

# Green Star Compliance



bringing materials to *life*™

# ACHIEVING GREEN STAR POINTS

These documents support the Green Star rating assessment of plasterboard products and systems for the six assessment criteria required by the Material categories (MAT) of Green Star ratings tools.

Information is also included on how all Lafarge Plasterboard’s products, systems and services can contribute to Green Star rating points in the categories of Indoor Environment Quality (IEQ) and Management (MAN).

Lafarge Plasterboard GECA certified products MastaShield ECO and FireShield ECO can achieve 100% Green Star points within materials categories:

- Office Interiors V1.1 - MAT-3 Walls and Partitions calculator (3 points)
- Healthcare V1 - MAT-14 Ceilings, Walls and Partitions calculator (2 points)
- Multi Unit Residential V1 - MAT-14 Internal Walls calculator (2 points)

When selecting to use GECA certified products, no further documentation is required to be submitted for the materials category of Green Star ratings tools. For detailed product information on MastaShield ECO and FireShield ECO, refer to the Tech Data sheets on [www.lafargeplasterboard.com.au](http://www.lafargeplasterboard.com.au).

TABLE 1: Summary of product score achieved for relevant materials categories for Lafarge Plasterboard GECA certified products

Total area of walls and partitions = X

Product Classification	Name of Walls or Partitions Product and Supplier	Brief Description of Walls or Partitions	Area of Walls or Partitions (m <sup>2</sup> )	Resource Utilisation		Management						Reusability		Product Score (%)
				Eco Preferred Content	Durability	EMS	EMS ISO 14001 Certified	EMS Includes			Product Stewardship	Modular	Designed for Disassembly	
								Waste Minimisation	Energy	Emissions				
Environmentally Innovative	Lafarge	MastaShield ECO FireShield ECO	X	/	/	/	/	/	/	/	/	/	/	100%

Other Lafarge Plasterboard products can also achieve Green Star points within the relevant Green Star tools. The following documents support the Green Star assessment of these products and systems.

TABLE 2: Green Star rating tools and categories applicable for Lafarge Plasterboard products, systems and services

Green Star Rating Tool	Materials (MAT)	Indoor Environment Quality (IEQ)	Management (MAN)
Education v1		IEQ-7 & IEQ-8	MAN-7
Healthcare v1	MAT-14	IEQ-7 & IEQ-8	MAN-7
Industrial v1		IEQ-7 & IEQ-8	MAN-7
Multi Unit Residential v1	MAT-14	IEQ-7 & IEQ-8	MAN-7
Office v3		IEQ-12 & IEQ-13	MAN-7
Office as Built v2		IEQ-12 & IEQ-13	MAN-7
Office Design v2		IEQ-12 & IEQ-13	MAN-7
Office Interiors v1.1	MAT-3	IEQ-10 & IEQ-11	MAN-6
Retail Centre v1		IEQ-7 & IEQ-8	MAN-7

This document is valid for Green Star materials calculators prior to Materials Calculator 2.0

# CONTENTS

## MATERIALS

Other Lafarge Plasterboard products	2
Resource Utilisation – Durability – 10 Year Warranty	3
Environmental Management System – EMS	4
Environmental Management System – EMS TOC	5
Environmental Management System – EMS Environmental Policy	6
Environmental Management System – EMS Reporting Extract	7
Product Stewardship – Product Stewardship Agreement	8
Reusability – OnBoard Design for Disassembly	9

## INDOOR ENVIRONMENTAL QUALITY

Internal Noise Levels	10
Volatile Organic Compounds (VOC) – Test Certificates	11

## MANAGEMENT

Waste Management Plan	17
-----------------------	----

## OTHER LAFARGE PLASTERBOARD PRODUCTS

Other Lafarge Plasterboard products can achieve 63% of Green Star points within material categories:

- Office Interiors V1.1 - MAT-3 Walls and Partitions calculator (2 points)
- Healthcare V1 - MAT-14 Ceilings Walls and Partitions calculator (1 point)
- Multi Unit Residential V1 - MAT-14 Internal Walls calculator (1 point)

Below is a summary of product score achieved on these calculators. Supporting documentation is provided in the following sections.

