



The Laminex Group and Green Star® Third Party Certification Fact Sheet

Introduction

The aim of this fact sheet is to demonstrate how products/materials contribute to Green Star® ratings in general and in detail. This advice is provided for the following product ranges:

1. **Craftwood (E0 raw MDF)** – product range with an ecospecifier GreenTag™ GreenRate certification
2. **Decorwood (E0 LPM decorated MDF)** – product range with an ecospecifier GreenTag™ GreenRate certification
3. **Lamiwood (E0 LPM decorated MDF)** – product range with an ecospecifier GreenTag™ GreenRate certification
4. **Trade Essentials White (E0 LPM decorated MDF)** – product range with an ecospecifier GreenTag™ GreenRate certification

The Green Building Council of Australia (GBCA) has recently published technical advice (01 January 2011) that simplifies the assessment criteria for VOCs, Formaldehyde, and credits found within the Material Category within Green Star Material Calculators.

These 'Technical Clarifications' were created in response to stakeholder feedback and in order to simplify the assessment process for third party certified products and materials. The Laminex Group have taken the opportunity to provide specific advice to their clients (specifiers, joiners, project managers etc.) at point of sale.

The following Technical Clarifications have recently been published by the GBCA:

- IEQ – Volatile Organic Compound (VOC) Technical Clarification no.51
- IEQ – Formaldehyde Minimisation Technical Clarification No.27

These Technical Clarifications (detailed below) are essentially 'deemed-to-satisfy' compliance options for any product or material that has achieved third party certification by a GBCA-recognised product certification scheme (in this instance, ecospecifier's GreenTag™ GreenRate product rating system).

Consequently, once The Laminex Group's respective products have achieved GreenTag™ Green Rate certification (Level A, B or C) they will have fulfilled the GBCA's deemed-to-satisfy criteria found within the following Green Star® credits:

- VOC credit (in all Green Star® rating tools where the credit specifically addresses fitout items)
- Formaldehyde Minimisation credit (all Green Star® tools)
- Relevant Material Calculator credits in the Materials category (in all Green Star® rating tools where the credit specifically addresses fitout items)

Outlined below is how The Laminex Group's GreenTag™ Green Rate certified MDF products can contribute to Green Star® credits (i.e. how they fit into Green Star). This advice is based on the release of IEQ – VOC Technical Clarification No.51, IEQ – Formaldehyde Minimisation Technical Clarification No.27, the Material Calculator Guide v4, new draft Material Calculators v2.0, as well as the revised Green Star® Timber credit.

Indoor Environment Quality (IEQ) Compliance

Volatile Organic Compounds (VOC) credit within Green Star®

In all Green Star® tools, where the VOC credit addresses fitout items, the following applies:

IEQ – VOC Technical Clarification No.51

Fitout items certified by ecospecifier's GreenTag™ GreenRate v3, under four Supplementary Category Specific Standards - 'Carpet and Flooring Supplementary Standard', 'Furniture Supplementary Standard', 'Joinery Supplementary Standard' and 'Walls, Partitions and Ceilings Supplementary standard' at level A, B or C, are deemed to meet the criteria for carpets, other flooring or fitout items. The certification licence for the product current at the time or project registration is the means to demonstrate compliance via this option.

→ **Summary:** the certification licence awarded to The Laminex Group by ecospecifier is the evidence required to show that the certified The Laminex Group product meets Green Star's VOC requirements (Credit Criteria).

Formaldehyde credit within Green Star®

In all Green Star rating tools, the following applies:

IEQ – Formaldehyde Minimisation Technical Clarification No.27

Engineered wood products containing product certified by all GBCA recognised product certification standards are deemed to meet the credit criteria. Recognised product certification scheme standards are listed on the GBCA website. The certification licence for the product current at the time or project registration is the means to demonstrate compliance via this option.

→ **Summary:** the certification licence awarded to The Laminex Group by ecospecifier is the evidence required to show that the certified The Laminex Group product meets Green Star's Formaldehyde requirements (Credit Criteria).

Additional Notes: the GreenTag™ Green Rate certification levels (A, B or C) are *irrelevant* for the VOC and Formaldehyde Minimisation credits within the Indoor Environment Quality (IEQ) category due to the Technical Clarifications referenced in the fact sheet. The important thing for these two credits is that Product Certification has been achieved, not at which level.

The certification levels (A, B or C) are *relevant* for the Material Calculator credits within Green Star (refer 'Materials Category within Green Star® & Third Party Certification' section of this Fact Sheet). The second point in the Green Star® 'Formaldehyde' credit is only available in Green Star® – Office Interiors v1.1 rating tool (the GBCA's current office tenancy rating tool). For all other Green Star® rating tools (other than Office Interiors v1.1), there is only 1 point available for low emission formaldehyde or no formaldehyde. NATA accredited laboratories are able to test for formaldehyde emissions, the requirements are outlined in Appendix A – Formaldehyde Emission Summary Table.

