Core Sustainable Development Goals









Building Insulation Materials

Standard No: BIM v2.0i-2018

Type 1 ecolabel standard in accordance with ISO 14024

Issued 26 May 2021 by GECA

(Good Environmental Choice Australia Ltd)





CONTENTS

DO	CUMEN	T HISTORY	4
НО	W TO A	PPLY FOR GECA CERTIFICATION	5
DE	FINITION	NS & ACRONYMS	6
ΑB	OUT GE	CA	8
AN	OVERV	IEW OF GECA'S STANDARDS	9
STI	RUCTUR	RE OF THE STANDARD	11
RE	QUESTI	NG ADDITIONAL EVIDENCE	11
RE	LEVANO	E WITH SUSTAINABLE DEVELOPMENT GOALS	12
ВА	CKGRO	UND	14
FIT	FOR PL	JRPOSE CRITERIA	15
1.	STANE	DARD CATEGORY SCOPE	15
	1.1	Scope schedule	15
2.	FITNES	SS FOR PURPOSE	16
	2.1	Thermal Insulation - Applicable Standards and Demonstrated Fitness	16
	2.2	Thermal Insulation - Warranty	16
	2.3	Acoustic Insulation - Applicable Standards and Demonstrated Fitness	16
	2.4	Acoustic Insulation - Warranty	17
HE	ALTH CI	RITERIA	18
3.	EMISS	IONS	18
	3.1	Air Emissions- Formaldehyde	18
	3.2	Air Emissions – VOC	18
4.	HAZAF	RDOUS MAterials	19
	4.1	Prohibited Substances	19
	4.2	Blowing Agents	20
	4.3	Restricted Substances	20
EN	VIRONM	ENTAL CRITERIA	21



5.	Materi	al Requirements	21
	5.1	Recycled Content	21
	5.2	Sand and Rock	21
	5.3	Cellulose	22
	5.4	Wool	22
	5.5	Petrochemical Raw Materials	22
6.	Energy	y, waste and water use	23
	6.1	Energy and Greenhouse Gases	23
	6.2	Water Use	23
	6.3	Production Waste Management	23
7.	PACK	AGING, END OF LIFE AND PRODUCT STEWARDSHIP	24
	7.1	Coatings/Treatments	24
	7.2	Product Stewardship	24
	7.3	Product Information	24
	7.4	Packaging Requirements	25
8.	ENVIR	CONMENTAL CLAIMS	27
	8.1	Public Claims	27
SO	CIAL CF	RITERIA	28
9.	SOCIA	AL AND LEGAL COMPLIANCE	28
	9.1	Environmental Legislation	28
	9.2	Minimum entitlement including wages	29
	9.3	Workplace Health and Safety	29
	9.4	Equal Opportunity	30
	9.5	Lawful Conduct	30
	9.6	Modern Slavery	31
	9.7	Human Rights including Labour Rights	32
EVI	DENCE	OF CONFORMANCE	34
	Demo	onstration of Conformance (DoC)	34
API	PENDIX	A	35
API	PLICATI	ION CHECKLIST	35



Building Insulation Materials

DOCUMENT HISTORY

Status: **Current**

Version: 2.0i

Date Published: 26 May 2021

Versions 1.1	Date Published 29 June 2007	Summary of Changes Initial version under the title Thermal Building Insulation Materials
2.0	23 July 2018	Complete revision. Addition of acoustic insulation to scope.
2.0i	26 May 2021	Update: Social criteria update, rearrangement of criteria, SDGs aligned, change auditors to assessors, change of auditing body to assurance provider throughout the standard, change of link to non-compliant organisations list regarding workplace gender equality DoC 34.4. change of exemption, audit, auditor, auditing body to exception, assessment, assessor and assurance provider, respectively according to the new scheme rules, adding definitions of above terminologies and ASTM.



HOW TO APPLY FOR GECA CERTIFICATION

Organisations interested in GECA certification using the Environmental Choice Australia Ecolabel are encouraged to read carefully through the entire standard. A **checklist at the back of the standard** provides a helpful list of all criteria within the standard.

Please contact us via email enquiries@geca.org.au or complete the brief form located here on the GECA website to begin the application process. We will then forward an information pack and a link to complete an obligation-free application form. After receiving the completed application form, an approved GECA Assurance Provider will contact the applicant and give a clear overview of the steps needed to achieve certification and provide a quote for assessment.

Note: GECA reserves the right to refuse, suspend or postpone an application if (a) the organisation does not meet minimum compliance with Environmental Law, Labour Law, Fair Pay, Work, Health and Safety, Lawful behaviour (e.g. pending or ongoing lawsuits), (b) the organisation does not have transparent reporting that is available/accessible on request or (c) the core mission of the organisation and/or product is in conflict with GECA's mission and/or is perceived by GECA to pose a risk to the GECA brand or reputation.



DEFINITIONS & ACRONYMS

ABCB: The Australian Building Codes Board.

Assessment: Process performed by the assessor to determine if the product conforms with the applicable GECA Standard.

Assessment report: Full document composed by the assurance provider that states how the nominated product conforms or fails to conform to GECA standards. This report shall include appropriate and substantial evidence to justify conformance decision.

Assessor: The individual performing the assessment as an employee or contractor of the Assurance Provider.

Assurance provider: Person or organisation accredited by the Independent Appointment Panel performing the conformance assessment.

ASTM: American Society for Testing and Materials.

Blowing agents means chemicals used to produce cellular structure in plastic or foam insulation. These chemicals include hydrocarbons and halogenated hydrocarbons, which change from liquid to gas when heated and develop cells within plastic material.

Cellulose fibre insulation refers to any loose-fill insulation product derived from wood. Examples include fire-proofed fibres made from recycled paper and cardboard.

Global Warming Potential (GWP) is a measure of how much a gas is estimated to contribute to global warming. It is a relative scale that compares the contribution of the gas to that of the same mass of carbon dioxide (CO_2), which has a GWP of 1, over a defined time frame. E.g. methane has a GWP of 21 (100-year time frame). This means that, over 100 years, methane will be approximately 21 times more heat-absorptive than CO_2 per unit of weight.

Contaminants/Impurities refers to residual products from primary production that can be found in the product/ingredient in concentrations below 0.010% (100 ppm). Substances that are actively added to an ingredient or product for a particular purpose are not considered to be impurities, irrespective of quantity. Substances/products known to be liberated by an ingredient (e.g. formaldehyde) are not considered to be impurities or contaminants.

Demonstration of Conformance (DoC): Defines sources of evidence acceptable to GECA to demonstrate compliance with each criterion of the standard. An applicant manufacturer must provide documentation to the appointed assurance provider in order to demonstrate conformance of its products under assessment. For further information on Demonstration of Conformance requirements see *Appendix A – Evidence of Conformance* at the end of this standard

Exception: An exception is granted when an applicant is given permission by the GECA CEO or Board to become certified despite not meeting a particular criterion in the standard as identified during the assessment process, usually with a mandatory transition period.

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ILAC: <u>International Laboratory Accreditation Cooperation</u>

ISO: <u>International Standards Organisation.</u>

Loose fill thermal insulation means fibre granules, nodules, or similar forms of material designed to be installed by hand pouring or blowing by pneumatic equipment. This includes loose-fill cellulose fibre, loose-fill glass fibre and loose-fill mineral wool.



NATA: National Association of Testing Authorities, Australia

NRC: noise reduction coefficient, a dimensionless number that quantifies sound wave absorption.

Mineral wool: a broad term referring to fibrous inorganic minerals or metal oxides. This includes the subcategories of: **Rock wool** using raw materials including basalt, limestone and recycled mineral products, **Slag wool** using waste slag from steel making or other industrial smelting processes, and **Glass wool** using silica-glass as a raw material.

Ozone Depletion Potential (ODP): refers to the ratio of a particular compound's ozone depleting effect compared to the ozone depleting ability of the standard reference compound, CFC-11, which is arbitrarily defined as 1.0.