TABLE 3: Summary of product score achieved for relevant materials categories for other Lafarge Plasterboard

Total area of walls and partitions = X

Product Classification	Name of Walls or Partitions Product and Supplier	Brief Description of Walls or Partitions	Area of Walls or Partitions (m <sup>2</sup> )	Resource Utilisation		Management						Reusability		Product Score (%)	
				Eco Preferred Content	Durability	EMS	EMS ISO 14001 Certified	EMS Includes				Product Stewardship	Modular		Designed for Disassembly
New	Lafarge	MastaShield SpanShield SoundShield MastaDeco CurveShield AcoustiShield FireShield MultiShield Shaftliner ImpactShield GIB X-Block QuadShield  plasterboard fixed to stud and track	X	*See note below	≥ 10 years	Y	N	Y	Y	Y	Y	Y	N	≥ 90%	63%

\* These Lafarge Plasterboard products are not certified for eco-preferred content.

## DURABILITY

### LAFARGE PLASTERBOARD WARRANTY



Lafarge Plasterboard manufactures under a quality system certified as complying with ISO 9001:2008, *Quality Management Systems* by an accredited certification body. Lafarge Plasterboard supplies plasterboard that complies with the relevant Australian Standards and is warranted to be free from defects in materials or manufacture and perform as a wall and ceiling lining for a period of ten years from the date of purchase subject to the conditions stated below.

**CONDITIONS OF WARRANTY:**

1. This warranty does not exclude, restrict or modify any condition, warranty, right or remedy implied or imposed under the Trade Practices Act or any other legislation which cannot be excluded at law (Implied Terms);
2. This warranty is non-transferable;
3. The plasterboard must be installed according to the Building Code of Australia, AS/NZS 2589:2007 and Lafarge Plasterboard requirements and in combination with products as specified in Lafarge Plasterboard literature. Current Lafarge Plasterboard literature is available at [lafargeplasterboard.com.au](http://lafargeplasterboard.com.au) or by calling 1300 724 505;
4. Lafarge compounds must be used with Lafarge systems. The performance of all Lafarge systems relies on using the nominated Lafarge compounds. Use of non-Lafarge compounds will void a system's fire rating and may reduce the acoustic rating, appearance or other aspects of performance and will void this warranty;
5. Lafarge Plasterboard limits its liability under this warranty to, at its option:
  - a. Replace the product or,
  - b. Supply an equivalent product;
6. A claim must be made against this warranty before installation if the defect could be reasonably detected. The claim must be submitted in writing within 30 days of discovering the defect and must be accompanied by proof of purchase;
7. Lafarge Plasterboard will not be liable for any consequential loss or damage including that caused by products with manufacturing defects;
8. Lafarge Plasterboard will not be liable for claims arising due to poor workmanship, poor design, structural movement or other building movement, any service condition outside those specified as acceptable in Lafarge Plasterboard literature (available at [lafargeplasterboard.com.au](http://lafargeplasterboard.com.au)) including constant high relative humidity, contact with liquid water or high temperatures;
9. This warranty constitutes the entire guarantee by Lafarge Plasterboard. Except where otherwise provided by the Implied Terms referred to above, all other obligations, warranties, both expressed and implied are excluded to the fullest extent allowed by law.

No:

**STUART JACQUET**  
Managing Director



Lafarge Plasterboard products have been installed in accordance with Lafarge Plasterboard's specifications. All fields must be completed.

No:

PROJECT NAME AND ADDRESS

INSTALLER COMPANY NAME

BUILDER COMPANY NAME

INSTALLER SIGNATURE

DATE

Please retain the original version of this warranty for your records and mail, fax or email a copy to LAFARGE PLASTERBOARD MARKETING DEPARTMENT PO Box 483 Matraville NSW 2036, 02 9661 5500 or [info@au.lafarge.com](mailto:info@au.lafarge.com).



To obtain a Lafarge Plasterboard 10 Year Warranty contact the regional commercial sales manager or download from [www.lafargeplasterboard.com.au](http://www.lafargeplasterboard.com.au)

## ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

The Lafarge Plasterboard Environmental Management System (EMS) complies with the requirements of the Green Star Material Calculator Guide. The Lafarge Plasterboard EMS follows the structure of ISO 14001 *Environmental Management Systems*.

