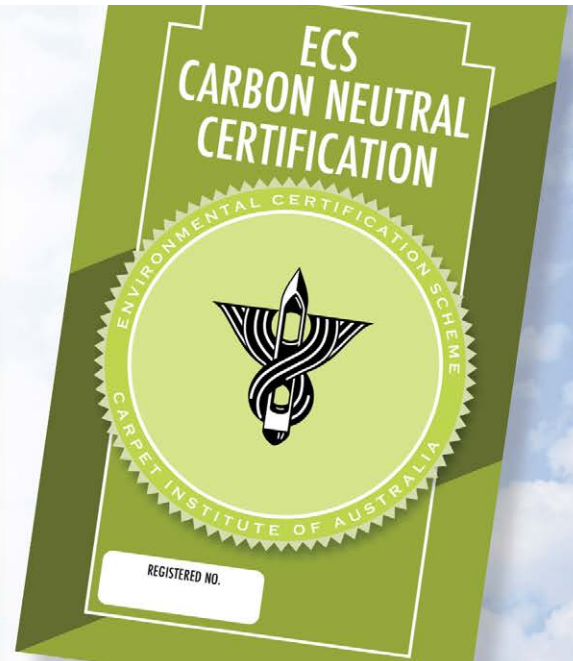




Version 1.0

ECS

Carbon Neutral Certification

Technical Specifications

September 2025

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Introduction

The Environmental Certification Scheme (ECS) provides a guide to the environmental performance of certified building fit-out products through their full lifecycle. In this Carbon Neutral certification, the lifecycle is limited to the processes involved in the production of raw materials and manufacturing of the building fit-out item. The carbon footprint is taken as the carbon emissions from the raw materials production to the production of the finished product at the factory gate. This is commonly termed the categories A1-3 in a full lifecycle assessment to ISO14040.

This is also termed the embodied carbon of the product. In order to meet the conditions of carbon neutrality the embodied carbon must be net zero or the product must be carbon negative.

Carbon neutral definition: A product that results in no net Greenhouse Gas emissions at the point of manufacture

This may be qualified by the manufacturer purchasing and retiring certified carbon off-sets to meet the net zero requirement.

Declarations provided in the form required will be evaluated by the Carpet Institute's Australian Carpet Classification Scheme (ACCS) panel. The systems used by the panel will be the same as used for the other Environmental Certification Scheme's performance labels. The panel will provide an independent authority with sufficient knowledge of the products and environmental standards to verify the claims brought to it.

The ACCS panel is described in the Technical Guidelines for the ACCS grading and ECS certification systems.

This carbon neutral ECS standard also requires material transparency in the specification of the product. All ingredients used in the manufacture of the product must be specified to enable the declaration of the embodied carbon of the raw materials (A1 category).

The Carpet Institute of Australia acts as the secretary to the certification standard for Carbon Neutrality.

Performance requirements summary

This standard addresses building fit-out products and products associated with the built environment. It is intended to cover the following product groups:

- Carpets, underlay, associated flooring hardware
- Resilient flooring products (including Luxury vinyl tiles, vinyl sheet, hybrid tiles and vinyl based plank products)
- Adhesives and other hardware used in flooring installation
- Acoustic screens
- Synthetic Turf



The following performance criteria must be achieved and verified for the ECS carbon neutral certification to be awarded.

	Criterion	Points awarded	Green Building Council (RPVs)
1	Fit for purpose	-	-
2	Ingredient disclosure	1	1
3	Carbon emissions disclosure	1	2
4	Energy improvement	1	1
5	Greenhouse emissions improvement	1	1
6	Net zero embodied carbon	3	3
7	Total	7	8

Criteria

1. Fit for purpose

The product must meet the appropriate industry standards that cover the form of the product and its performance in the role it has. The specific standards vary for different products but are those generally accepted by the industry concerned that have national and international standing under the ISO or similar industry standards.

Textile floor coverings

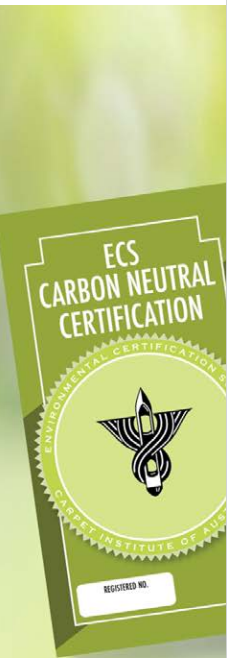
A certified textile floor covering must have been graded by the Australian Carpet Classification Scheme (ACCS). The ACCS classifies textile floor coverings according to their suitability for use in residential and contract installations. ACCS assesses the durability and appearance retention properties of textile floor coverings.

