to be made as to choice of Certification Scheme and Certifying Body. Specific proposals from individual CB’s to each manufacturer would need to be compared in order to provide a recommendation on the preferred path.

The key difference between the CodeMark scheme and other Product Certification schemes is Australian building legislation requires building control authorities to accept all products with a CodeMark Certificate of Conformity. While both schemes may be achieved by undergoing a similar process performed by the same CB, individual manufacturers may see benefit in achieving CodeMark certification for this reason.

8 FUTURE WORK - STAGE 3

This report involves the identification of the options available to IA members for demonstrating compliance with the IA Guidelines. It provides information on the process of achieving certification and includes indicative timeframes and cost structures.

The time and cost are key elements. Achieving compliance cost-effectively is highly dependent on the “readiness” of the products and processes. “Readiness” includes such things as technical literature and product testing as outlined in the Stage 1 Check Lists and the Manufacturers Review outlined in Section 5.
Based on this information, IA members are now in a position to make informed decisions regarding the most appropriate route for demonstrating compliance to the satisfaction of IA Guidelines.

Stage 3 of the process will involve each member choosing their own means of demonstrating IA Guideline compliance. Key steps include preparing the product for certification followed by the selection of a Certification Body. The CB will tailor a compliance route to suit your specific product classification(s), manufacturing facilities, market share, target market, and budgeting requirements. All compliance routes require similar supporting documentary evidence consisting of quality systems, product test reports, technical literature and installation instructions. The major difference being the perceived benefit of achieving CodeMark Certification to provide mandatory acceptance under Australian building legislation.

9 SUMMARY

Information has been sourced to clarify acceptable means of compliance with the IA member guidelines for compliance and accreditation. The different options available to members have been described in detail to provide members with sufficient information to make informed decisions as to which is likely to be most suitable to demonstrate compliance.

This builds on the Stage 1 report to outline the minimum requirements of AS/NZS 4859.1 and the NCC 2012, and leads into Stage 3 involving the choice and implementation of compliance with the IA guidelines for each IA member.

Notes:
1. Acronem Consulting Australia Pty Ltd (Acronem) shall not be liable for loss, cost, damages or expenses incurred by the client or any other person or company, resulting from the use of any information or interpretation given in this report.
2. In no case shall Acronem be liable for consequential damages including, but not limited to, lost profit, damages for failure to meet deadlines or other losses arising from this report.
3. This document shall not be reproduced except in full and relates only to the analysis as detailed.
4. It remains the responsibility of the client to verify that the information provided is applicable for their intended purpose.
5. Acronem shall take no responsibility for the accuracy and authenticity of the information provided by secondary sources and included herein.
6. Acronem shall take no responsibility for the interpretation or misinterpretation of this report.

CAMERON CHICK BE(HONS), PH.D, GC. COM. (MKTG), M.AIRAH
ACRONEM CONSULTING AUSTRALIA PTY LTD
APPENDIX A: CODEMARK

CodeMark Certification provides assurance that a product meets the specified requirements of the Building Code of Australia (BCA) and/or the New Zealand Building Code (NZBC). Certification is gained by following the simplified process below:

- Product Review of the design, performance and installation to the relevant Building Code section;
- Application Process: application form, product documentation including available test reports, quotation of fees, pre-evaluation, evaluation plan;
- Initial Evaluation: product testing (if relevant), quality plan, factory/construction site visit(s);
- Certificate Issuance and details of the certified company & product on the ABCB website. Marking of the certified product can commence;
- Maintaining Certification through annual surveillance evaluations;
- Renewal of the Certificate every 3 years.

CONTACTS FOR CODEMARK CERTIFICATION

JAS-ANZ
Tel 02 6232 2000
Email contact@jas-anz.com.au
Visit www.jas-anz.com.au

Australian Building Codes Board
Tel 1300 134 631
Email CodeMark@abcb.gov.au
Visit www.abcb.gov.au

NZ Dept. of Building and Housing
Tel 04 494 0260
Email info@dbh.govt.nz
Visit www.dbh.govt.nz
CODEMARK CERTIFIED BODIES

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Contact</th>
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<tbody>
<tr>
<td>SAI Global Certification Services</td>
<td></td>
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<tr>
<td>Trading as SAI Global, Accreditation No. Z1440295AS</td>
<td>Website: <a href="http://www.saiglobal.com">www.saiglobal.com</a></td>
</tr>
<tr>
<td></td>
<td>Address: 286 Sussex Street</td>
</tr>
<tr>
<td></td>
<td>SYDNEY NSW 2000</td>
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<tr>
<td></td>
<td>Phone: +61 (2) 8206 6322</td>
</tr>
</tbody>
</table>

| Address: Suite 4.07, 32 Delhi Road |
| NORTH RYE NSW 2113 |
| Phone: +61 (2) 9886 0222 |

| Address: PO BOX 7144 |
| SIPPY DOWNS QLD 4556 |
| Phone: +61 (7) 5445 2199 |

CODEMARK CERTIFICATES OF CONFORMITY

There are a number of checks a CB must perform before a CodeMark certificate of conformity can be issued; these cover a broad range of requirements including:

- Use of the Mark of Conformity and certificate of conformity numbers.
- Suspension and Withdrawal of Certificates of Conformity
- Amendments to Certificates of Conformity
- Transfer of Certificates of Conformity
- Complaints and Appeals
- Certified Products
- Certificate Holder Responsibilities
- Certificate Holder Acknowledgements

A CodeMark Certificate of Conformity may only be issued subject to the CB considering the following.

1. Does the CB confirm that each Certificate of Conformity contains sufficient information to enable a user to verify Product identity onsite?
2. Does the CB’s Certificate of Conformity include at least the following:
   a. Product description including trade name(s), catalogue numbers, model identification and indication of the different brand names that may be used;
   b. Product purpose or use;
   c. reference to the specific BCA clauses including any relevant State and Territory variations and additions to which the certification applies;
   d. Certificate holder’s full contact details;
   e. conditions, or limitations of certification;
   f. reference to a specific edition/publication of documentation;
   g. reference to the existence of any Schedule that forms part of the Certificate of Conformity or the basis for certification;
   h. Mark of Conformity;
   i. Certificate of Conformity number;
   j. JAS-ANZ symbol;
   k. name of the CB and its mark;
   l. date of issue;
   m. date of expiry; and
   n. this statement: “This Certificate of Conformity is issued by an accredited certification body under arrangement with JAS-ANZ. The ABCB does not in any way warrant, guarantee or represent that the Product the subject of this Certificate of Conformity conforms with the BCA, nor accepts any liability arising out of the use of the Product. The ABCB disclaims to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this Certificate.”

3. Does the CB confirm that the supporting information required for a Certificate of Conformity, is available on request?

4. Are the CB’s Certificates of Conformity:
   a. issued using the template provided by ABCB;
   b. valid for 3 years unless withdrawn or suspended; and
   c. reproduced only in their entirety.

5. Does the CB use the Certificate of Conformity numbers issued by the ABCB for Certificate holders?

6. Does the CB use the Mark of Conformity as a certification mark, and if so in accordance with Appendix 3?

7. When there is misuse by a Certificate holder, does the CB suspend the use of the Certificate of Conformity, the Mark of Conformity, and the Certificate number until corrective action is taken, and withdraw certification upon written notice to the Certificate holder (see clause 5.5.1)?

8. Does the CB inform the client that the CB may withdraw Certificates of Conformity at any time, for:
   a. breach of these CodeMark Scheme Rules;
   b. breach of the conditions of a Certificate of Conformity;
c. a critical nonconformity (see Appendix 1);
d. significantly changing a characteristic of the certified Product without prior notification to the CB;
e. failure to pay any fees, costs or charges associated with the certification;
f. failure to comply with the procedures of the CB; or
g. misuse of the Mark of Conformity?

9. Does the CB inform the client understands that the CB may suspend certification for any of the reasons where the transgression is of a temporary nature?

10. In the event of suspension or withdrawal, does the CB advise the Certificate holder and ABCB in writing of the reasons for the suspension or withdrawal?

11. A Certificate holder may relinquish certification at any time by written advice to the CB.

12. The CB, and/or the ABCB, may make details of withdrawn or suspended Certificates of Conformity, publicly available.

13. Does the CB assess requests for amendments to Certificates of Conformity in accordance with the procedures of the CB and the CodeMark Scheme Rules?

14. Does the CB ensure, whenever the BCA, CodeMark Scheme Rules or documents referenced therein are amended, that all certification decisions taken by them are reviewed and appropriate action taken to ensure compliance with the BCA, and CodeMark Scheme Rules is maintained within 3 months of the amendments coming into effect?

15. Does the CB regard a request to transfer a Certificate of Conformity from one Certificate holder to another as a new application and evaluate accordingly?