TABLE 4: Green Star EMS requirements and Lafarge Plasterboard EMS

Green Star EMS requirement	Lafarge Plasterboard EMS
Environmental Policy	4.2 Environmental Policy
Environmental aspects analysis and/or identification and ranking of the environmental risks	4.3.1 Environmental Aspects
Environmental objectives and targets	4.3.3 Objectives, Targets and Programs
Monitoring of environmental impact criteria	4.5.1 Monitoring and Measurement
Environmental auditing	4.5.2 Evaluation of Compliance 4.5.3 Nonconformity, Corrective Action and Preventative Action 4.5.4 Control of Records 4.5.5 Internal Audit
Reporting of environmental performance	4.4.3 Communication 4.4.4 Documentation
A review (undertaken as least annually) of the EMS and its components	4.6 Management Review
Details of the relevant environmental roles and responsibilities of staff	4.4.1 Resources, Roles, Responsibility and Authority
Details of the environmental training of staff	4.4.2 Competence, Training and Awareness
Further points are awarded where the EMS addresses: <ul style="list-style-type: none"> <li>• Waste minimisation</li> <li>• Energy</li> <li>• Emissions</li> <li>• Materials minimisation</li> </ul>	Measured, reviewed and reported at least every month into the Lafarge Group environmental reporting system, benchmarked internationally with over 25 plasterboard plants.



## ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) – TABLE OF CONTENTS

### 4.1 GENERAL REQUIREMENTS

### 4.2 ENVIRONMENTAL POLICY

### 4.3 PLANNING

#### 4.3.1 ENVIRONMENTAL ASPECTS

*Compliance Indicator*

#### 4.3.2 LEGAL AND OTHER REQUIREMENTS

*Enviro Law (Web based)*

#### 4.3.3 OBJECTIVES, TARGETS AND PROGRAMS

*Divisional Environmental Objectives*

*Water Savings Action Plan (NSW*

*Government)*

*EPA Licence – Matraville*

*Victorian Enviro Law Guidelines – Altona*

### 4.4 IMPLEMENTATION AND OPERATION

#### 4.4.1 RESOURCES, ROLES, RESPONSIBILITY AND AUTHORITY

*Resource Network*

*Environmental Miscellaneous Capital*

*Expenditure*

*National Sustainability Management*

#### 4.4.2 COMPETENCE, TRAINING AND AWARENESS

*Divisional Environmental Induction*

*Site Specific Environmental Training*

*Manufacturing Web (Lotus Notes)*

#### 4.4.3 COMMUNICATION

*GOLD Reporting Tool*

*Environmental Dashboard Part 2 (DB2)*

*Environmental Records (e.g. noise, dust records)*

#### 4.4.4 DOCUMENTATION

*Lafarge Plasterboard Environmental Management System*

#### 4.4.5 CONTROL OF DOCUMENTS

*Request for Change System (RFC)*

#### 4.4.6 OPERATIONAL CONTROL

*MAINPAC*

*Environmental Procedures*

#### 4.4.7 EMERGENCY PREPAREDNESS AND RESPONSE

*Environmental Procedures*

*Compliance Indicator*

### 4.5 CHECKING

#### 4.5.1 MONITORING AND MEASUREMENT

*MAINPAC*

*Compliance Indicator*

*Continuous Dust and Gas Measurement*

#### 4.5.2 EVALUATION OF COMPLIANCE

*Compliance Indicator*

#### 4.5.3 NONCONFORMITY, CORRECTIVE ACTION AND PREVENTIVE ACTION

*Commitment to Excellence (CTE)*

*MAINPAC*

#### 4.5.4 CONTROL OF RECORDS

*Commitment to Excellence (CTE)*

*MAINPAC*

*Records of Environmental Measurements (e.g. noise, dust records)*

#### 4.5.5 INTERNAL AUDIT

*Environmental Audit Reports*

### 4.6 MANAGEMENT REVIEW

*Plant Management Team Review of Audits*

*VP Environment*



## ENVIRONMENTAL POLICY

LAFARGE PLASTERBOARD is committed to creating sustainable value by minimising the impact its activities, products and services have on both the environment and society.

LAFARGE PLASTERBOARD is committed to complying with all applicable legislation and conducts its business consistent with sustainable development principles.

LAFARGE PLASTERBOARD is also committed to continual improvement in environmental management, principles and practices.