MAT – Materials Category within Green Star[®] and Third Party Certification

In relevant Green Star[®] Material Category credits, as per the Material Calculator Guide v4 (found on GBCA website), the following applies:

Greater than >90% certified Environmentally Innovative rule

Where 90% or more (by mass) of the components of a product can be categorised as 'Environmentally Innovative', the entire product may be entered as 'Environmentally Innovative' in the Material Calculators (with any non-compliant components disregarded).

What constitutes 'Environmentally Innovative'?

A product certified by a multi-criteria product certification scheme is recognised as 'Environmentally Innovative' by the GBCA (in this instance – ecospecifier's GreenTag[™] GreenRate v3.1 rating system).

→ **Summary:** This approach allows a product using GreenTag[™] GreenRate certified The Laminex Group Raw or Decorated MDF to score 100% of points in the relevant Material Calculator credit (e.g. tables, chairs, joinery etc.) provided that greater than 90% (by mass) of the product is third party certified. In most cases, the project's specifier will be able to determine if this is the case. From The Laminex Group's point of view, the certified MDF products are compliant and will contribute to this outcome. The certification licence awarded to The Laminex Group by ecospecifier is the evidence required to show that the certified The Laminex Group MDF products can be considered 'environmentally innovative' within the Material Calculator.

Less than <90% certified Environmentally Innovative rule

Where less than 90% (by mass) of the components of a product are categorised as 'Environmentally Innovative' (as per above definition), then the product may still be considered to contain third party certified components and can be classified as 'eco-preferred' rather than 'environmentally innovative'. As such, the product can contribute to the 'eco-preferred' content criteria found within the Material Calculators.

The percentage of eco-preferred content in a product, or product components is calculated by mass with three available options to choose from in the Material Calculators:

- <5% by mass;
- ≥5% and <20% by mass; or
- ≥20% by mass.

What constitutes 'Eco-preferred'?

For the purposes of the Green Star[®] Material Calculators, eco-preferred content is defined as the amount of re-used content, **GBCA-recognised third party certified content**, or independently-verified recycled content in an item.

→ **Summary:** This approach allows a product using GreenTag[™] GreenRate certified The Laminex Group's Raw or Decorated MDF (but where the bulk of the product is not made up of eco-preferred content) to score points in relevant Material Calculator credits (e.g. tables, chairs, joinery etc.). From The Laminex Group's point of view, the certified MDF products are compliant and will contribute to this outcome. The certification licence awarded to The Laminex Group by ecospecifier is the evidence required to show that the certified The Laminex Group MDF products can be considered 'eco-preferred' content within the Material Calculator.



Additional notes: with regards to the Materials Category, please refer to the new Material Calculators v2.0 (DRAFT) which are due to be released mid-late 2011:
<http://www.gbca.org.au/green-star/materials-category/draft-material-calculators-2-0/3047.htm>. You will notice that Criterion No.3 is for 'Certified Product' and will contribute a greater percentage of points depending on whether or not a product has been certified to level A, B or C. This applies for credits within the Materials Category that are based on **Material Calculators**. For example, within the Green Star[®] – Education v1 rating tool this would apply to MAT-11 Flooring, MAT-12 Joinery and MAT-13 Loose Furniture credits.

Please note that these new Material Calculators v2.0 are still in DRAFT format, and may be subject to change during the stakeholder feedback period.

Timber Certification and Compliance

On January 1, 2010 the GBCA released a revised Green Star[®] Timber credit. If a Green Star[®] project decides to apply for the timber credit as part of their Green Star[®] submission, one point is available where at least 95% (by cost) of all timber is certified by a forest certification scheme that meets the GBCA's

'Essential' criteria for forest certification; or is from a **reused source;** or is sourced from a **combination of both.**

Forest Certification Schemes that comply with the Essential Criteria must be accredited by the Forest Stewardship Council (FSC) International or Programme for the Endorsement of Forest Certification (PEFC). FSC Australia is the Australian provider of FSC certification. The Australian Forest Certification Scheme (AFCS) is the PEFC accredited scheme in Australia.

In future, two points will be available where at least 95% (by cost) of all timber is certified by a forest certification scheme that meets both the GBCA's 'Essential' and 'Significant' criteria for forest certification; or is from a reused source; or is sourced from a combination of both.

→ **Summary:** The Laminex Group's products that meet the above 'Essential Criteria' for timber may contribute to achieving the 1 point currently available. The documentation required to demonstrate compliance includes, but is not be limited to, appropriate Chain of Custody (CoC) certificates or invoices. Please refer to the documentation requirements found within the revised Green Star[®] timber credit on the GBCA website.