If at the time of application for ECS certification the ACCS grading is more than two years old, the licensee must demonstrate that the main construction parameters of the product remain within 5% manufacturing tolerance of the original specification registered with the ACCS. This requires the licensee to have the product tested by a NATA registered laboratory to the requirements of the ACCS Abbreviated Quality Assurance Test Package.

The licensee must provide an ACCS Abbreviated Quality Assurance test report from a NATA registered laboratory if the ACCS grading was awarded more than two years prior to date of the application for environmental certification.

Resilient floor coverings

The resilient flooring must meet the relevant standards set for that particular class of product under Australian conditions. The product must have suitable guarantees of performance for the intended application. Specifications of products where standards exist include the following, these standards may be amended from time to time and it is the responsibility of the licensee to meet the standards as they are updated.



EN-ISO 10581/2	Specification for resilient floor covering
EN 651	Resilient floor coverings with a foam layer specification
ASTM F1303/3261/1913	Resilient floor covering modular (rigid core without backing)

Acoustic panels

The acoustic panels must meet the design specification as provided in relevant Australian or international standards - AS/NZS 2785. They must meet the fire safety standards as presented in AS5637.1

The NCC specifies noise reverberation times for certain building types. This is specified for sound absorption as Noise Reduction Coefficients, NRC. Acoustic panels function to reduce noise and as such are expected to have a minimum NRC of 0.2 or 20% noise reduction and that normally shown in the following table.

Wall panel direct stuck	NRC	Explanation
12mm thickness	0.45	45% noise reduction

Artificial turf

The artificial turf must meet the relevant standards set for that particular class of product under Australian conditions. The product must have suitable guarantees of performance for the intended application. This could include a warranty period for performance aspects such as colour retention which may in turn depend on the application.

Associated building products

These products must have suitable guarantees of performance for the intended application. This could include a warranty period for performance aspects such performance retention that may in turn depend on the application.

2. Ingredient disclosure

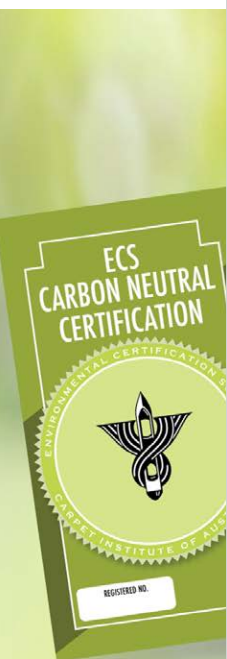
Licensees must declare the components of the product publicly so that this data is available to consumers.

The ACCS administration will take random checks of this data to confirm its accuracy. Ingredient information must be supplied as chemical names to a level of 0.1% (1000ppm) by weight.

The raw materials declaration form must be used as provided in Schedule 9 – Raw Materials (herein and Carpet Guidance Manual).

3. Carbon emissions declaration

This is split into two components – manufacturing and product. The manufacturing carbon emissions are declared as a function of square meter of carpet or flooring type, or using another functional unit such as kg of product. The declaration for manufacturing is to be given as defined in scope 1 and scope 2 emissions. These carbon emissions must be calculated according to Government protocols e.g. the National Greenhouse energy reporting framework and declared in the Schedule 12 (Carpet Guidance manual).



All declarations are to be verified by a third party, publicly available on the licensee's web site and confirmed by the ACCS panel. This declaration is to be provided in a consolidated form in Schedule 14d (Guidance manual). This declaration has to be signed off by an independent assessor.

4. Energy improvement program

The aim of this criterion is to require manufacturers to achieve year on year improvements in energy consumed per square meter or kg of certified product produced.

The manufacturer is required to report on all forms of energy usage in the production of certified products, in the most recent and previous year.

To satisfy this credit a 5% reduction in energy use over 5 years or a 1% reduction per year over the same period, must be achieved.

The report provided requires evidence of an improvement program as well as the efficiency improvements as per Schedule 12.

5 Greenhouse emissions (carbon) improvement program

The aim of this criterion is to require manufacturers to achieve year on year reductions in carbon emissions per square meter or kg of product produced.

The manufacturer is required to report on carbon emissions in the production of all products, in the most recent and previous year.

Carbon emissions must be calculated according to Government protocols e.g. the National Greenhouse energy reporting framework for scope 1 and 2 carbon emissions.

To satisfy this credit a 5% reduction in carbon emissions over 5 years or a 1% reduction per year over the same period, must be achieved.

Licensees must report on manufacturing efficiency measures annually using the Manufacturing declaration form (Schedule 12) available herein and the Carpet Guidance Manual.