LAFARGE PLASTERBOARD's Environmental Policy is based on the following principles:

- An obligation of every employee to ensure individual and group practices are environmentally conscious and consistent with the behaviours outlined in the Lafarge Principles of Action, the Lafarge Group guide for employees around the world.
- All managers are responsible for promoting and ensuring environmentally conscious practices, products, and services in accordance with Group rules.
- Appropriate training initiatives are carried out on a regular basis.
- Lafarge Plasterboard continually monitors, analyses and audits its environmental performance including benchmarking and the adoption of Group best practices.
- Lafarge Plasterboard openly communicates and consults on all issues affecting the environment.
- Environmental impact is taken into account at the initial design of products, services, and installations using the New Product Safety Evaluation Matrix.
- Lafarge Plasterboard aims to use energy and natural resources more efficiently, minimise the production of waste, harmful air emissions and water discharges and recycle or reuse where possible.
- Lafarge Plasterboard believes that it will succeed in the long term only by operating with the utmost respect for the common interest of present and future generations.

"Wherever Lafarge is present, it operates with the utmost respect of the common interest"  
(Lafarge Principles of Action).

A handwritten signature in black ink, appearing to read 'Stuart Jaquet'.

Stuart Jaquet Managing Director/CEO  
January 2009

**LAFARGE PLASTERBOARD Pty Ltd**  
31 Military Road, PO Box 483, Matraville NSW Australia 2036  
Customer Service 1300 724 505  
lafargeplasterboard.com.au

*international fresh focused responsible reliable involved*

EMS REPORTING EXTRACT

The Lafarge Plasterboard EMS addresses materials minimisation, energy, emissions and waste minimisation. These environmental indicators are measured, reviewed and reported monthly through the Lafarge Group internal environmental reporting system. An example report is below.

EMS REPORTING EXTRACT – AUSTRALIA

April 2009		Actual/Forecast			
N°	Indicator label	Unit	Jan	Feb	Mar
BU					
1670XX	Lafarge Compliance Indicator	%			
1672XX	Regulation Compliance Indicator	%			
0422XX	Water consumption Public network	m3			
0424XX	Water consumption Borehole	m3			
0426XX	Water consumption River or Lake	m3			
0445XX	Water consumption	m3	1		
1000XX	Gypsum consumption natural allocated	t			
1003XX	Gypsum consumption total synthetic allocated	t			
1017XX	Gypsum consumption external waste allocated	t			
1024XX	Gypsum consumption allocated	i	1		
1022XX	By-product allocated gypsum Mix	%			
1028XX	Total raw material consumption	i	1		
1029XX	Total by-product consumption	t			
1023XX	Total by-product ratio	%			
1684XX	Energy consumption	kWh	2		
1690XX	Energy consumption allocated from Calcining	kWh			
1033XX	CO2 emissions	i	3		
1034XX	CO2 emissions allocated from calcining	t			
1586XX	Waste landfilled Gypsum	t			
1588XX	Waste landfilled Paper	t			
1590XX	Waste landfilled EPS	t			
1592XX	Waste landfilled Metal	t			
1611XX	Waste landfilled other	t			
1050XX	Waste landfilled	t			
1052XX	Ratio of waste landfilled	%			
1055XX	Waste recovered	i	4		
1638XX	Waste incinerated	t			
1640XX	Waste Total	t			
1668XX	Waste treatment cost	EUR			
1060XX	Gypsum waste stockpile	t			

EMS INCLUSIONS

- 1 **Materials Minimisation** – All inputs including raw material consumption are measured, reviewed and reported monthly. Plasterboard is not packaged, although it does leave the factory on gluts which are made from recycled plasterboard.
- 2 **Energy** – Energy consumption of the manufacturing process is measured, reviewed and reported monthly.
- 3 **Emissions** – CO2 emissions are reported monthly. Dust and gas emissions are continuously monitored and reported in the Environmental Dashboard.
- 4 **Waste Minimisation** – All waste generated from the manufacturing process is measured, reviewed and reported monthly.

Environment Monthly Report  
 © Copyright 2009 Lafarge Plasterboard. All rights reserved. Confidential – For internal company use only.



## PRODUCT STEWARDSHIP

In accordance with our Environmental Policy, Lafarge Plasterboard is committed to minimising the environmental impact of our products. This includes providing environmentally responsible disposal options for plasterboard waste from both construction and demolition sites.

Lafarge Plasterboard will co-ordinate the collection of plasterboard waste for either recycling or reprocessing subject to the following conditions.

