

Environmental Change

Current trends worldwide are focusing on reducing the environmental impact of construction, with a focus towards embedding sustainable building practices. Incorporating sustainable materials and designing for energy efficient homes is fast becoming a key measure for tightening regulations around the world and for environmentally conscious clients.

Having an environmentally designed building provides a green advantage, not only during the construction phase, but also once the building is complete and operational.

Benefits Include

- ▶ Fewer carbon emissions during construction
- ▶ Higher recyclable content of the building
- ▶ Lower operational heating and cooling costs
- ▶ Reduced long-term environmental impact

LEED Certification

LEED (Leadership in Energy and Environmental Design) is the world's most widely used 'Green Building' rating system, allocating points for design in compliance with established sustainability standards. Launched by the United States Green Building Council (USGBC), this certification system encourages the design and construction of green buildings and provides a third-party verification system attesting that a building has reached one of four LEED certification levels.

LEED Certification levels

- ▶ Certified 40-49 points
- ▶ Silver 50-59 points
- ▶ Gold 60-79 points
- ▶ Platinum 80-110 points

Decra: A Sustainable Solution

Decra's pressed steel tiles are the ideal solution to reducing the environmental impact of roof construction. The lightweight, compact design means not only is less framing support required than traditional concrete tiles, the transportation emissions of transporting Decra tiles to site is significantly lower.

Furthermore, water collected from a Decra roof is not tainted by the roof coatings and is safe for drinking* and other household purposes. In fact, it goes above and beyond World Health Organisation drinking water standards.

And best of all, steel can be recycled indefinitely. So, a retired Decra roof doesn't need to end up in landfill – it can simply be re-worked into another steel product.

*Reflects roofing material contamination only, please refer local rainwater harvesting quality guidelines



Decra is proud to be ISO 14001 accredited, this means you can rest easy knowing the manufacture of your roof has a certified environmental management system.

POINT ALLOCATION GUIDELINE

Credit name	Points	Decra application to credits
Rainwater management	Up to 3 points	A Decra roof provides an excellent platform to collect quality rainwater. Rainwater from a Decra roof is cleaner than water collected from other common steep slope roof types.
Outdoor water use	Up to 2 points	By way of the Rainwater Management program, the quality non-potable water may be implemented to reduce municipality water use for landscaping, toilet and urinal flushing, along with custodial uses.
Indoor water use	Up to 6 points	
Optimise energy performance	Up to 18 points	A Decra roof with added roof deck insulation can optimise energy performance as validated through energy models. HVAC systems may then be downsized with a thermally efficient roof contributing to reduce electrical loads.
Renewable energy	Up to 5 points	Photovoltaic (PV) panels and solar thermal units attached to a Decra roof provides a platform for renewable energy production.
Low-emitting materials	Up to 3 points	VOC emissions off of Decra roof panels and components is virtually absent with the use of acrylic water-based products to adhere roof granules. Coating is applied off-site and does not affect the VOC calculations within this credit.
Daylight	Up to 3 points	Skylights incorporated into a Decra roof can help achieve this credit. Light transmitting skylights on a Decra roof may also include diffusers to enhance the interior lighting area.
Construction and demolition waste management	Up to 2 points	Shop fabricated Decra roof panels and accessories generate limited on-site construction waste, thereby helping to reduce waste.
Building lifecycle impact reduction	Up to 5 points	With a 50+ year life span, a Decra roof can be a great asset to capture this credit. Point earning potential can be based on re-use of existing material or a whole building life-cycle assessment.

Note

The information shown is intended as a guide only and refers to LEED v4:New construction only. LEED points are allocated based on all materials utilised within the project and Decra products consist of only a portion of the total materials within the project. Credit values shown above reflect those points available and are not a guarantee of credits to be issued. As LEED certification criteria are subject to change, please refer to USGBC directly prior to design.

For more information about LEED and LEED Certification program requirements, visit www.usgbc.org/LEED