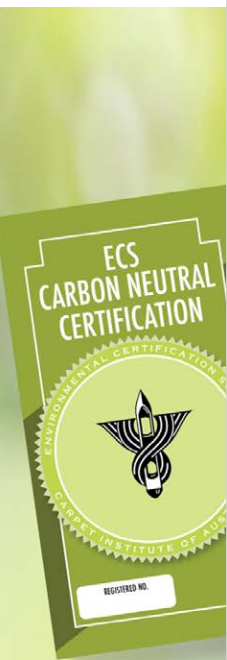
6. Net zero carbon emissions

Manufacturers must provide a verified product declaration that includes carbon emissions taken to mean climate change impacts in CO_{2eq} per m² or kg of product over the product life cycle to the factory gate (Product stages A1-3). This must be accompanied by certificates of carbon offsets purchased by the licensee and its share allocated to the product submitted for ECS certification.

Offset record details required:

- Description of eligible scheme and type
- Offset serial numbers
- Registration (by Clean Energy Regulator)
- Retirement dates (and unique cancellation record prior to the carbon neutral claim period)
- Carbon offset claimed (tCO_{2eq})

The Offsets need to be publicly reported and further information may be required pending a review of the submission by the Panel. It is intended to only allow Australian registered offset schemes.



SCHEDULE 9 – DECLARATION OF COMPLIANCE – RAW MATERIALS (TOXICITY)

Instructions for Completing the Declaration

- Product raw material declarations must be made using the form provided, or through the ECS portal.
- The name of the product and its construction together with the company name is filled in on the front sheet.
- The construction details are given in grams per square metre-kg and percentages in the table “Material Content”. This table also includes the percentage of recycled content for each material.
- A Safety Data Sheet (SDS) should be provided for each material.
- Chemicals in the product can then be identified through the ingredients section of the SDS for each material in the product.
- These chemical names should be listed in the second table. This list should include all chemicals listed in the SDS for each material ingredient down to 0.1% by weight.

For each chemical

- Determine the percentage of each chemical in the product. Use the maximum level recorded in the SDS if there is a range given.
- If all chemicals are compliant then the declaration can be finalized by a company representative who can take responsibility for the declaration and sign off on it.
- All relevant SDS or product analysis test results must be attached to the declaration form.
- Declarations can be made in electronic form as a pdf.



SCHEDULE 9 – DECLARATION OF COMPLIANCE – RAW MATERIALS

In accordance with ECS standard

Registered quality name:	Product construction::	
ACCS label number: (if applicable):		
Company Name:		
I confirm that all the performance requirements of the Raw Materials criterion have been fully met and the list of chemical components is publicly available.		
Licensee declaration by:	Position:	Date:

Material Content

Material	Weight %	Recycled %
TOTAL	100.0%	



This data must be publicly available through the company's web site, or similar mechanism.



SCHEDULE 12 – DECLARATION OF COMPLIANCE – MANUFACTURING

Instructions for Completing the Declaration

- Manufacturing declarations must be made using the form provided.
- The name of the product and its construction together with the company name is filled in on the front sheet.
- A responsible management representative shall verify that the information provided is correct and that the performance requirements of the Manufacturing criterion have been fully met.
- Data provided in the tables can be for the last year recorded prior to the declaration, either a financial or calendar year.

Manufacturing Data on Efficiencies

- Provide data in the second column (Consumption / Production) for all categories for the full year for the whole facility. The year should be stated at the heading and the facility name. Consumption / Production data is for the full manufacturing facility (not an individual product).
- Provide Efficiency data in the 5th column as unit/m²-kg of production. This data is calculated by dividing the 2nd column amount by the total facility production in m²-kg for the year.
- Reference year efficiencies must be provided as the licensee is required to pursue improvement.

Manufacturing Improvement Plans

- Fill in each Improvement Target column space with a Yes (Y) or No (N) depending on whether the facility has a target for improvement in the specified area.
- A very brief description of the plan or reason for no plan must be provided for each category.
- Improvement plan details can be provided as considered appropriate by the licensee.
- Note: all column spaces must be filled in to comply with Manufacturing declaration requirements of the ECS.

Efficiency improvement can be demonstrated by year-on-year improvements in the energy and material consumed by m²-kg. The declaration requires the provision of the previous (or reference) year's efficiency data as well as the data for the current year. Please note the efficiencies sought are for the whole manufacturing facility.