**CONDITIONS:**

1. Lafarge Plasterboard reserves the right to charge a fee for the removal and processing of plasterboard waste;
  2. Plasterboard waste will only be collected where a Lafarge Plasterboard Product Stewardship Agreement has been signed by the beneficiary and the Lafarge General Manager of Sales and Operations;
    - The plasterboard must be easily accessible for collection, that is no other building materials or obstacles in or around the collection area;
  3. Notice must be provided in writing for any and all plasterboard collection with a notice period as follows:
    - a. 7 days for construction waste,
    - b. 90 days for demolition waste
  4. Lafarge Plasterboard accepts no liability for demolition within the structure nominated in the Product Stewardship Agreement;
  5. All plasterboard to be collected must be disassembled and sorted into like material groups as directed by Lafarge Plasterboard to facilitate their re-use, recycling or reprocessing:
    - The plasterboard waste must be no larger than 3m x 2m and must be free of all contaminates such as plastics, screws, adhesive, cement, food scraps, toxic substances and other building materials;
    - Where plasterboard waste is stacked outside, it must be kept off the ground and covered with a larger piece of plasterboard to minimise the effects of rain;
    - If plasterboard waste is not in the allocated area, accessible, or does not comply with all of the stated conditions, the waste will not be collected. The beneficiary will be charged and a non-conformance notice will be issued detailing the reason for non-collection.
- Plasterboard waste must be left neatly stacked in an area at ground level which is reserved for plasterboard collection;

This Product Stewardship Agreement will only be

valid if all the details below are completed.

**Note:** A document can be provided on request to the beneficiary detailing the weight of plasterboard collected for recycling or reprocessing.

BENEFICIARY

---

ABN

---

PHONE

---

PROJECT NAME AND ADDRESS

---

SIGNATURE OF BENEFICIARY

---

DATE

---

SIGNATURE OF LAFARGE GENERAL MANAGER  
OF SALES AND OPERATIONS

---

DATE

---

To obtain a Product Stewardship Agreement contact the regional commercial sales manager.

DESIGN FOR DISASSEMBLY

FOR TECHNICAL ADVICE call 1300 724 505 or visit [lafargeplasterboard.com.au](http://lafargeplasterboard.com.au)

# ONBOARD DESIGN FOR DISASSEMBLY



Lafarge Plasterboard’s interior linings may be disassembled for recycling at end of life. This can include office fit-outs, retail spaces such as shop fittings, multi-residential and public space areas subject to redesign due to changing needs, such as museum or art gallery spaces.

Any plasterboard wall or ceiling system can be disassembled for recycling of the plasterboard materials being used. Commercial interior partitions are typically constructed from light duty zinc plated steel framing, and clad with plasterboard on both sides, and fixed with zinc plated steel fasteners to the framing. Plasterboard is finished using compounds, sanding and finally painting.

**DISASSEMBLY PROCEDURE**

Plasterboard and steel framing separated using this procedure can be collected and is suitable for 100% recycling.

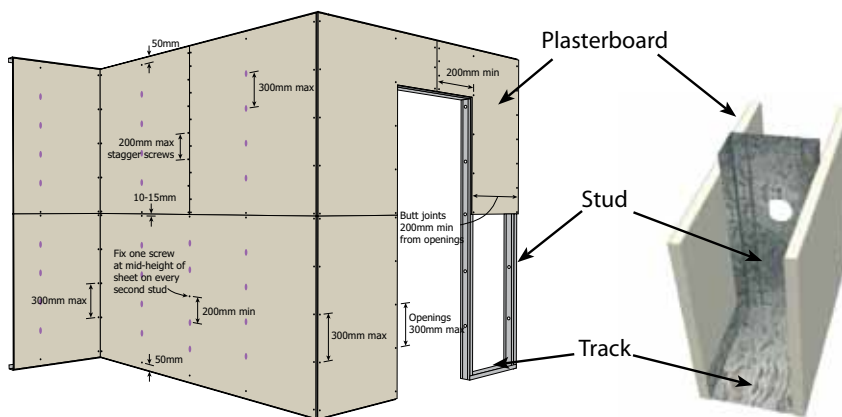


FIGURE 1

Typical plasterboard partition  
Left: installation details  
Right: partition cross section

**STEP 1**

Make a small hole in the face of the plasterboard using a hammer. Pull the plasterboard from the frame or gently lever it away from the frame with a pinch bar. Stack plasterboard to one side.

