# WHY CHOOSING ACCREDITED PRODUCTS WILL NEVER FAIL YOUR PROJECT (OR BLOW YOUR BUDGET)







www.weathertex.com.au

## INTRODUCTION

To say the architectural, engineering and construction industries in Australia knows the importance of leaving the smallest carbon footprint behind would be an understatement. Not only do industry benchmarks like the Green Star Rating system drive almost every practice's design approach today, architects and building designers are also increasingly reviewed and recognised by their peers based on their environmentally sustainable design (ESD) initiatives.

This sustainability hype – if you could call fundamental building principles hype – is not unfounded either. A 2008 submission by the Green Building Council of Australia (GBCA) to the 2009-2010 Federal Budget noted that residential and commercial buildings in the country produce 23 percent of total national greenhouse emissions annually. That's 130 megatonnes of unwanted emissions the built environment is responsible for every year.<sup>1</sup>

Alarmingly, the same paper notes that without appropriate action, energy use in the commercial sector with respect to buildings and their impact on the environment is expected to treble by 2050.<sup>2</sup>

As more building professionals grasp the true significance of these statistics, whether a project needs to be sustainable no longer needs answering (the answer is always yes). Instead, the discussion has moved towards how far a design team should go in their push for sustainable excellence, especially as industry standards are continually raised. Importantly, for both designers and clients, the imperative is also on understanding the costs involved in the endeavor for truly green buildings.

Architects and building designers are increasingly reviewed and recognised by their peers based on their environmentally sustainable design initiatives

"



## THE COST OF SUSTAINABILITY

The best architects will tell you that basic ESD initiatives do not come with a high price tag, only a creative and clever solution to whatever constraints a site might present. For instance, MAKE Architecture's founding director Mel Bright says her practice makes use of siting and orientation in every project they tackle – basic principles that "you get for free".<sup>3</sup> Gensler's Lifestyle Sector and Retail Practice Area leader Irwin Miller noted in an interview that designing and building sustainability is better for communities, the environment, as well as the wallet.<sup>4</sup> Meanwhile, experts who have studied what it costs to build green have found that it may cost "anywhere from nothing more to a nominal amount more to build green over the budget for a traditionally designed building".<sup>5</sup> The business case for green buildings could go on and on.

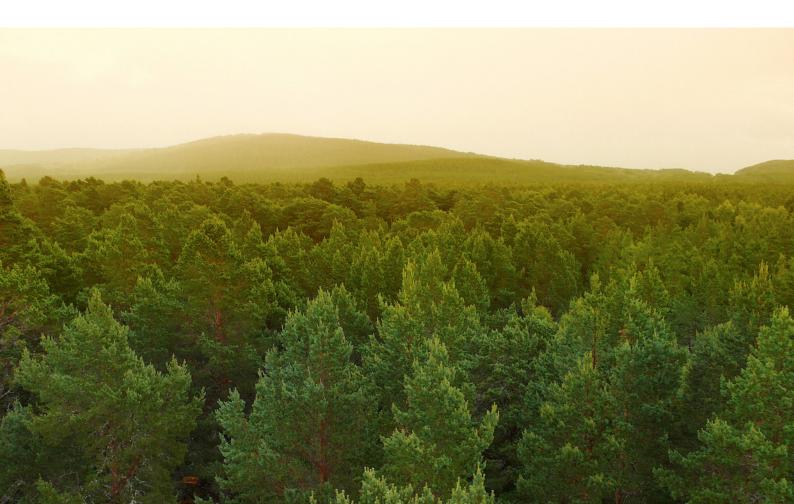
However, to say that the implementation of all green initiatives comes at absolutely no cost is certainly false, particularly for the many architects, engineers, builders and specifiers who work with smaller or more restrained budgets. The reality is that more elaborate sustainability features, such as underfloor air distribution systems, can cost more, and often have to give right of way to other design concerns.