PREP: Packaging Recyclability Evaluation Portal.

Polybrominated diphenyl ethers: chemicals that have the molecular formula C12HxBryO. This includes penta-, octa-, and deca-brominated diphenyl ethers;

Reflective Insulation: thermal insulation products that rely solely on a reflective (often metallic) surface.

Recycled materials: include both pre- and post-consumer recycled materials:

Post-Consumer: Material generated by households, or by commercial, industrial and institutional facilities in their role as end-users of a product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

Pre-Consumer: Material diverted from the waste stream during a manufacturing process. This does not include re-utilisation of materials such as rework, or scrap generated in a process and capable of being reclaimed within the same process that generated it.

R-value: thermal resistance, measured in m² @C/W or m² K/W with increasing values indicating a greater capacity to resist heat transfer. R value = thickness mm / 1000 / thermal conductivity

SDGs: The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 SDGs, which are a set of goals, targets and indicators

SDS: Safety Data Sheet (formally Material Safety Data Sheet – MSDS). Contains information relating to the composition, classification and risk assessment of the product. To qualify as suitable, the SDS and information therein must not be more the 5-years old.

Spray-on thermal insulation: material supplied in the form of fibre granules, nodules, or similar forms of material designed to be installed in conjunction with a binder material by means of spraying, or thermoplastic insulation materials designed to be installed by means of spraying using a blowing agent;

Synthetic Polymer: a high molecular weight material consisting of repeating monomer units. This includes plastics and many foams, including the common insulation materials polyester (polywool), polyethylene, polyolefin, polyimide, polystyrene and many proprietary polymer preparations.

Thermal insulant or **thermal insulation**: bulk (resistive-type) thermal insulation material.

VOC: Volatile Organic Compounds; any organic compound (compound which contains carbon) with a boiling point below 250°C measured at 101.3kPa. VOC content of products will be calculated according to the content of ingredients that fit this definition.

Wool: fibres derived from sheep fleece. The word "wool" may be used to describe the fibrous properties or appearance of a material (e.g. mineral wool), but shall only refer to sheep wool if the term is used on its own.



ABOUT GECA

At GECA, we help organisations and individuals to *make*, *buy* and *do* better for people and planet. We are a purpose-driven not-for-profit that stands for **integrity**, **independence** and **impact**.

We offer a suite of services designed for anyone committed to continuous improvement in their sustainability, including Australia's only not-for-profit multi-sector ecolabelling program.

GECA has proudly been a <u>Certified B Corp</u> since November 2015. We are part of a global movement of organisations in over 50 countries across 130 industries trying to make the world a better place.



AN OVERVIEW OF GECA'S STANDARDS

Following ISO 14024: Environmental labels and declarations - Type I environmental labelling - Principles and procedures and <u>ISEAL frameworks</u> for global best practice in ecolabelling, we've developed our rigorous standards, which are independently assessed by GECA Approved Assurance Providers.

ISO 14024 is internationally recognised and has been adopted as a benchmark for life cycle-based ecolabels by GEN, the international federation of ecolabelling bodies. Our standards are relevant to critical Australian industries, and GECA is the only Australian GEN member.

ISO 14024 requires environmental labelling specifications to include criteria that are objective, reasonable and verifiable. The purpose of voluntary environmental labels and declarations is to communicate **verifiable and accurate** information for the numerous environmental and social aspects of goods and services. As required by the <u>Trade Practices Act</u>, the information cannot be misleading. Such transparent information encourages the demand for, and supply of, those products or services that cause less harm to people and planet, thereby stimulating the potential for market-driven continuous environmental and social improvement.

While following ISO 14024 for environmental, health and fit for purpose criteria, **GECA's standards go above and beyond**, including social impact criteria. At GECA, we know that nothing can be truly sustainable if it only looks at environmental impacts and ignores the treatment of people. GECA standards identify the **environmental**, **human health**, **fit for purpose** and **social impact** criteria that the top environmentally and socially performing products or services sold in the Australian marketplace can meet to be recognised by GECA as "environmentally and socially preferable".

All GECA standards are based on life cycle thinking, allowing organisations to understand their sustainability impacts and where they occur within their operation's life cycle, **from raw materials to end of life**. We have used these principles to set criteria to address relevant sustainability loads typical in a product category. As such, this standard may also offer guidance for organisations to reduce the harmful impacts of their products or services. Organisations may use the criteria in this standard as an optimisation tool to design and refine the processing, manufacturing, packaging and delivery of their products or services. Also, organisations may uncover other sustainability issues and potential measures within the product's or service's life cycle.

At GECA, we encourage both manufacturers and retailers to include and adapt improvements in their processes and product designs that will enable them to achieve even better sustainability results where technically possible. GECA welcomes feedback where this has occurred.

While all GECA ecolabelling standards are voluntary, nevertheless they contain criteria that address compliance with specific laws. Also, a GECA standard may recognise specific Australian standards. A prerequisite for certification under the GECA ecolabel is to satisfy the relevant Australian and international standards, where required by law. However, Australia's compulsory standards typically focus on fit for purpose criteria instead of assuring environmental and social preferability. **GECA's ecolabelling standards go beyond mandatory Australian standards** and define an environmental and social benchmark for specific product categories.

Where a product or service is certified under our standard, it may display the GECA ecolabel (the "Environmental Choice Australia Mark") to show that it has been independently assessed and demonstrates conformance with the environmental and social criteria detailed in this standard.



Products or services certified as conforming to our standards may gain a marketing advantage in government and business procurement programs, as well as greater market recognition in general because of their independently verified sustainability attributes. GECA certification demonstrates leadership and may help to future-proof supply chains and improve economic performance. By generating genuine benefits for people and planet, it is possible to gain increased customer loyalty.

For further information please contact GECA

+61 (2) 9699 2850 <u>standards@geca.org.au</u> <u>www.geca.org.au</u> Level 32, 101 Miller Street North Sydney NSW Australia 2060

© Good Environmental Choice Australia Ltd 2021

All rights reserved. No part of this publication may be reproduced in any material form or transmitted to any other person without the prior written permission of Good Environmental Choice Australia except as permitted under the Copyright Act 1968 (as amended) or unless expressly permitted in writing by Good Environmental Choice Australia.





STRUCTURE OF THE STANDARD

Within each section of this standard, you will find criteria and Demonstrations of Conformance (DoCs). The criteria outline the requirements for the product and applicant company regarding its sustainability performance. The DoCs list the information required to verify compliance with the criteria. Selected sections also contain introductory text which outlines the purpose behind the criteria or the reason for its inclusion in the standard.

REQUESTING ADDITIONAL EVIDENCE

DoCs are listed for each criterion within this standard; however, a GECA Approved Assessor may request additional information to ensure conformance on a case-by-case basis. Therefore, the DoCs listed below should be considered a guide to the applicant organisation's minimum DoCs.



RELEVANCE WITH SUSTAINABLE DEVELOPMENT GOALS

Each of GECA's standards is linked to specific <u>Sustainable Development Goals</u> (SDGs) set by the United Nations. The 17 SDGs are an internationally agreed framework for urgent action to achieve the <u>2030 Agenda for Sustainable Development</u> adopted by all UN member states in 2015, including Australia. The goals address global challenges, including global inequality, climate change, environmental degradation, peace and justice. Each standard criterion answers specific SDG targets.

Each criterion within this standard answers to a specific SDG target. These specific SDGs are shown below and are highlighted throughout each section of the standard, including the core SDGs related to this standard as further illustrated.