**STEP 2**

Remove steel studs (still containing the fasteners) from the top and bottom tracks by simply twisting the stud around its axis and stack them to one side.

**STEP 3**

Remove top and bottom tracks by either unscrewing the fasteners attaching them to the building or levering them free by using a pinch bar. Stack these with the studs.

October 2010



# INDOOR ENVIRONMENT QUALITY

## INTERNAL NOISE LEVELS

Lafarge Plasterboard products and systems can contribute to points under the Internal Noise Levels credit. Refer to the Lafarge Tech Manual for full system details or [lafargeplasterboard.com.au](http://lafargeplasterboard.com.au). Below is a summary of points available for the Internal Noise Levels credit for each Green Star Rating Tool.

TABLE 5: Internal Noise Levels Credit Summary

Green Star Rating Tool	Credit No.	Points	Lafarge Solution		
			Use Lafarge Acoustic Systems to reduce the ambient internal noise levels	Reduce noise from building services by using Lafarge Soil and Waste Pipe Systems	Use Lafarge AcoustiShield Systems to reduce reverberation time by absorbing noise
Education v1	IEQ-7	2	✓	✓	✓
Healthcare v1	IEQ-7	1	✓	✓	
Industrial v1	IEQ-7	2	✓	✓	
Multi Unit Residential v1	IEQ-7	2	✓	✓	
Office v3	IEQ-12	2	✓	✓	
Office As Built v2	IEQ-12	2	✓	✓	
Office Design v2	IEQ-12	2	✓	✓	
Office Interiors v1.1	IEQ-10	1	✓		✓
Retail Centre v1	IEQ-7	1		✓	

## VOLATILE ORGANIC COMPOUNDS

All Lafarge Plasterboard products are under the required levels for VOC content and therefore are awarded the maximum amount of points available. Below is a summary of points achieved for the Volatile Organic Compounds credit.

TABLE 6: Volatile Organic Compounds Credit Summary

Green Star Rating Tool	Credit No.	Points	Category Description		
			Adhesives and Sealants	Tenancy Fitout Item – Walls and Partitions	Wall and Ceiling finishes
Education v1	IEQ-8	2	✓	✓	
Healthcare v1	IEQ-8	2	✓		✓
Industrial v1	IEQ-8	1	✓		
Multi Unit Residential v1	IEQ-8	2	✓		✓
Office v3	IEQ-13	1	✓		
Office As Built v2	IEQ-13	1	✓		
Office Design v2	IEQ-13	1	✓		
Office Interiors v1.1	IEQ-11	4	✓	✓	
Retail Centre v1	IEQ-8	1	✓		

VOC TEST CERTIFICATE – MASTAGRIP STUD ADHESIVE



SCIENTIFIC CONSULTANTS IN RISK ASSESSMENT AND MANAGEMENT, PRODUCTS, PROCESSES, OH&S, ENVIRONMENT

# VOC Content Test Certificate

Thursday October 23<sup>rd</sup>, 2008

Manufacturer: Lafarge Plasterboard (31 Military Road, Matraville NSW 2036)

Sample Description: Lafarge MastaGrip Stud Adhesive

Date Tested: October 2008

Test Method: SCAQMD Method 304-91 Determination of Volatile Organic Compounds (VOC) in Various Materials as referenced by South Coast Air Quality Management Division (SCAQMD) Rule 1168.

Test Data:

<b>Specification</b>  <b>Green Building Council of Australia</b> <b>Green Star Office Design V2 IEQ-13</b> <b>Green Star Office Interiors V1.1 IEQ-11</b>	<b>Lafarge MastaGrip</b>  <b>Stud Adhesive</b>
Dry wall and panel adhesive 50 grams per Litre as VOC content coating	<b>45 grams per Litre as VOC content per coating</b>
<b>Specification</b>  <b>Green Building Council of Australia</b> <b>Green Star Office Design V3 IEQ-13</b>	<b>Lafarge MastaGrip</b>  <b>Stud Adhesive</b>
Dry wall and panel adhesive 50 grams per Litre as VOC content coating	<b>45 grams per Litre as VOC content per coating</b>