MANUFACTURERS REQUESTING CODEMARK CERTIFICATION

The certification body must confirm with the manufacturer the following:

1. Does the CB confirm that the certificate holder:
   a. complies with the CodeMark Scheme Rules;
   b. complies with the procedures of the CB;
   c. maintains a Product Quality Plan that details the procedures and associated resources that are applied by whom and when to a specific Product and its manufacture, and is consistent with ISO 10005:2005 (AS/NZS 10005:2006);
   d. ensures the certified Product is manufactured in accordance with the Product Quality Plan and any conditions associated with the Certificate of Conformity and that it is materially the same as any sample that was evaluated;
   e. notifies the CB of any intended change, modification or alteration to the certified Product (or its method of manufacture, Product Quality Plan, installation instructions, etc.);
   f. notifies the CB of any reason to suspect the certified Product may not comply with the BCA;
g. notifies the CB in writing of any intended change to the name, address or contact details of the Certificate holder place(s) of Product manufacture;

h. issues public disclosure statements through means acceptable to the CB and the ABCB where certified Product that is found not to comply with the BCA has been released on to the market;

i. if certification has been suspended or withdrawn – notifies existing customers of this change in status and immediately ceases the use of the Certificate of Conformity, Mark of Conformity and Certificate of Conformity number;

j. reproduces the Certificate of Conformity only in its entirety;

k. ensures that the supporting information required for a Certificate of Conformity is available on request;

l. ensures that the certified Product is identified as such by applying the Mark of Conformity to the certified Product or its packaging; and

m. uses the Mark of Conformity in accordance with requirements.

To gain and maintain a CodeMark certificate for a product, the CB must confirm with the certificate holder:

1. Does the CB confirm that the Certificate Holder acknowledges that:
   a. each Certificate of Conformity is registered in accordance with a Trans-Tasman scheme managed in Australia by the ABCB;
   b. the ABCB does not make any representations, warranties or guarantees, and accepts no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any material contained within the Certificate; and
   c. the ABCB disclaims to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in the Certificate?
APPENDIX B: JAS-ANZ

Joint Accreditation System of Australia and New Zealand (JAS-ANZ) is a self-funding international organisation with authority to act as the joint accreditation body for Australia and New Zealand for certification of products.

JAS-ANZ is an Accreditation Body that is a member of the International Accreditation Forum, Inc. (IAF). The IAF is the overarching international body whose members are required to operate at the highest standard in accordance with ISO/IEC Guide 65:1996 - *General Requirements for Certification Bodies operating Product Certification Systems*. ISO/IEC Guide 65:1996 is an International Standard which sets out criteria for bodies operating certification of products, services and processes.

JAS-ANZ accreditation is accessible to any company seeking qualification to provide product certification services as a Certification Body (CB).

CONTACT DETAILS

JAS-ANZ
Tel 02 6232 2000
Email contact@jas-anz.com.au
APPENDIX C: BRANZ

BRANZ Group, comprising BRANZ Inc. and BRANZ Ltd and their partly-owned subsidiaries, is owned and directed by New Zealand's building and construction industry. BRANZ is an independent and impartial research, testing, consulting and information company providing resources for the building industry.

It receives almost all its income from the Building Research Levy, and invests this to achieve benefits for the New Zealand community by improving the knowledge base of the New Zealand building and construction sector.

BRANZ two main areas of activity are to:

- research and investigate the construction and design of buildings that impact the built environment in New Zealand; and
- enable the transfer of knowledge from the research community into the commercial building and construction industry.

Funding for BRANZ comes from three main sources:

- industry funding via the Building Research Levy;
- the Ministry of Science and Innovation;
- revenues generated through commercially contracted research projects for private, government and international clients.

The Building Research Levy funds a continuous programme of research and information transfer activities for the benefit and education of the building and construction industry, and funds activities such as Build magazine, specific research projects, seminars, technical advice helpline and material testing projects.

Commercial income is generated through commercial activities such as the testing and appraisals of products. This work on behalf of governmental, institutional and commercial entities keeps BRANZ in direct contact with the construction industry and ensures that BRANZ processes are commercially competitive.
APPENDIX D: BENCHMARK CERTIFICATION

BSI Group Australia & New Zealand Pty Ltd trades as such in Australia and New Zealand. However, BSI Management Systems Australia & New Zealand trades as Benchmark Certification for all clients serviced by nominated Overseas Agents and for Product Certification.

CONTACT DETAILS:

Head Office: Suite 1.08 - 56 Delhi Road, North Ryde NSW 2113, Australia.
Contact: Tracey Lang
Phone: 1300 730 134
Fax: 1300 730 135
Web: www.bsigroup.com.au

BSI’s Benchmark Certification provides a highly respected and recognised Product Certification service to Australian and New Zealand Standards, British and European standards including CE Marking and other International Standards.

BSI’s Benchmark in Product Certification is accredited by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ).

Certified products will be promoted on the global client directory as well as the JAS-ANZ directory to demonstrate to potential customers the validity of your registration. Additionally certified products will be allowed to display the prestigious and internationally recognised BSI Benchmark Product Certification Mark and use it to publicise this achievement to clients, vendors and stakeholders alike.
APPENDIX E: SAI-GLOBAL

Head Office: SAI Global Certification Services Pty Ltd., Trading as SAI Global, 286 Sussex Street, Sydney NSW 2000, Australia.
Contact: Samer Chaouk
Phone: 1300 360 314
Web: www.saiglobal.com

SAI Global Limited is a compliance and training organisation with offices in Australia, New Zealand, North America, Europe, Asia and the Middle East.