If the global population reaches

9.6 billion by 2050, the equivalent of almost three planets will be required to sustain current lifestyles



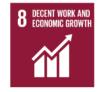
All SDGs relevant to GECA's Building Insulation Materials standard





















Core SDGs relevant to GECA's Building Insulation Materials standard



CORE SDG: 3 GOOD HEALTH AND WELL-BEING

GECA Standard Criterion

- Hazardous substances and volatile organic compounds: criteria 6-9, 11, 12
- Workplace health and safety: Criterion 35

SDG 3 Specific target 3.9

By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

RESPONSIBLE CONSUMPTION AND PRODUCTION

CORE SDG: 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

GECA Standard Criterion

- Resource efficiency: criterion 13
- Hazardous substances: criteria 6-9, 11, 12
- Waste minimisation: criterion 21

SDG 12 Specific target 12.2

By 2030, achieve the sustainable management and efficient use of natural resources.

SDG 12 Specific target 12.4

By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

SDG 12 Specific target 12.5

By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.



CORE SDG: 13 CLIMATE ACTION

GECA Standard Criterion

- Global warming potential of blowing agents criterion 10
- Energy and greenhouse gas reduction criterion 19

SDG 13 Specific target 13.2

Integrate climate change measures into national policies, strategies and planning.



CORE SDG: 15 LIFE ON LAND

GECA Standard Criterion

- Environmental remediation: criteria 14, 15
- Environmental legislation: criterion 31

SDG 15 Specific target 15.1

By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

SDG 15 Specific target 15.2

By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

SDG 15 Specific target 15.5

Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.



BACKGROUND

High-quality thermal insulation plays a vital role in the energy efficiency of a building. Reducing heating and cooling requirements means reduced greenhouse gas emissions. It can also improve indoor comfort levels, keeping surfaces cool in summer and warm during winter.

Other benefits of having well-insulated buildings include:

- · improved indoor comfort levels
- warmer internal surfaces in winter
- cooler internal surfaces in summer
- a reduction in the reliance on fossil fuels which contribute to global warming and improved durability of internal finishes

Acoustic building insulants are designed to provide additional functions beyond thermal resistance. While thermal insulation may inadvertently reduce noise transmission, acoustic insulation is specifically designed for this purpose. Acoustic insulation is used in residential and commercial spaces. Indoor comfort levels are increased by diminishing penetration of external noise and preventing internal noise from being transmitted to other rooms.

However, the manufacture of insulation products can have negative environmental and social impacts depending on the processes involved. Inappropriate sourcing of raw materials, for example, can lead to the degradation of ecosystems. The use of certain blowing agents can contribute to climate change and ozone depletion. Inefficient use of energy and water during the manufacturing process and sending waste to landfill is environmentally damaging.

Some manufacturers may also use hazardous materials and flame retardants linked to adverse health effects.

The standard sets requirements that aim to provide a benefit by:

- avoiding the illegal harvest of wood and fibre for raw materials
- ensuring that sand and rock is not sourced from within a National Park or threatened ecosystem
- setting the amount of recycled content used in the product
- banning chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs)
- preventing the use of specific hazardous materials and heavy metals such as known carcinogens and mutagens
- prohibiting certain flame retardants
- ensuring workers and suppliers through the supply chain can expect fair pay, equal opportunity,
 and a safe working environment



FIT FOR PURPOSE CRITERIA



1. STANDARD CATEGORY SCOPE

1.1 Scope schedule

Criterion 1: This standard applies to the following categories of insulation products:

- resistive-type boards, blankets, batts
- loose-fill or spray-on thermal insulation
- acoustic insulation

Exclusions and Notes

This standard excludes reflective foil-type insulants and those used for specialist applications, such as pipe and hot water cylinder lagging.

Other environmentally innovative insulation products that do not fit the above categories may be considered for certification provided the product fulfils the requirements of any relevant sections of this standard. Other categories may be added at a later date.

It is noted that correct installation of insulation products is generally outside the direct control of manufacturers. This standard refers only to insulation materials and does not control installation or use of thermal insulants. The <u>ABCB</u> provides regulations governing this aspect of thermal insulation.

Demonstration of Conformance

DoC 1.1: Detailed description of the product(s) or product range; and

DoC 1.2: Explanation of applicability of the product(s) to the scope of this standard.



2. FITNESS FOR PURPOSE

To be certified, the product(s) shall be fit to perform its intended purpose or application. A minimum level of quality and durability is implicit before the GECA ecolabel can be displayed on the product. The producer/manufacturer shall ensure that the product is fit for its intended purpose.

2.1 Thermal Insulation - Applicable Standards and Demonstrated Fitness

Criterion 2: The product shall meet or exceed the requirements of the relevant Australian Standards (including AS 4859 parts 1 and 2 Materials for the thermal insulation of buildings), or the product shall meet the applicable and accepted standard in its target market if it is to be exported.

Demonstration of Conformance

DoC 2.1: A detailed description of the product as it relates to relevant Australian (or other equivalent) standards. If there is no applicable Australian standard (or international equivalent), or if it is not legally required, this should be clearly stated; and

DoC 2.2: Independent assessment or test reports confirming conformance with the relevant Australian or international safety and/or quality standard.

Note:

This is a voluntary environmental labelling standard which prescribes material requirements. The Standard does not specify R-ratings or thermal conductivities of insulation materials since this is already specified under the Building Codes. This Standard assumes that two insulation products made of different materials that provide the same installed R-rating in the same building will lead to the same energy saving over the life of the building. Testing and labelling of thermal resistances (R-values) of insulation materials is specified by the Australian Standard AS 4859.1.

2.2 Thermal Insulation - Warranty

Criterion 3: The manufacturer/applicant shall offer a commercial guarantee of a minimum of 20 years, provided the product is used for its intended purpose. The guarantee shall be valid from the date of delivery to the customer.

Demonstration of Conformance

DoC 3.1: Evidence of the warranty offer provided to customers. This can be a guarantee certificate or authorised statement on the company website.

2.3 Acoustic Insulation - Applicable Standards and Demonstrated Fitness

Criterion 4: All acoustic insulant products shall have a stated noise reduction coefficient (NRC) value which has an appropriate statistical basis, derived from independent laboratory testing. Testing shall determine the mean acoustic performance of the product, the standard deviation and variations between batches of product.

Relevant Standards include, but are not limited to:

 ASTM C423-17 Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method; or



• ISO 354 Measurement of Sound Absorption in a Reverberation Room

Demonstration of Conformance

DoC 4.1: A detailed description of the product as it relates to relevant Australian (or other) Standards. If there is no applicable Australian Standard (or international equivalent), or if it is not legally required, this should be clearly stated.

DoC 4.2: Reports from independent testing and sampling, completed by a laboratory or testing agency competent to complete the required tests.

DoC 4.3: Documentation from the quality management system on the statistical basis of sampling and relevant production and quality controls, and

DoC 4.4: Results of any random market sampling by independent testing agencies

2.4 Acoustic Insulation - Warranty

Criterion 5: The manufacturer/applicant shall offer a commercial guarantee of a minimum of 20 years, provided the product is used for its intended purpose. The guarantee shall be valid from the date of delivery to the customer.

Demonstration of Conformance

DoC 5.1: Evidence of the warranty offer provided to customers. This can be a guarantee certificate or authorised statement on the company website.



HEALTH CRITERIA







3. EMISSIONS

3.1 Air Emissions- Formaldehyde

Criterion 6: If formaldehyde binders are used in the production of glass wool insulation, the applicant shall have a program in place to review and replace those formaldehyde binders.

Demonstration of Conformance

DoC 6.1: Information about the program to replace formaldehyde binders.

3.2 Air Emissions – VOC

Volatile Organic Compounds (VOC) released by solvents and other substances contribute to poorer air quality in buildings. Indoor air quality is vital for occupant health. Thus, limiting the VOC content is important for good indoor air quality.