Yet the misconception about how much more expensive building sustainably is compared to 'traditional' construction may, more often than not, be over-dramatic. Just take the 2007 public opinion survey conducted by the World Business Council for Sustainable Development as one example. The study found that on average, survey respondents believed green features added 17 percent to the cost of a building. Compare this to a related study of 146 green buildings, which found that the actual average marginal cost was less than two percent.<sup>6</sup>

This tendency to overestimate the cost of sustainability is most obvious during the material specification process. In an environment where emphasis is placed on accreditation and rating systems, sustainably manufactured products are frequently perceived as more expensive if they have a higher rating than other alternatives.

Weathertex, a market-leading manufacturer of natural Australian hardwood weatherboards and architectural panels, understands too well this price misconception. Its Natural Range, for example, is the first manufactured product in the world to achieve a Platinum Green Tag rating with a GreenRate R Level A – a certification that many of its potential customers expect comes at a premium.

Except it doesn't. As Weathertex points out, the Australian-owned company has always sought to manufacture the 'greenest' products that have a better than zero carbon footprint. The GreenTag certification only confirms how sustainable its products truly are, while making it much easier for the environmentally conscious designer, architect and builder to choose a durable, high quality and easy to install product without additional costs.<sup>7</sup>



## KEY BENEFITS OF SPECIFYING ACCREDITED PRODUCTS

The decision to use accredited materials and products have and will never detract from the value of a project. A great case in point is the EcoSpecifier Global GreenTag certification system. Recognised in over 75 countries, Global GreenTag is a third-party, multi-criteria, consensus-based Type 1 ecolabelling program that enables clients and design teams to be confident of the products they are putting into a home, office or public space. Going back to Weathertex's Natural Flat Sheets & Weatherboards example, the range's Platinum GreenTag rating assures buyers that the manufacturers' claims of formadelhyde-free architectural panels and weatherboards are legitimate. Made from natural Australian hardwood timber from sustainably managed AFS/PEFCcertified NSW state forests and EPA approved private native forestry, the certification likewise recognises that the products are termite resistance as well as compliant with AS 3959 Bushfire Attack Level (BAL-19).

Weathertex also commissioned the NSW DPI to undertake testing to determine actual end of life carbon storage and loss potential of products subjected to anaerobic decay conditions such as would be found in landfill or tips. These tests demonstrated that Weathertex mean loss was only 3.55% loss of carbon many orders of magnitude less than previously assumed numbers.

In addition to boosting the trust customers can place in their manufacturer, accredited products also help professionals like specifiers easily meet certain GBCA or Infrastructure Sustainability Council of Australia requirements. For instance, the Global GreenTag GreenRate Level A rating Weathertex's Natural range has achieved immediately makes the products relevant to a number of elements under the GreenStar rating tool. These are:

- GreenStar 'Design and As Built v1' and 'Interiors v1' Rating Tools Credits:
  - Sustainable Products Level A
  - Life Cycle Impact
- GreenStar ' Performance v1' Rating Tools Credits: Procurement and Purchasing:
  - Refurbishment Materials
- GreenStar Legacy Tools Credits (as a component):
  - MAT: Ceilings, Walls & Partitions
  - MAT: Internal Walls
  - MAT: Walls and Partitions
  - FIT: Assemblies
  - IEQ: Formaldehyde Minimisation
  - IEQ: Volatile Organic Compounds (VOC)<sup>8</sup>

Weathertex's Primed Flat Sheets and Panels range also exemplify the benefits of choosing an accredited product. Awarded the Global GreenTag Gold Plus GreenRate Level A rating, the exterior cladding line is easily recognised as more durable and sustainable than competing products with lower or no ratings. The accreditation of the range, which utilises a water-based acrylic primer and includes Traditional lapped weatherboards, Selflok weatherboards, Weathergroove, Rubix and ExteriorBoard architectural panels, is also relevant to a range of GreenStar rating tool credits, such as the 'Performance v1' credits of Procurement and Purchasing: Refurbishment Materials.<sup>9</sup>



#### THE POWER OF A GLOBAL GREENTAG RATING

Global GreenTag operates the only certification mark in the sector approved by the Australia Competition and Consumer Commission (ACCC), the US Patents and Trademarks Office, as well as green building rating tools around the world. It comprises two certification systems – the Life Cycle Analysis (LCA) Rate for all products and rating tools that engage LCA and Environmental Product Declarations; and GreenRate, which applies to products relevant to the Green Star rating system, Infrastructure Sustainability Council of Australia (ISCA), Living Building Challenge and HomeStar (New Zealand).