Certification experience covers more than 300 Australian and international standards. SAI Global auditors are selected for specific audit activities based on their qualifications, skills and industry experience that match the business needs of our clients. For CodeMark certification SAI Global uses auditors with building industry specific knowledge and extensive audit experience of building products and services.


SAI Global has trademarked the name StandardsMark™ to differentiate their Product Certification service offering to the market.

Product Certification Scheme Descriptions:

- StandardsMark
- CodeMark
- Product Standards:
  - Building Code of Australia - all clauses; and New Zealand Building Code - all clauses

The ‘5 ticks’ StandardsMark™ is a global certification mark designed to differentiate each product carrying this mark. The StandardsMark™ on a product is an independent assurance to the customer that the product has undergone a rigorous audit and testing program.

The StandardsMark™ scheme requires annual audits of the manufacturing facility in addition to product type testing, according to the requirements of the relevant standard.
It is achieved through an on-site factory assessment of the manufacturing process as well as type testing of product samples. Ongoing certification is also required and involves factory surveillance audits to ensure that maintenance of the manufacturing process is occurring, for example StandardsMark™ certification scheme. SAI Global offers the StandardsMark™ certification program for a large number of products.

SAI Global evaluates and certifies building products so that the product can carry the CodeMark Certification Mark.

Sample Application for Product Certification
APPENDIX F: GLOBAL-MARK

Head Office: Suite 4.07, 32 Delhi Road, North Ryde NSW 2113, Australia.

Contact: Herve Michoux
Phone: (02) 98860222 / 1300766509
Fax: (02) 98860200 / 1300766504


Global-Mark is a JAS-ANZ Certified Body accredited to provide product certification and other services to ISO/IEC Guide 65: General requirements for bodies operating product certification systems, as guided by the IAF Guidance on the Application of ISO/IEC Guide 65:1996 Product Certification Schemes. These include:

- Product Conformance Program: (ISO Type 5 certification) type testing, plus factory audit, on-going testing and factory audits, as presented in Global-Mark document G-64, the Trust-Mark certification mark can be affixed to the product. Annual surveillance is required as a minimum;
- Product Standards: Building Code of Australia - all clauses; and New Zealand Building Code - all clauses;
APPENDIX G: CERTMARK AUSTRALASIA

CMA is an Australian-owned, accredited third-party product certifying body offering quality certification services across a broad range of standards and building codes in Australia and New Zealand. It is a Conformity Assessment Body (CAB) under the Joint Accreditation Scheme of Australia and New Zealand (JAS-ANZ) (registration # Z4450210AK). Whereas most product certification bodies are large multinational organisations, CMA is a locally owned family business that just happens to operate in several countries. Head office is in Queensland.

Website: www.certmark.com.au  
Address: PO BOX 7144  
SIPPY DOWNS QLD 4556  
Phone: +61 (7) 5445 2199

“At CMA we believe that the process of product certification does not have to be a bureaucratic nightmare, instead we strive to make the process as simple and straightforward as possible. We have a free pre-application period where we work with you to obtain the information needed to define the areas of compliance that are applicable to your product and then prepare a quotation and schedule.

We pride ourselves on the following:

- Prompt and professional service.  
- Agreed certification completion time lines.  
- Expert staff to assist you every step of the way.  
- Dedicated Client Managers.  
- No hidden costs.

CertMark provide a CodeMark Product Certification designed to make the certification process simple, quick and painless. CertMark’s network of Client Managers will support you with your Product Certification needs throughout the Australasia Region. Our client managers are carefully matched to your area of business; to ensure consistency of experience and expertise that enables the best possible outcome in the shortest possible time.”
APPENDIX G: NATA REGISTERED TESTING AUTHORITIES

The National Association of Testing Authorities, NATA is one of four bodies that form Australia's standards and conformance infrastructure. The others are Standards Australia, the National Measurement Institute (NMI) and the Joint Accreditation System of Australia and New Zealand (JAS-ANZ).

NATA accreditation provides a means of formally recognising the competence of facilities to perform specific types of testing and other related activities. To maintain accreditation, facilities must be re-assessed regularly. The criteria for determining a facility's competence are based on the relevant international standard (eg ISO/IEC 17025).

NATA's role is to ensure that member facilities comply with relevant international and Australian Standards. NATA represents Australia in The International Laboratory Accreditation Cooperation (ILAC). This role is recognised by the Australian Government in a Memorandum of Understanding with NATA.