Criterion 7: The following maximum limits for VOCs must not be exceeded by the product:

Parameter	Concentration in air limit (based on the standard room calculation)	Emission rate limit (when tested in a small or full scale environmental chamber)
TVOCs C6 – C16 (Total Volatile Organic Compounds)	≤ 0.5 mg/m³ (after 7 days)	345 μg/m²*hr (after 7 days)
Formaldehyde	< 0.05 ppm (after 7 days)	42.3 μg/m ² *hr (after 7 days)

Testing method

The testing method shall be in accordance with Greenguard UL2818 Certification Program for Chemical Emissions for Building Materials, Finishes and Furnishings or an equivalent method, such as ISO 16000-9:2006 with ISO 16000-11:2006, ANSI/BIFMA M7.1-2011(R2016); ASTM D5116-06 Standard Guide for Small-Scale Environmental Chamber Determination of Volatile Organic Emissions from Indoor Materials/Products; or ASTM D6670-01 Standard Practice for Full-Scale Chamber Determination of Volatile Organic Emissions from Indoor Materials/Products.

The laboratory carrying out the testing shall be accredited by <u>NATA</u> or under ISO 17025:2005 (or an equivalent standard) to carry out the relevant method(s).

Explanatory notes

It is sufficient to test the highest density of each group of products as a worst-case scenario.

Demonstration of Conformance

DoC 7.1: An emissions test report and calculations demonstrating the limits are met.



4. HAZARDOUS MATERIALS

This section's criteria address some of the main hazardous substances found within the product category, added to the product, or to ingredients during manufacturing. The intention is to reduce the use of hazardous materials and to prevent pollutants from entering the environment. The requirements in this section apply to all materials in the finished product regardless of weight.

4.1 Prohibited Substances

Criterion 8: In order to promote the reduction of pollutant hazards in the manufacture, use, or disposal of products, the following substances (and where appropriate, their compounds) shall not be added to products during manufacture:

- Polybrominated diphenyl ether flame retardants;
- Brominated paraffin flame retardants;
- Short-chain chlorinated paraffin flame retardants;
- CFCs, HCFCs or HFCs;
- Tin, lead, mercury, cadmium or chromium-containing catalysts or additives.

Demonstration of Conformance

DoC 8.1: A schedule of the constituent chemical substances in g/kg used in the manufacture of the product, and relevant SDS (previously MSDS).

Criterion 9: In order to address human and environmental health risks, substances which are classifiable as hazardous according to any of the following categories shall not be added to products or their components or used in the manufacturing process.

- Acutely toxic substances including any R26-27 (H330; H310) substances
- Carcinogens, teratogens and mutagens including:
- any R39, R40 or R45-49 (H370; H350; H351; H340; H372; H373) substances,

Exceptions:

- Contaminants/impurities (defined in the 'Definitions and Acronyms' section) may be exempt from the above restrictions (via application to GECA as an exception request).
- Formaldehyde may be exempt from this criterion if the measured release of formaldehyde from the new product is less than 42.3 μ g/m2*h, measured by ASTM D5116 or ASTM 5197.
- Antimony is exempt from the above restrictions. See Criterion 17 below.
- Borax/Boron used in glass wool insulation is exempt from the above restrictions. See Criterion 18 below.
- Other exemptions (via application to GECA as an exception request) for a specific substance may only be granted for safety or performance considerations provided that



- the substance does not pose a health risk to the end user, or manufacturing/installation staff; and
- the applicant can demonstrate that exposure to the substance is below No Observable Adverse Effect Level or zero if NOAEL is unknown;
- the substance cannot enter the environment during the manufacturing/installation process or as a result of use.

Demonstration of Conformance

DoC 9.1: A schedule of the constituent chemical substances in g/kg used in the manufacture of the product that are classified as harmful, and relevant SDS; and

DoC 9.2: Where an exception (via application to GECA) is claimed, the applicant must provide a signed declaration from an Executive Director of the applicant company stating that attempts have been undertaken to find alternatives for the substance(s) for which the exception is claimed; and the purpose for which the given substance is necessary; documentation clearly outlining how each chemical is used, managed and stored; and evidence that human exposure or environmental contamination is prevented.

4.2 Blowing Agents

Criterion 10: Foam products shall not be manufactured using blowing agents with a global warming potential of more than 25, measured over a 100-year timeframe. Blowing agents shall also have an ozone depletion potential (ODP) of zero. GECA accepts ODP and GWP figures for compounds as defined by the Montreal Protocol and its appendices.

Demonstration of Conformance

DoC 10.1: A schedule of the blowing agents used and relevant SDS (previously MSDS), their associated GWP and ODP.

4.3 Restricted Substances

Criterion 11: The amount of antimony in virgin polyester fibres shall not exceed 260 ppm.

Demonstration of Conformance

DoC 11.1: Either a declaration of non-use of antimony, production information showing the amount of antimony in the virgin polyester, or a test report using the following test method: direct determination by Atomic Adsorption (AA) Spectrometry. The test shall be carried out on the raw fibre.

Criterion 12: Licence holders must have and implement an ongoing program to review options to replace borax (boron) in glass wool products and maintain records on the progress of that program.

Demonstration of Conformance

DoC 12.1: Information about the program to replace borax in glass wool.



ENVIRONMENTAL CRITERIA











5. MATERIAL REQUIREMENTS

This section's criteria address some of the major life cycle factors of a product that can be anticipated in sustainable design and are more easily incorporated during the design phase of product development. Unless otherwise stated, this section's requirements apply to each type of material contained in the finished product regardless of weight.

5.1 Recycled Content

Criterion 13: Certified products shall meet the minimum resource efficiency requirements outlined below for recycled material content by weight.

Material	Recycled Content	
Glass wool	65%	
Rock Wool	400/	
Slag wool	40%	
Cellulose	100%, minimum 80% post-consumer	
Wool	80%	
Synthetic Polymers	85%	

Note

If more than two types of recycled materials are mixed and used in a composite product, the whole use rate of recycled content shall satisfy the material requirements for the main raw material.

Demonstration of Conformance

DoC 13.1: A schedule of materials in the product.

DoC 13.2: Documentation including records from the previous 12-month period to demonstrate that the recycled content limits are being met.

5.2 Sand and Rock

Criterion 14: Non-recycled sand and rock for use as raw materials in mineral wools (e.g. glass, rock or slag) shall come from an operation with a registered environmental remediation program.

Criterion 15: The manufacturer shall have a procurement program that ensures virgin raw materials do not come from environments that are protected for biological and/or social reasons. This includes not being located in a National Park or within an endangered community as defined by the Environment Protection and Biodiversity Conservation Act 1999 <u>List of Threatened Ecological Communities</u>.



Demonstration of Conformance

DoC 15.1: Records of the supplier, nature and geographical source of all non-recycled sand and rock.

DoC 15.2: Evidence of a registered environmental remediation program.

DoC 15.3: Description of the raw material procurement program, and management systems in place to ensure that virgin raw materials do not come from environments that are protected for biological and/or social reasons.

5.3 Cellulose

Criterion 16: Cellulose fibre shall not be bleached for re-use.

Under section 5.1 of this standard, all cellulose material used in insulation products must contain 100% recycled content; therefore, it is accepted that the fibre may have been bleached during its previous life cycle.

Demonstration of Conformance

DoC 16.1: Declaration that fibre is not bleached for inclusion in the insulation products.

5.4 **Wool**

Criterion 17: Any non-recycled wool destined for a GECA-licensed insulation product must meet the requirements set for scoured wool in GECA Standard TLv3.0i-2014 for Textiles and Leather or GECA Standard 50-2011 v2.0i for Carpets.

Demonstration of Conformance

DoC 17.1: A copy of the GECA licence covering the scoured wool; or

DoC 17.2: A report from a GECA Approved Assessor stating the scoured wool used meets the requirements of TLv3.0i-2014 or 50-2011 v2.0i; and

DoC 17.3: Records to demonstrate that the insulation product includes scoured wool meeting the applicable requirements in TLv3.0i-2014 or 50-2011 v2.0i.

