

SUSTAINABLE BUILDINGS

This edition of OnBoard explains how Knauf's products, systems and services contribute towards sustainable building programs such as Green Star.



In Australia, a widely recognized approach to sustainable construction is the Green Star rating system, created by the Green Building Council of Australia (GBCA) to evaluate the environmental design and construction of buildings. Green Star ratings are awarded for the entire project, taking into account site selection, design, construction and maintenance.

A project is assessed using a "rating tool" and approved by the GBCA depending on the type of building. Rating tools currently exist for the commercial construction market and include offices, retail, healthcare and education. Each rating tool has been developed to measure the different environmental factors in the specific construction type. For example operation and plans for waste management and recycling are considered as more important in retail developments when compared to education and office fit-outs. Green Star rating tools are completed by a Green Star Accredited Professional.

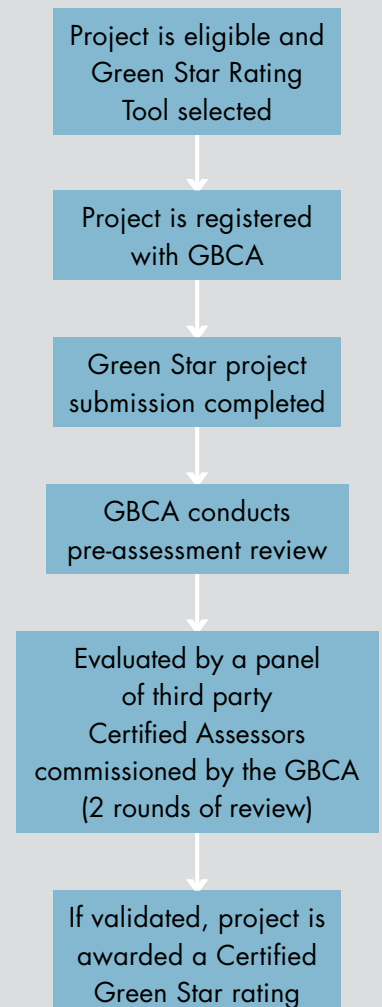
Green Star Ratings

Green Star ratings are awarded by the GBCA in an independent process. Only the GBCA can certify a project for a Green Star rating. Green Star ratings are certified for buildings for their design "Design", or for their actual construction after completion of the project "As Built". A new rating system "Performance" is currently under development to assess the operational performance of existing buildings.

Overall, there are nine categories in each Green Star calculator: Management, Indoor Environment Quality, Energy, Transport, Water, Materials, Land Use & Ecology, Emissions, and Innovation. These categories are divided into credits, with points awarded within the credit for various criteria. Once all credits are assessed, a percentage score is calculated and Green Star environmental weighting factors are applied. Environmental weighting factors vary across states and territories to reflect the local environmental concerns.

Figure 1.

Green Star certification process



Knauf's role in your Green Star projects

There are three categories where Knauf plasterboard and related products and services contribute to Green Star points. The maximum contribution depends on the project type. There are nine Green Star rating tools covering commercial and multi-residential construction, and three rating tools in pilot mode (Custom, Convention Centre, Public Building).

PROJECT TYPE		Schools Universities	Shopping Centres	Hospitals Medical Centres	Office Fit Outs	New Offices	Apartments		
Green Star Rating Tool	Total Points	Education v1	Retail Centre v1	Healthcare v1	Office Interiors v1.1	Office v3 Design v2 As Built v2	Multi-Unit Residential v1		
GREEN STAR CATEGORY	Materials (MAT)	22 - 30	n/a	n/a	2 points	3 points	n/a	2 points	
	Indoor Environment Quality (IEQ)	14 - 34	Internal Noise Levels	2 points	1 point	1 point	1 point	2 points	2 points
			VOCs	1 point	1 point	1 point	2 points	1 point	1 point
	Management (MAN)	12 - 18	2 points	2 points	2 points	2 points	2 points	2 points	

v = version. Industrial v1, PILOT rating tools not shown.

Materials (MAT)

The Materials Category is applicable for our products in the Healthcare, Office Interiors and Multi-Residential Rating Tools.



Achieve 100% points with GECA certified

FireShieldECO, **MastaShieldECO**, **QuadShieldECO** and **ImpactShieldECO**

- > Healthcare (MAT-14)
- > Office Interiors (MAT-3)
- > Multi-Residential (MAT-14)

Other Knauf plasterboard products can achieve 63% points.

Indoor Environment Quality (IEQ)

We contribute to your project's Green Star points in two sub-categories:

- > Internal noise levels: noise reduction systems for reverberation and sound insulation using SoundShield and AcoustiShield plasterboards will achieve 100% for plasterboard systems towards the total.
- > Volatile Organic Compounds (VOCs): all Knauf adhesives and compounds are third party certified as low in VOC content and under the required levels for Green Star projects, achieving 100% for plasterboard related products towards the total.

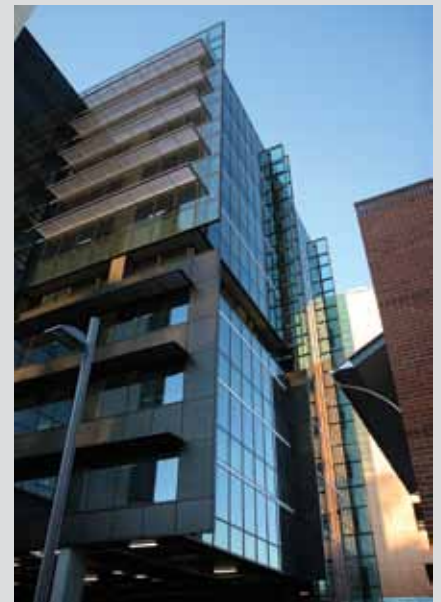
Management (MAN)

We can contribute towards points achieved in the project's waste management category:

- > Supporting contractors by providing access to plasterboard waste collection, re-use and recycling services.



4 Star
Best Practice
45 – 59 Points
Innovation Place
North Sydney, NSW



5 Star
Australian Excellence
60 – 74 Points
Parramatta Justice Building
Sydney, NSW



6 Star
World Leadership
75 – 100 Points
VS1, SA Water
Adelaide SA

Knauf's support for your Green Star projects

For information on supporting documentation and assistance in completion of your project submission, contact your local PlastaMasta or Knauf sales manager.

Our sustainability documents, for example our GECA Certification documents, Environmental Policy, VOC Certificates, and 10 Year Product Warranty, are available to download from our website:

knaufplasterboard.com.au/sustainability/Library-Tools.php

We have achieved many improvements in our Australian manufacturing facilities such as heat recovery and water saving initiatives.

More information regarding these initiatives is available from our website:

knaufplasterboard.com.au/sustainability/Our-Commitments.php

For more information on ECO products:

- ▶ Download our Green Star documentation:
knaufplasterboard.com.au/sustainability/Eco-Friendly-Solutions.php
- ▶ For more information on GBCA and Green Star: gbca.org.au

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For further information on Knauf products or systems, contact
1300 724 505
or visit our website at
knaufplasterboard.com.au