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SCHEDULE 12 – DECLARATION OF COMPLIANCE – MANUFACTURING IN ACCORDANCE WITH ECS STANDARDS

Registered product quality name:	Construction:	
ACCS QA Test Report No: (if applicable)	ACCS QA Test Report Date:	
Company name:		
I confirm that all the performance requirements of the manufacturing criteria have been fully met.		
Licensee declaration by:	Position:	Date:

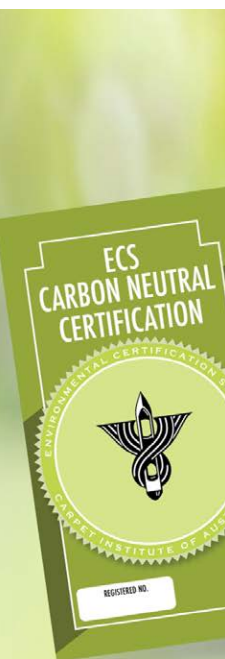
Manufacturing Data on Efficiencies

Year:	Total Consumption	Unit	Reference Year: Efficiencies	Current Year Efficiencies	Unit
Raw materials (total)		tonne			kg/m ² -kg
Recycled raw materials		tonne			kg/m ² -kg
Rapidly renewable raw materials ⁽¹⁾		tonne			kg/m ² -kg
Water		kL			L/m ² -kg
Electricity		kWh			kW/m ² -kg
Natural Gas		MJ			MJ/m ² -kg
Fuels (Diesel)		kL			L/m ² -kg
Annual production		kg/m ²			
Carbon emissions ⁽²⁾		Tonne (CO ₂ eq)			kg(CO ₂ eq/m ² -kg)
Raw material wastes		tonne			kg/m ² -kg
Waste recycled		tonne			kg/m ² -kg
Latex waste		tonne			kg/m ² -kg
Air emissions		kg			kg/m ² -kg

Notes

⁽¹⁾ Rapidly renewable materials are those that can be harvested from sources that can regenerate within 10 years.

⁽²⁾ Carbon emissions for the facility are to be calculated according to the Government protocols i.e. National Greenhouse Energy Reporting Framework as Scope 2 emissions.



Manufacturing Improvement Plans

Facility:	Improvement Target (Y/N)	Plan description (or reason for no plan)
Carbon emissions ⁽¹⁾		
Water conservation		
Raw material waste reduction		
Waste recycling (recyclables / packaging)		
Waste segregation and recycling (fibre wastes)		
Recycled raw material sourcing		
Rapidly renewable raw materials ⁽²⁾		
Dematerialisation of products		
Electrical energy efficiency		
Natural gas efficiency		
Other fuel efficiencies		

Please attach improvement plans as appropriate.

Notes

⁽¹⁾ To comply with the improvement requirements of the ECS at Level 2, a 5% efficiency improvement must be achieved over 5 years in each category of efficiency (or a 1% efficiency improvement per year over 5 years).

⁽²⁾ Rapidly renewable materials are those that can be harvested from sources that can regenerate within 10 years



SCHEDULE 14d – PRODUCT DECLARATION OF COMPLIANCE

Carbon Neutral Product

Registered quality name:	Product description:	
Production (kg/m ²) over period		
Company name:		
I declare that all performance requirements of "carbon neutrality" have been fully met.		
Licensee declaration by:	Position:	Date:

Please attach an electronic copy of the product specific EPD, LCA or independent certification.

Lifecycle Assessment title: Date:		
Lifecycle stage	Carbon emissions (kg CO ₂ eq/m ² -kg)	Total for production period (tonne CO ₂ eq/ period)
1. Raw materials (total)		
2. Manufacturing (from Schedule 12)		
3. Off-sets purchased*		
Net total		
Verifier:	Details	
Signature:		Date:

*Off-sets must be detailed, and certificate(s) provided(as per section 6 requirements).



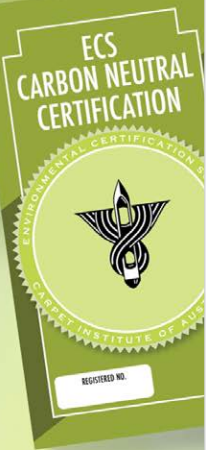
RAW MATERIAL EMBODIED CARBON

Product: Raw material	CAS no.	% in product	Embodied Carbon (per kg of raw material)	Embodied Carbon (per kg of m ² of product)	Total (Kg CO _{2eq} per kg or m ²)

NET CARBON ZERO CALCULATION

Production period	Total production (kg or m ²)	Total carbon (embodied CO _{2eq})	References
Manufacturing			
Product			
Off-set 1			
Off-set 2			
Off-set 3			
Net total			

The net total carbon must be at or below zero for carbon neutral certification compliance.



SCHEDULE 14d – DECLARATION OF COMPLIANCE

Environmental impact calculations must follow the methodology of lifecycle assessment as set out in the standard series A carbon neutral declaration should also follow the lifecycle assessment process as it is applied to carbon emissions, with the requirement that the net product lifecycle carbon emissions as calculated in a verified LCA or EPD are then balanced out, if necessary, with the purchase of off-sets to meet the net outcome of zero carbon emissions.

The licensee needs to provide a verified certificate that includes carbon emissions (climate change impacts in kg of CO₂ eq per m²-kg of product over its lifecycle from manufacturing raw materials to the final product at the factory gate). This needs to be accompanied by certificates of carbon off-sets purchased by the licensee and its share allocated to the product in question.





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