5.5 Petrochemical Raw Materials

Criterion 18: Non-recycled monomer or other petrochemical products for use as raw materials in insulation shall be sourced from a production facility that complies with section 9 of this standard.

Demonstration of Conformance

DoC 18.1: Declaration from supplier of petrochemical raw materials.



6. ENERGY, WASTE AND WATER USE

6.1 Energy and Greenhouse Gases

Criterion 19: The manufacturer shall have effective energy and greenhouse gas management policies and procedures and/or an energy management program.

Licence holders and product manufacturers shall maintain records on an annual basis on energy management and the generation of greenhouse gases during production, including:

- total energy use;
- breakdown of total energy use to types of energy used;
- energy use related to production;
- initiatives taken to reduce energy use and improve energy efficiency; and
- initiatives taken to calculate and reduce CO2 emissions and other greenhouse gases associated with energy use.

Demonstration of Conformance

DoC 19.1: Copies of energy management policies and procedures.

DoC 19.2: Records of energy management and generation of greenhouse gases.

6.2 Water Use

Criterion 20: The applicant is requested to provide information on water use during the manufacturing process.

Demonstration of Conformance

DoC 20.1: Information on water use and management during the manufacturing process.

6.3 **Production Waste Management**

Criterion 21: The manufacturer shall have effective policies and procedures to minimise waste, including measures to recycle waste materials from the production process.

Demonstration of Conformance

DoC 21.1: Copies of waste management policies and procedures.

DoC 21.2: Records of waste minimisation and recycling.



7. PACKAGING, END OF LIFE AND PRODUCT STEWARDSHIP

Previous sections of this standard apply to the characteristics of the product and the production process. This section addresses the impacts arising during the remainder of the product's life cycle.

7.1 Coatings/Treatments

Criterion 22: The insulation product shall not be impregnated, labelled, coated or otherwise treated in a manner which would prevent recycling in Australia or in the country where the product is used.

Demonstration of Conformance

- DoC 22.1: Declaration that no coatings or treatments are added to the product; or
- DoC 22.2: Detailed description of each coating or treatment applied to the product or component; and
- DoC 22.3: Explanation of how each coating affects the recyclability of the product or component; and
- **DoC 22.4:** Description of the end-of-life options for the coated or treated components (e.g., "this coated component may be recycled at <facility name>") with written confirmation from a recycler able to accept the component.

7.2 **Product Stewardship**

Criterion 23: The manufacturer shall maintain annual records of its take-back scheme, including:

- availability, feasibility, and involvement in product take-back schemes, including for products which are currently installed;
- initiatives taken to promote or implement take-back schemes;
- initiatives taken to make products more recyclable; and
- initiatives or requirements for suppliers or contract manufacturers.

Demonstration of Conformance

DoC 23.1: Copy of instructions outlining the take-back service including the costs, contact details of the take-back service, relevant website documentation, and records of the take-back scheme including the bullet points above.

7.3 Product Information

Criterion 24: Insulation products shall be labelled according to the requirements of AS 4859.1. The following additional information for product suppliers, installers and consumers shall also be provided:

- Manufacturer and manufacturing date (or batch identification);
- Weight (for blankets, boards and batts, expressed as either weight per square metre or as bale weight and area);
- Thickness (for blankets, boards and batts);
- R-value and the conditions under which it is achieved (including requirements on temperature or any settling or ageing of the material). R-values stated shall be a product rather than a system R-value;



- Area of insulation before installation;
- Safety instructions.
- The material that the product is manufactured from, including the percentage recycled content.
 For composite materials, the percentage of each material shall be clearly labelled by mass or volume.
- Maximum storage time or install-by date (if batch identification only is provided) for blanket and segment type insulation. If products are provided directly to the user from the manufacturer, then written storage instructions shall also be provided to the user.
- For compression packaged materials, the time after installation at which the product will have re-lofted to its nominal thickness if installed before the install-by date using the prescribed installation instructions.
- Transportation and installation instructions, which, when followed, lead to the labelled thermal
 resistance being achieved. Given the importance of minimising the risk of condensation, the
 installation instruction shall also address potential installation issues by providing information
 on the corrosion potential of the insulation (e.g. pH value test and/or vapour/moisture
 permeability).

Exemptions:

Labels for acoustic insulation are not required to include an R-value.

If there is insufficient space for this information on the product label, it may be provided as a separate document provided to suppliers, distributors and consumers, and be made available on the manufacturer's website.

Demonstration of Conformance

DoC 24.1: Copy of the product label and documentation supplied with the product.

Criterion 25: The insulation material shall not require labelling as toxic, corrosive or flammable.

Demonstration of Conformance

DoC 25.1: Copy of the product label and documentation supplied with the product.

7.4 Packaging Requirements

Inefficient use of packaging can result in greater transportation needs, natural resource depletion and increased burden on landfills. Product packaging should be as efficient and recyclable as possible across the product's life cycle.

Criterion 26: Chlorinated or halogenated plastics shall not be used in product packaging.

Demonstration of Conformance

DoC 26.1: SDS (previously MSDS) of packaging and site inspection of final product packaging.



Criterion 27: Packaging shall comply with at least one of the following:

- a) Each material constituting >20% by weight of the total primary and secondary packaging used, shall contain at least 50% recycled content by weight;
- b) Each material constituting >20% by weight of the total primary and secondary packaging used, shall be derived from plant-based materials (e.g. PLA plastics); or
- c) Each separable item constituting >20% by weight of the total primary and secondary packaging, shall be recyclable in Australia. This may be demonstrated using the Australian Packaging Covenant's Packaging Recyclability Evaluation Portal (PREP).

Materials used for the transport of products (tertiary packaging) and whose disposal is not the end consumer's responsibility may be excepted from the above requirements if they are re-used by the applicant or are recyclable in specialist recycling facilities.

Demonstration of Conformance

DoC 27.1: Details of materials used as packaging, including information on the input of recycled and virgin materials reported by weight if applicable. The recycled content can be averaged over a 12-month period to find the amount or range of recycled content; and/or

DoC 27.2: Evidence of recyclability or copy of PREP Assessment Report; and/or

DoC 27.3: Details of re-use programs for transport materials within the applicant company.

Criterion 28: Chemical drums used to contain constituent spray-foam reactants shall be able to be reused (refilled). Where re-use is not possible, the drums shall be recycled at appropriate facilities.

Demonstration of Conformance

DoC 28.1: Documentation showing the re-use rates of the drums.

DoC 28.2: Documentation verifying all decommissioned drums were recycled or are intended to be recycled.

Criterion 29: Product packaging shall be durable enough to withstand normal transport and storage without compromising the performance of the product in any way.

Demonstration of Conformance

DoC 29.1: Details of customer complaints about products damaged during transport or failure of products to re-loft.



8. ENVIRONMENTAL CLAIMS

This section addresses the need to ensure that any environmental claims made beyond this standard's scope by the manufacturer are verifiable.

8.1 Public Claims

Criterion 30: The applicant's public claims regarding the product's environmental performance beyond this standard's scope (other than GECA certified content) shall be independently verified as compliant with ISO 14021: Environmental Labels and Declarations – 'Self-Declared Environmental Claims' (Type II Environmental Labelling) requirements. Also refer to the GECA Rules for the Use of the Good Environmental Choice Australia Mark.

Demonstration of Conformance

DoC 30.1: Report or statement from the applicant listing all public environmental claims regarding the product by the applicant, demonstrating compliance to ISO14021; and

DoC 30.2: A signed declaration from an Executive Director of the applicant company stating that any environmental claims made by the company regarding the product in the future will be verified using ISO 14021 and/or the GECA certification.