Dr. Vyt Garnys  
 PhD, BSc(Hons) AIMM, ARACI, ISIAQ  
 ACA, AIRAH, FMA  
 Managing Director and Principal Consultant

F0810-18

Cetec Pty Ltd  
 ABN 44 006 873 687

2/27 Normanby Road,  
 Clayton North, Victoria 3168  
 AUSTRALIA

Telephone: (03) 9544 9111  
 Facsimile: (03) 9544 9122  
 International: (+613)

Email: info@cetec-foray.com.au  
 www.cetec-foray.com.au

## VOC TEST CERTIFICATE – COMPOUNDS



Consulting Enterprises in Technology

SCIENTIFIC CONSULTANTS IN RISK ASSESSMENT AND MANAGEMENT, PRODUCTS, PROCESSES, OH&S, ENVIRONMENT

Lafarge Plasterboard

Page 1 of 3

# VOC Content Test Certificate

Thursday October 2<sup>nd</sup>, 2008

Manufacturer: Lafarge Plasterboard (31 Military Road, Matraville NSW 2036)

Date Tested: September 2008

Test Method: SCAQMD Method 304-91 Determination of Volatile Organic Compounds (VOC) in Various Materials as referenced by South Coast Air Quality Management Division (SCAQMD) Rule 1168.

Dr. Vyt Garnys  
PhD, BSc(Hons) AIMM, ARACI, ISIAQ  
ACA, AIRAH, FMA  
Managing Director and Principal Consultant

F0809-31

Cetec Pty Ltd  
ABN 44 006 873 687

2/27 Normanby Road,  
Clayton North, Victoria 3168  
AUSTRALIA

Telephone: (03) 9544 9111  
Facsimile: (03) 9544 9122  
International: (+613)

Email: [info@cetec-foray.com.au](mailto:info@cetec-foray.com.au)  
[www.cetec-foray.com.au](http://www.cetec-foray.com.au)

# VOC Content Test Certificate

Test Data:

<p><b>Specification</b></p> <p><b>Green Building Council of Australia Green Star Office Design V2 IEQ-13</b></p> <p><b>Green Star Office Interiors V1.1 IEQ-11</b></p>	<p><b>MastaBase</b></p> <p><b>MastaBlock</b></p> <p><b>MastaBond</b></p> <p><b>MastaCoat 3</b></p> <p><b>MastaCove 45</b></p> <p><b>MastaCove 75</b></p> <p><b>MastaFinish</b></p> <p><b>MastaFix 20</b></p> <p><b>MastaLite</b></p> <p><b>MastaLongset</b></p> <p><b>MastaSmooth</b></p>
<p>Dry Wall and Panel Adhesive 50 grams per Litre maximum</p>	<p>&lt;50 grams per Litre as VOC content per coating</p>

F0809-31



SCIENTIFIC CONSULTANTS IN RISK ASSESSMENT AND MANAGEMENT, PRODUCTS, PROCESSES, OH&S, ENVIRONMENT

Lafarge Plasterboard

Page 3 of 3

# VOC Content Test Certificate

Test Data:

<p><b>Specification</b></p> <p><b>Green Building Council of Australia Green Star</b></p> <p><b>Office Design V3 IEQ-13</b></p>	<p><b>MastaBase</b></p> <p><b>MastaBlock</b></p> <p><b>MastaBond</b></p> <p><b>MastaCoat 3</b></p> <p><b>MastaCove 45</b></p> <p><b>MastaCove 75</b></p> <p><b>MastaFinish</b></p> <p><b>MastaFix 20</b></p> <p><b>MastaLite</b></p> <p><b>MastaLongset</b></p> <p><b>MastaSmooth</b></p>
<p>Dry Wall and Panel Adhesive 50 grams per Litre maximum</p>	<p>&lt;50 grams per Litre as VOC content per coating</p>

F0809-31

**Cetec Pty Ltd**  
ABN 44 006 873 687

2/27 Normanby Road,  
Clayton North, Victoria 3168  
AUSTRALIA

Telephone: (03) 9544 9111  
Facsimile: (03) 9544 9122  
International: (+613)

Email: [info@cetec-foray.com.au](mailto:info@cetec-foray.com.au)  
[www.cetec-foray.com.au](http://www.cetec-foray.com.au)

VOC TEST CERTIFICATE – PLASTERBOARD



SCIENTIFIC CONSULTANTS IN RISK ASSESSMENT AND MANAGEMENT, PRODUCTS, PROCESSES, OH&S, ENVIRONMENT

# Emission Test Certificate

Tuesday September 28<sup>th</sup>, 2010

Supplier: Lafarge Plasterboard (31 Military Road, Matraville NSW 2036)

Sample Description: 13mm SoundShield Plasterboard

Date Tested: September 2008

Test Method: ASTM D5116 “Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Material/Products”.