The Global GreenTag's LCA Rate program scores products against six main sustainability assessment criteria – Greenhouse Gas Emissions, Health & Ecotoxicity, Life Cycle Analysis, Social Responsibility & Labour Conditions, Synergy and Biodiversity – and over 20 other Life Cycle and Social Criteria. As part of the Life Cycle Analysis, the program assesses a product before it is even processed at a raw material stage, through to production, packaging and distribution, and finally use and wastage. It is an extremely strict rating system that awards products on four levels, Bronze, Silver, Gold and Platinum, with a Platinum rating signifying a product or range, like the Weathertex Natural Range, is world leading.

In addition to its GBCA recognition, GreenTag is certified in accordance with ISO 14024, 14040-4, 14025, 14067 and 9001.

A GreenTag accreditation also grants building professionals an opportunity to use the product LCA for life cycle impact and greenhouse gas emission analyses of buildings that utilise the rated product. In fact, the certification system is the only one globally that facilitates BIM-based LCA modeling of whole buildings using branded product data.<sup>10</sup>



#### CONCLUSION

As communities around the world become more populated by people and buildings, executing sustainable building concepts and practices has never been more crucial. Without intelligent green design, developers are left with a sub-par project that ultimately leads to inflated costs, both at the project level and after a building is completed in the form of higher energy costs and water consumption.

Without intelligent green design, the environment and everyone who lives in it and depends on it are left poorer off.

One of the easiest ways a design team can achieve the highest standards of sustainability is by specifying products with reputed accreditations, like the Weathertex Natural or Primed Flat Sheets and Panels Range when deciding on an exterior wall cladding or panel product. The Global GreenTag certification awarded to these ranges enables architects to make informed decisions quickly, without being bogged down by the plethora of building compliance information, standards and opinions they otherwise would face. Weathertex's ratings even automatically help teams achieve the maximum rating points for wall cladding and panels as set out by the GBCA's Green Star program – all without blowing their budgets.

To find out more about Weathertex's Global GreenTagcertified products and whether they are suitable for your external wall paneling needs, please visit http://www.weathertex.com.au/greentag-accreditation/. Information about the Global GreenTag program can be found at http://www.globalgreentag.com/.

### REFERENCES

- 1 https://www.gbca.org.au/uploads/90/1882/2009%20Federal%20Budget%20Submission%20final.pdf
- <sup>2</sup> Centre for International Economics, Capitalising on the Building Sector's Potential to Lessen the Costs of a Broad Based GHG Emissions Cut, p.16
- <sup>3</sup> http://www.architectureanddesign.com.au/features/features-articles/build-less-but-of-a-higher-guality-melissa-brid
- <sup>4</sup> http://inhabitat.com/interview-genslers-irwin-miller-on-sustainable-architecture-and-opportunity-green
- <sup>5</sup> http://www.buildings.com/article-details/articleid/3029/title/the-true-costs-of-building-green.aspx
- <sup>6</sup> http://www.usgbc.org/articles/green-building-costs-and-savings
- <sup>7</sup> http://www.weathertex.com.au/wp-content/uploads/2016/06/brochure\_weathertex.pdf
- <sup>8</sup> http://www.globalgreentag.com/products/unprimed-raw-flatsheets-weatherboards/
- <sup>a</sup> http://www.globalgreentag.com/products/primed-flatsheets-weatherboards/
- <sup>10</sup> http://www.globalgreentag.com/about-greentag/#g-how





www.weathertex.com.au