SOCIAL CRITERIA









9. SOCIAL AND LEGAL COMPLIANCE

This section addresses compliance with the legal and social attributes of the producer and the applicant company; it also engages with the supply chain to ensure human and labour rights are upheld. These criteria are common to all GECA standards. The social aspect partially addresses the third dimension of sustainability - society. This concept was first understood by producers under the name "Corporate Social Responsibility" (CSR). In this standard, social criteria include laws for equal opportunity, safety and protection of workers, and compliance with human and labour rights. GECA certification cannot be given to any company that illegally exploits workers or their families.

Note: In cases where there is a conflict between GECA requirements in this section and relevant legislation or regulations introduced by governments and agencies, national legislation overrides state legislation and state legislation overrides regulations and standards issued by GECA. Where the GECA requirements go further than the applicable legislation, the producer and/or applicant company shall comply with applicable law while trying as far as possible to act in accordance with the spirit of the GECA requirements.

9.1 Environmental Legislation

Criterion 31: The producer of the product and applicant company shall as per law comply with relevant environmental legislation and government orders at the Local, State, and Commonwealth levels (if these have been issued). Where a producer is from an overseas jurisdiction, it is that jurisdiction's environmental regulations that apply. Where the producer has been found guilty of a breach of any environmental legislation or permit(s) within the last two years, there must be evidence of corrective action.

Demonstration of Conformance

DoC 31.1: Signed declaration from an Executive Officer of the organisation stating compliance with applicable environmental legislation and government orders;

DoC 31.2: Signed declaration disclosing any breaches of environmental legislation or permits and the date of the breach. Applicant shall:

DoC 31.3: Provide a Legal Register listing applicable environmental legislation (including applicable Regulations under that legislation) in, or as an attachment to the above two declarations (31.1 and 31.2). The Legal Register shall:

- For each applicable Act and Regulation listed, state whether the manufacturer and applicant company comply; or have a certified ISO 14001, Eco-Management and Audit Scheme (EMAS) or equivalent environmental management system in place; and;
- List relevant permits granted by the EPA or an equivalent national, state or local body;

DoC 31.4: Evidence of corrective action following identification of a breach of environmental legislation, if applicable.



Note:

In this criterion, 'Regulation' means an entire regulatory instrument (for example, the Environmentally Hazardous Chemicals Regulation 2008) and not the individual sections, provisions or clauses of a regulatory instrument.

9.2 Minimum entitlement including wages

Criterion 32: All employees and contractors must receive at least the applicable minimum wage including penalty rates, allowances and superannuation and be provided with all other minimum entitlements including in relation to hours, leave and termination. All employees shall be covered by a Federal or State award, a certified industrial agreement or registered agreement as determined by the Australian Government Workplace Authority or a State or Territory Workplace Relations Agency, or an agreement that complies with Fair Work Act 2009 section 61 – National Employment Standards. A manufacturer/applicant company shall demonstrate compliance to the following requirements as taken from the ILO Convention: Convention 100 – Equal Remuneration Convention.

Where a producer is from an overseas jurisdiction, it is that jurisdiction's equivalent regulations that apply.

Where a producer/applicant company or a third party has identified a breach of applicable legislation, including underpayment of wages within the last two years, there shall be evidence of corrective action.

Demonstration of Conformance

- **DoC 32.1:** Signed declaration from an Executive Officer of the organisation confirming compliance with all minimum entitlements including wages; and
- **DoC 32.2:** List of applicable awards, certified industrial agreements or registered agreements and the number of workers to which they apply, and number of workers not covered by such; and
- **DoC 32.3:** Text or template of a typical workplace agreement offered to employees of the company; and sample payslips; and
- DoC 32.4: Evidence of corrective action following identification of a breach of legislation, if applicable.

9.3 Workplace Health and Safety

Criterion 33: A manufacturer/ applicant company shall demonstrate compliance to the following requirements as taken from the ILO Conventions:

- a) Convention 155 Occupational Safety and Health and its accompanying Recommendation No. 164;
- b) Convention 161 Occupational Health Services and its accompanying Recommendation No. 171

And general compliance with applicable State or Territory Legislation concerning Occupational, Health and Safety (OHS) / Work Health and Safety (WHS) and/or the Commonwealth Safety, Rehabilitation and Compensation Act 1988, where applicable. Where a manufacturer is from an overseas jurisdiction, it is that jurisdiction's equivalent regulations that apply. Where a producer/applicant company has been found guilty of a breach of relevant legislation within the last 2 years, there shall be evidence of corrective action.



Demonstration of Conformance

DoC 33.1: Signed declaration from an Executive Officer of the organisation stating compliance to workplace legislation and government orders, as well as declaration of any breaches of legislation and the date of the breach. Applicants shall list all applicable legislation in, or as an attachment to, this declaration;

DoC 33.2: Copy of the company Occupational / Workplace H&S policy and procedures;

DoC 33.3: Copy of employee induction records, training records, meeting records and risk assessments; or current ISO 45001:2018 (or former OHSAS 18001), AS/NZS 4801 or equivalent certification; or third-party certification stating compliance to Work Health and Safety Act 2011 and the Work Health and Safety Regulation 2011 or equivalent jurisdiction specific legislation; and

DoC 33.4: Evidence of corrective action following a breach of legislation, if applicable; and

DoC 33.5: WHS incidents register

9.4 Equal Opportunity

Criterion 34: The manufacturer/applicant company shall demonstrate general compliance with the requirements of the Racial Discrimination Act 1975, Sex Discrimination Act 1984, Disability Discrimination Act 1992, Equal Opportunity for Women in the Workplace Act 1999, and complementary State Legislation. The manufacturer cannot be in the list of 'named' or non-compliant employers under the Workplace Gender Equality Act 2012. Where a manufacturer /applicant company is from an overseas jurisdiction, it is that jurisdiction's equivalent regulations that apply. Where a manufacturer has been found guilty of a breach of relevant legislation within the last two years, there shall be evidence of corrective action.

Demonstration of Conformance

DoC 34.1: Signed declaration from an Executive Officer of the organisation stating compliance with above legislation;

DoC 34.2: Copy of relevant company policies and procedures;

DoC 34.3: Evidence of corrective action following a breach of legislation, if applicable; and

DoC 34.4: The assessor will verify that the company does not appear on the following list: Non-compliant list | WGEA

9.5 Lawful Conduct

Criterion 35: The manufacturer/applicant company shall not have been convicted of any breach of criminal law, any breach of the Competition and Consumer Act 2010 or the Corporations Act 2001, including prosecution or de-listing by the Australian Stock Exchange (ASX or international equivalent). Where a manufacturer is from an overseas jurisdiction, it is that jurisdiction's equivalent regulations that apply. Where a producer has been found guilty of a breach of relevant legislation within the last two years, there must be evidence of corrective action.

Demonstration of Conformance

DoC 35.1: Signed declaration from an Executive Officer of the organisation stating compliance with above legislation; and

DoC 35.2: Evidence of corrective action following a guilty verdict, if applicable.



9.6 Modern Slavery

Criterion 36: The applicant company shall promote the elimination of Modern Slavery through collaboration with their supply chain, in accordance with the Australian Commonwealth Modern Slavery Act 2018 or NSW Modern Slavery Act 2018 and the following requirements as taken from the ILO Conventions:

- Conventions 29 and 105 Elimination of Forced and Compulsory Labour; and
- Convention 182 Worst Forms of Child Labour

Where an applicant has found instances of modern slavery in their business operations and or supply chains in the past two years, there shall be evidence of corrective action.

This criterion shall be valid for applicant companies of any size and is not restricted to any annual revenue threshold.

Demonstration of Conformance

DoC 36.1: A copy of the published Modern Slavery Statement from within the previous 12 months. The Modern Slavery Statement shall comply with the seven mandatory criteria of the Act as below:

- a) Identify the reporting entity
- b) Describe reporting entity's structure, operations and supply chains
- c) Describe the risks of modern slavery practices in the operations and supply chains of the reporting entity and any entities it owns or controls
- d) Describe the actions taken by the reporting entity and any entities it owns or controls to assess and address these risks, including due diligence and remediation processes
- e) Describe how the reporting entity assesses the effectiveness of these actions
- f) Describe the process of consultation with any entities the reporting entity owns or controls
- g) In addition to the modern slavery report, some supporting documents may be asked to be cited at the main site of manufacturing during the on-site assessment:

If a copy of the Modern Slavery Statement is unable to be presented, a rationale will be required. Also in cases where supportive documentation is unavailable at the time of certification, a grace period of three years or one certification period may be granted (no more than one certification period will be given).

