

Responsible Structure

Responsible

Credit: 6

Points: 5

Outcome

The building's structure is comprised of responsibly manufactured products.

Criteria

Credit Achievement	3 points	<ul style="list-style-type: none"> 50% of all structural components (by cost) meet a Responsible Products Value of at least 10.
		In conjunction with the <i>Credit Achievement</i> .
Exceptional Performance	2 points	<ul style="list-style-type: none"> 10% of all products in the structure (by cost) meet a Responsible Products Value of at least 15 Or 80% of all products in the structure (by cost) meet a Responsible Products Value of at least 10.

Additional information

Stage implementation

Strategy Brief Concept **Design** Tender Construction Handover Use

Synergies with other credits

- Responsible Envelope
- Responsible Systems
- Responsible Finishes
- Life Cycle Impacts
- Upfront Carbon Emissions

Sustainable Development Goals

- Goal 9 (Industry, Innovation and Infrastructure)
- Goal 12 (Sustainable Consumption and Production)

Relevant reporting initiatives

- None

Requirements

Credit Achievement

The project must comply with the following criteria:

- Good practice products

Good practice products

The project must have **50%** of all structural components (by cost) meet a Responsible Products Value of at least **10**.

The structure is defined as load bearing and stability components of a building, including steel, timber, concrete load bearing elements.

Values for each product can be calculated by using the Responsible Products Value calculator.

Exceptional Performance

In conjunction with the *Credit Achievement*, the project must comply with **one** of the following criteria:

- Best practice products
- Good practice products

Best practice products

The project must have **10%** of all products in the structure (by cost) meet a Responsible Products Value of at least **15**. These products do not need to be in addition to the Credit Achievement; they can be used towards meeting the Credit Achievement.

See *Credit Achievement* requirements for further information.

Good practice products

The project must have **80%** of all products in the structure (by cost) meet a Responsible Products Value of at least **10**.

See *Credit Achievement* requirements for further information.

Submission content

Submissions for this credit must contain:

- **Submission form**
- **Evidence** to support claims made in the submission

Recommended evidence:

- Receipts confirming purchase of stated products
- Evidence that claimed products with required RPV constitute required cost of all structural components

Alternate documentation can also be used by project teams to demonstrate compliance.

The recommended evidence listed above is applicable to the as built submission. See the ***Error! Reference source not found.*** section in the Introduction for more information on submitting evidence for the Design assessment.

The key requirement is that evidence is provided to support each claim made within the Submission form.

Guidance

Responsible Products Value

The Responsible Products Value for a product is calculated by manufacturers and suppliers based on which of the relevant initiatives their product complies with. To assist them in demonstrating compliance, a number of third-party certification schemes and independent verification methods have been pre-approved as compliant with the many initiatives in the Responsible Products Framework.

Examples of recognised initiatives are:

- Industry wide environmental product declarations (EPD)
- Product specific environmental product declarations (EPD)
- ISO14001 certification
- Climate Active Carbon Neutral Certification
- Chain of custody certification
- Third-party product certification schemes.

The list of compliant schemes and verification methods that can be used to demonstrate compliance is available on the [GBCA website](#).

Calculating the RPV in a product where one or multiple components have an RPV, but the final product does not

When calculating the RPV score of a product that has a number of components, and where only one of these complies, the item should be broken down into its key major components (approximately those that make up 80% of the mass of the item in question). An approximate estimate will suffice. Each item is assigned an RPV score and multiplied by the key component makeup, and the total RPV is calculated by adding up these values.

For example, in a chair with three key components (timber, foam, fabric), the following would apply:

- Timber (60%) with an RPV of 10 = 6
- Foam (20%) with RPV of 0 = 0
- Fabric (20%) with RPV of 12 = 2.4

The chair would have an RPV of 8.4

Dual purpose elements

Elements that serve a dual purpose (e.g., load bearing façade) can be claimed in this and other 'Responsible' credits.

Calculating compliance

The percentage of cost that has a compliant score is used to determine compliance with the credit.

Cost can be calculated either as total cost (materials + labour) or materials only. However, the cost used must be consistent for the whole calculation (consistency in the numerator and denominator). For example, if the total cost is used to calculate the compliant structural components, the total cost must be used to calculate the full structural component cost. Project teams may use different approaches between Responsible products credits but must be consistent in their approach within the credit.

Procuring products with a compliant RPV

The Responsible Products Value website includes a list of compliant scheme combinations to assist project teams to procure compliant products. In the future this list will be supplanted by a product directory. This list will be maintained by the Green Building Council of Australia (GBCA). The list can be found on the [GBCA website](#).

Definitions

Responsible Structure

The structure is defined as load bearing and stability components of a building, including steel, timber, concrete load bearing elements. Temporary formwork is excluded from meeting compliance with the Responsible Products Value part of the credit, however, is included in the cost of the structure where projects choose to use the 'total cost' approach.

Responsible Envelope

The envelope is defined as the elements that surround a building such as the façade, and all façade components such as external shading and insulation, suspended slabs, as well as roofing systems.

Responsible Systems

Active building systems are characterised by energy and movement, and include all mechanical, hydraulic, transportation and electrical systems present in the building. Lighting, security, and fire systems are also included. Products that make up active systems such as pipes, cables, ducts etc are included. Passive systems such as a fixed façade shading device are not included.

Responsible Finishes

Internal finishes include flooring, plasterboard, paints, ceilings, partitions, doors, internal glazing partitions or similar. Joinery used as part of a wall finish is included, e.g., wall panelling or fixed shelving/cupboards that make up a partition. Sealants and adhesives used for finishes are also included. Loose furniture or joinery is not included.

Supporting information

The following resources support this credit:

- Responsible Products Framework: <https://new.gbca.org.au/rate/rating-system/responsible-products-framework/>