Additional notes: one point will be awarded in the revised Timber credit where 95% (by cost) of all timber used in the building and construction works is certified by a PEFC or FSC International accredited forest certification body; or is from a reused source; or is sourced from a combination of both.

Only one point is currently available when claiming this credit. The second point should be claimed as 'not applicable' (N/A) until the 'Significant Criteria' are released by the GBCA. Further work is being undertaken on establishing the 'Significant Criteria' for forest management.

Further information on the revised Timber credit (including the 'Essential Criteria' background document and a list of GBCA-recognised Forest Certification Schemes), can be found on the GBCA website: <http://www.gbca.org.au/green-star/materials-category/revised-timber-credit/2693.htm>



Appendix A – Formaldehyde Emission Summary Table

Test Protocol	Emission Limit for 1 point	Emission limit for 2 points
AS/NZS 2269:2004, testing procedure AS/NZS 2098.11:2005 method 10 for Plywood	≤1mg/ L	≤0.3mg/L (mean) and 0.4mg/L (max)
AS/NZS 1859.1:2004 - Particle Board, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1.5 mg/L	≤0.3mg/L (mean) and 0.4mg/L (max)
AS/NZS 1859.2:2004 - MDF, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤1mg/ L	≤0.3mg/L (mean) and 0.4mg/L (max)
JIS A 5908:2003- Particle Board and Plywood, with use of testing procedure JIS A 1460 (This test protocol is known as F**** [<i>F4Star</i>])	≤1mg/ L	≤0.3mg/L (mean) and 0.4mg/L (max)
JIS A 5905:2003 - MDF, with use of testing procedure JIS A 1460	≤1mg/ L	≤0.3mg/L (mean) and 0.4mg/L (max)
JIS A1901 (not applicable to Plywood)	≤0.1 (+/- 0.0005) mg/m ² hr*	≤0.005 mg/m ² hr
ASTM D5116	≤0.1 (+/- 0.0005) mg/m ² hr	≤0.005 mg/m ² hr
ISO 16000 part 9, 10 and 11 (also known as EN 13419)	≤0.1 (+/- 0.0005) mg/m ² hr at 3 days	≤0.005 mg/m ² hr at 3 days
ASTM D6007	≤0.12mg/m ^{3**}	≤0.04 mg/m ^{3*} (mean) and 0.05mg/m ³ (max)
ASTM E1333	≤0.12mg/m ^{3***}	≤0.04 mg/m ^{3*8} (mean) and 0.05mg/m ³ (max)
EN 717-1 (also known as DIN EN 717-1)	≤0.12mg/m ³	≤0.04 mg/m ³ (mean) and 0.05mg/m ³ (max)
EN 717-2 (also known as DIN EN 717-2)	≤3.5mg/m ² hr	≤0.11 mg/m ² hr (mean) and 0.13mg/m ² hr (max)
* mg/m ² hr may also be represented as mg/m ² /hr		
** The test report must confirm that the conditions of Table 1 comply for the particular wood product type, the final results must be presented in EN 717-1 equivalent (as presented in the table) using the correlation ratio of 0.98.		
*** The final results must be presented in EN 717-1 equivalent (as presented in the table), using the correlation ratio of 0.98.		



Appendix B – Disclaimers and Further Information

Advice in this Fact Sheet applies to products that have **achieved** third party certification using Ecospecifier's GreenTag™ GreenRate v3.1 rating system and have achieved recognition under one of the following three levels:

- GreenRate **Level C** - **Level C** recognition;
- GreenRate **Level B** - **Level B** recognition; and
- GreenRate **Level A** - **Level A** recognition.

AND

For one of the following supplementary category specific standards:

- 'Carpet and Flooring Supplementary Standard'
- 'Furniture Supplementary Standard'
- 'Joinery Supplementary Standard'
- 'Walls, Partitions and Ceilings Supplementary Standard'

The GreenRate licence and associated marketing information includes a reference to category-specific supplementary standards where applicable. This provides the means by which to determine if a certified product is applicable to Material Calculator credits in Green Star® rating tools and is covered by the GBCA recognition of the GreenRate standard.

The LCARate component of GreenTag™ is excluded from this recognition. The previously recognised GreenTag™ GreenRate v2.4 standard was replaced with version 3.1 in August 2010. Refer to GBCA website for further information:

<http://www.gbca.org.au>

<http://www.gbca.org.au/green-star/materials-category/product-certification-schemes/2933.htm>

<http://www.gbca.org.au/green-star/materials-category/draft-material-calculators-2-0/3047.htm>

<http://www.gbca.org.au/green-star/materials-category/revised-timber-credit/2693.htm>