The documents may include but not limited to the following documentation to support the modern slavery report:

- h) Employment records
- i) List of contractors
- j) Leave entitlements policy
- k) Any relevant Human Resources policy
- I) Payslips/ wage scales/ remuneration policy
- m) Minimum age of employment policy
- n) Any other relevant information

Where an organisation has not previously reported on the Australian Commonwealth Modern Slavery Act 2018 or NSW Modern Slavery Act 2018 and does not meet the reporting threshold of the NSW or



Commonwealth legislation, the organisation shall publish a Modern Slavery Statement within three years of certification on a voluntary basis. A grace period of up to one cycle of certification may be granted depending on the company's reporting period.

For more information about modern slavery and the *Modern Slavery Act 2018*., please see News and Resources (modernslaveryregister.gov.au).

9.7 Human Rights including Labour Rights

Criterion 37: The manufacturer/applicant company shall respect internationally recognised human rights, including labour rights, including the rights set out in:

- Universal Declaration of Human Rights
- International Covenant on Civil and Political Rights
- International Covenant on Economic, Social and Cultural Rights
- ILO Declaration on Fundamental Principles and Rights at Work

(No child/forced/bonded labour (ILO 29 and 105), Minimum age convention (ILO 138), Worst forms of child labour (ILO182), Health and safety procedures and training (155, 161 and 171), Right of freedom of association (ILO 87 and 98), Non-discrimination (ILO 100 and 111), Discipline/harassment and grievance procedures, Fair working hours and compensation, Anti-corruption and bribery)

The applicant company shall also take steps to ensure human rights are respected in its supply chain. Where an applicant has been found to breach this criterion in the past two years, there must be evidence of corrective action.

Demonstration of Conformance

DoC 37.1: The manufacturer/applicant company shall provide evidence of its commitments to human rights including labour rights (e.g. policies, published reports containing disclosure in relation to human rights (e.g. sustainability report) commitments to international initiatives such as the UN Global Compact); and

DoC 37.2: The manufacturer/applicant shall provide a map of at least one tier of its supply chain; and

DoC 37.3: Evidence of implementation of a Supplier 'Code of Conduct'; Code of conduct to include Human and Labour Rights, Health and Safety of workers; and

DoC 37.4: Evidence of assessment of suppliers in relation to human rights and recommendations for improvements in their supply chain; and

DoC 37.5: Evidence of <u>ISO20400</u> implementation; or

- Evidence of valid SA8000® Standard, or other equivalent certification; or
- Evidence of being a signatory to the <u>UN Global Compact</u>; or
- <u>SEDEX</u> membership; or
- GRI 400 Report (Global Report Initiative); and

If any of DoCs 37.5 cannot be provided, manufacturer/ applicant shall provide:

DoC 37.6: Evidence of commitment to achieve SA 8000 certification within one year; or

DoC 37.7: Evidence of becoming a signatory to the UN Global Compact within six months;



and

DoC 37.8: Evidence of corrective action, if applicable.

GECA acknowledges that this is an emerging area of compliance and conformance. Therefore, alternative certifications, standards, ethical membership organisations or compliance reporting may be recognised as demonstration of conformance where an exception is granted by the GECA Board.



EVIDENCE OF CONFORMANCE

Demonstration of Conformance (DoC)

This section lists the sources of evidence to be considered during an assessment to establish conformance against GECA's standards. This list is provided to guide the applicant through the standard's requirements and facilitate the preparation of an application. The DoC requirements are specified along with each criterion in the standard define specific sources of evidence acceptable to GECA. In cases where criteria offer several DoC requirements, it is the sole decision of the appointed assurance provider to choose the appropriate option throughout the preliminary stage of the assessment. If none of the recommended DoC requirements stipulated for a particular criterion in the standard is applicable for a product under assessment, then the appointed assurance provider may choose an alternative but equivalent source of evidence. In cases where alternative sources of evidence have been accepted for the verification of the product, the assurance provider will inform GECA by providing a report on the details as far as appropriate. GECA will use this information to continuously improve the DoC requirements stipulated by that standard.

All laboratory testing and analysis shall be carried out by a <u>NATA</u> accredited laboratory. For tests carried out overseas, all analysis shall be carried out by a reputable lab accredited by an <u>ILAC</u>.

The applicant/manufacturer shall have processes in place to ensure on-going compliance with the criteria in this standard; for example in relation to hazardous substances, having a process in place for completing a checklist (signed and dated by the authorised person) that lists all the substances and requirements in that section prior to using in/with the GECA product/s. The process may be carried out by relevant supplier/s of relevant material/s if there is no in-house capacity within the organisation being assessed to carry out this process. Documented information about any communication in regards to this process (i.e. between applicant and suppliers) shall be maintained.

The DoC requirements are summarised in Appendix B to assist applicants in preparing documentation for the verification process with a GECA designated assessor.

APPENDIX A

APPLICATION CHECKLIST

The application checklist guides the applicant through the application and verification process. An applicant may collect all information required for the verification of the product and attach the relevant documents to their application. The table below summarises the DoC requirements for each criterion in the standard.

Criterion No.	Criterion Content	Demonstration of Conformance See standard body for details	Evidence Attached	Complies Y/N or NA
FIT FOR PURP	OSE CRITERIA			
1. Standard Ca	itegory Scope			
Criterion 1		Detailed description of the product(s); and		
CHEHOH I	Standard category scope	Explanation of applicability to the scope of the standard		
2. Fitness for	ourpose			
	Thermal Insulation - Product shall meet or exceed applicable	Detailed description of the product(s) as it relates to Australian (or other) standards; and		
Criterion 2	standards and demonstrated fitness levels (only two DoCs required)	Independent assessment or test reports confirming conformance to relevant Australian (or other) standard		
Criterion 3	Thermal Insulation - Product shall have 20 year commercial guarantee on the quality of the product	Evidence of the warranty offer provided to customers		
		Detailed description of the product as it relates to Australian (or other) standards;		
	Acoustic Insulation – Product shall	Report from independent testing and sampling.		
Criterion 4	have a stated noise reduction coefficient, derived from independent laboratory testing.	Documentation from the quality management system on the statistical basis of sampling and relevant production and quality controls.		
		Results of any random market sampling by independent testing agencies.		



Criterion 5	Acoustic Insulation - Product shall have 20 year commercial guarantee on the quality of the product	Copy of warranty documentation provided to customers	
HEALTH CRITE	RIA		
3. Emissions			
Criterion 6	If formaldehyde binders are used in the production of glass wool, the applicant shall have a program in place to review and replace those formaldehyde binders.	Information about the program to replace formaldehyde binders.	
Criterion 7	Limits for formaldehyde and total VOCs	An emissions test report and calculations demonstrating the limits are met.	
4. Hazardous	Materials		
Criterion 8	Listed substances shall not be added to products during manufacture.	A schedule of the constituent substances in g/kg used in the manufacturing process and relevant SDS.	
	Substances classified as acutely toxic, carcinogenic, teratogenic or	A schedule of the constituent substances in g/kg used; and	
Criterion 9	mutagenic shall not be added to products or used in the manufacturing process.	Where an exception is claimed, the applicant must provide a signed declaration from an Executive Director of the applicant company	
Criterion 10	Foam products shall not be manufactured using blowing agents with a global warming potential of more than 25. Blowing agents shall also have an ozone depletion potential (ODP) of zero.	A schedule of the blowing agents used, and their associated GWP and ODP.	
Criterion 11	The amount of antimony in virgin polyester fibres shall not exceed 260 ppm.	Either a declaration of non-use of antimony, production information showing the amount of antimony in the virgin polyester, or a test report	
Criterion 12	Licence holders must have and implement an ongoing program to review options to replace borax (boron) in glass wool products and maintain records on the progress of that program.	Information about the program to replace borax in glass wool.	



ENVIRONME	ENVIRONMENTAL CRITERIA				
5. Material R	equirements				
	Minimum resource efficiency	A schedule of materials in the product			
Criterion 13	requirements for recycled content material by weight.	Documentation, including records from the previous 12-month period, to demonstrate that the recycled content limits are being met.			
Criterion 14	Non-recycled sand and rock shall come from an operation with a	Records of the supplier, nature and geographical source of all non-recycled sand and rock.			
	registered environmental remediation program.	Evidence of a registered environmental remediation program.			
Criterion 15	The manufacturer shall have a procurement program that ensures virgin raw materials do not come from environments that are protected for biological and/or social reasons.	Description of raw material procurement program, and management systems in place to ensure that virgin raw materials do not come from environments that are protected for biological and/or social reasons.			
Criterion 16	Cellulose fibre should not be bleached for re-use	Signed declaration that cellulose fibre is not bleached for inclusion in the insulation products.			
		A copy of the GECA licence from the wool supplier; or			
Criterion 17		A report from a GECA-approved Assessor stating the scoured wool used meets the requirements of TLv3.0i-2017 or 50-2011 v2i; and			
	TLv3.0i-2017 for Textiles and Leather or GECA Standard 50-2011 v2i for Carpets	Records to demonstrate that the insulation product includes scoured wool meeting the applicable requirements in TLv3.0i-2017 or 50-2011 v2i			
Criterion 18	Non-recycled monomer or other petrochemical products for use as raw materials in insulation shall be sourced from a production facility that complies with Section 9 of this Standard.	Signed declaration from the supplier of petrochemical raw materials.			



6. Energy, Wa	ste and Water Use		
Criterion 19	The manufacturer shall have effective energy and greenhouse gas management policies and	Copies of energy management policies and procedures.	
Citterion 19	procedures and/or an energy management program.	Records of energy management and generation of greenhouse gases.	
Criterion 20	The applicant is requested, to provide information on water use during the manufacturing process.	Information on water use and management during the manufacturing process.	
Criterion 21	The manufacturer shall have effective policies and procedures to minimise waste, including	Copies of waste management policies and procedures.	
	measures to recycle waste materials from the production process.	Records of waste minimisation and recycling.	
7. Packaging,	End of Life and Product Stewardship		
	The insulation product shall not be impregnated, labelled, coated or otherwise treated in a manner which would prevent recycling in Australia or in the country where the product is used.	Declaration that no coatings or treatments are added to the product; or	
		Detailed description of each coating or treatment applied to the product or component, or declaration of nonuse; and	
Criterion 22		Explanation of how each coating affects the recyclability of the product or component; and	
		Description of the end of life options for the coated or treated components (e.g., "this coated component may be recycled at <facility name="">") with written confirmation from a recycler able to accept the component.</facility>	
Criterion 23	The manufacturer shall maintain annual records of its take-back scheme	Copy of instructions outlining the take back service including the costs, contact details of the take-back service, relevant website documentation, and records of the take-back scheme.	
Criterion 24	Insulation products shall be labelled according to the requirements of AS 4859.1	Copy of the product label and documentation supplied with the product.	



	1	1	1	1
Criterion 25	The insulation material shall not require labelling as toxic, corrosive or flammable.	Copy of the product label and documentation supplied with the product.		
Criterion 26	Chlorinated or halogenated plastics shall not be used in product packaging.	SDS for packaging and site inspection of final product packaging.		
	Packaging shall comply with at least one of the following: a) Each material constituting >20% by weight of the total primary and secondary packaging used, shall contain at least 50% recycled	Details of materials used as packaging, including information on the input of recycled and virgin materials reported by weight if applicable; and/or		
Criterion 27	content by weight; b) Each material constituting >20% by weight of the total primary and secondary packaging used, shall be derived from plant-based materials	Evidence of recyclability or copy of PREP Assessment Report; and/or		
	(e.g. PLA plastics); or c) Each separable item constituting >20% by weight of the total primary and secondary packaging, shall be recyclable in Australia.	Details of re-use programs for transport materials within the applicant company.		
	Chemical drums used to contain constituent spray-foam reactants shall be able to be re-used (refilled). Where this is not possible, the drums shall be recycled at appropriate facilities.	Documentation showing the re-use rates of the drums.		
Criterion 28		Documentation verifying all decommissioned drums were recycled or are intended to be recycled.		
Criterion 29	Product packaging shall be durable enough to withstand normal transport and storage without compromising the performance of the product in any way.	Details of customer complaints about products damaged during transport or failure of products to reloft.		
8. Environme	ental Claims			
		Report or statement from the applicant listing all public environmental claims regarding the product by the applicant, demonstrating compliance to ISO14021.		
Criterion 30	Public claims made by applicant	A signed declaration from an Executive Director of the applicant company stating that any environmental claims made by the company regarding the product in the future will be verified using ISO 14021 and/or the GECA certification.		



SOCIAL CRITERIA				
9. Social and L	egal Compliance			
		Signed declaration confirming conformance to the criterion; and		
		Signed declaration disclosing any breaches of environmental legislation		
Criterion 31	Environmental legislation	Legal register listing applicable environmental legislation (including applicable Regulations under that legislation)		
		Evidence of corrective action (if applicable)		
		Signed declaration confirming conformance to the criterion; and		
Criterion 32	Minimum entitlement including wages	List of applicable awards, industrial and registered agreements and number of workers who are covered and not covered		
		Text or template of the typical workplace agreement offered to employees, and sample payslips		
		Evidence of corrective action		
		Signed declaration stating compliance to workplace legislation and government orders, as well as declaration of any breaches of legislation		
		OHS/WHS policies and procedures; and		
Criterion 33	Work health and safety	Copy of employee induction records, training records, meeting records and risk assessments; or current ISO 45001:2018 (or former OHSAS 18001), AS/NZS 4801 or equivalent certification; or third-party certification stating compliance to Work Health and Safety Act 2011 and the Work Health and Safety Regulation 2011 or equivalent jurisdiction specific legislation; and		



		Evidence of corrective action (if applicable)	
		WHS Incidents register	
		Signed declaration confirming conformance to the criterion and	
		Copy of relevant policies and procedures and	
Criterion 34	Equal opportunity	Evidence of corrective action (if applicable)	
		The assessor will verify that the company does not appear on the WGEA non-compliant list	
Criterion 35	Lauful aandust	Signed declaration confirming conformance to the criterion and	
Citterion 55	Lawful conduct	Evidence of corrective action (if applicable)	
Criterion 36	Modern slavery	Copy of the published Modern Slavery Statement from within the previous 12 months	
		Evidence of commitments to human rights including labour rights	
		Map of at least one tier of their supply chain; and	
		Evidence of implementation of a Supplier Code of Conduct, and	
Criterion 37		Evidence of assessment of suppliers in relation to human rights and recommendations for improvements in their supply chain	
- Criterion 37	Human and labour rights	Evidence of ISO20400 implementation; or	
		Evidence of valid SA8000® Standard certification or other equivalent certification; or	
		Evidence of being a signatory to the UN Global Compact	
		SEDEX Membership, or	
		GRI 400 Report; and	



Evidence of commitment to achieve SA8000® Standard certification within one year	
Evidence of becoming a signatory to the UN Global Compact within six months; and	
Evidence of corrective action (if applicable).	

[©] Copyright 2021 Good Environmental Choice Ltd ABN 27 118 766 153

Our vision is for a sustainable future for people and planet