Emission Data:

Green Building Council of Australia Green Star Specification	SoundShield
Office Design V2 IEQ-13 < 0.5 mg/m <sup>2</sup> /hr (24 hours) Office Design V3 IEQ-13 < 0.5 mg/m <sup>2</sup> /hr (24 hours)	<0.5 mg/m <sup>2</sup> /hr
Office Interiors V1.1 IEQ-11 < 0.5 mg/m <sup>3</sup> (7 days)	<0.5 mg/m <sup>2</sup> /hr When this product is used in the typical manner in an office building the resulting airborne total volatile organic compound concentration can be expected to be less than 0.5 mg/m <sup>3</sup> .

The above results may be considered representative of the following plasterboard products manufactured by Lafarge Plasterboard: Shaftliner, GIB X-Block, WaterShield, AcoustiShield, MastaShield, MastaShield Eco, SpanShield/SpanGrid, CurveShield FireShield and FireShield Eco.

Dr. Vyt Garnys  
PhD, BSc(Hons) AImm, ARACI, ISIAQ  
ACA, AIRAH, FMA  
Managing Director and Principal Consultant

Project CV080924

Cetec Pty Ltd  
ABN 44 006 873 687

2/27 Normanby Road,  
Clayton North, Victoria 3168  
AUSTRALIA

Telephone: (03) 9544 9111  
Facsimile: (03) 9544 9122  
International: (+613)

Email: info@cetec-foray.com.au  
www.cetec-foray.com.au



SCIENTIFIC CONSULTANTS IN RISK ASSESSMENT AND MANAGEMENT, PRODUCTS, PROCESSES, OH&S, ENVIRONMENT

# Emission Test Certificate

Tuesday September 28<sup>th</sup>, 2010

Supplier: Lafarge Plasterboard (31 Military Road, Matraville NSW 2036)

Sample Description: 16mm MultiShield Plasterboard

Date Tested: September 2008

Test Method: ASTM D5116 "Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Material/Products".

Emission Data:

<b>Green Building Council of Australia Green Star Specification</b>	<b>MultiShield</b>
Office Design V2 IEQ-13 < 0.5 mg/m <sup>2</sup> /hr (24 hours) Office Design V3 IEQ-13 < 0.5 mg/m <sup>2</sup> /hr (24 hours)	<0.5 mg/m <sup>2</sup> /hr
Office Interiors V1.1 IEQ-11 < 0.5 mg/m <sup>3</sup> (7 days)	<0.5 mg/m <sup>2</sup> /hr When this product is used in the typical manner in an office building the resulting airborne total volatile organic compound concentration can be expected to be less than 0.5 mg/m <sup>3</sup> .

The above results may be considered representative of the following plasterboard products manufactured by Lafarge Plasterboard: SafeShield, ImpactShield and QuadShield.

Dr. Vyt Garnys  
PhD, BSc(Hons) AIMM, ARACI, ISIAQ  
ACA, AIRAH, FMA  
Managing Director and Principal Consultant

Project CV080924

Cetec Pty Ltd  
ABN 44 006 873 687

2/27 Normanby Road,  
Clayton North, Victoria 3168  
AUSTRALIA

Telephone: (03) 9544 9111  
Facsimile: (03) 9544 9122  
International: (+613)

Email: info@cetec-foray.com.au  
www.cetec-foray.com.au

# MANAGEMENT (MAN)

## WASTE MANAGEMENT PLAN

Lafarge Plasterboard can assist building contractors in implementing a Waste Management Plan by providing access to a plasterboard recycling service. Refer to the Product Stewardship Agreement for details.

100% of plasterboard waste can be diverted from landfill as long as it is disassembled and free from contaminants. The number of points awarded for this credit is dependent on the percentage (%) of total waste by weight which is re-used or recycled for the Green Star project.

TABLE 7: Waste Management Plan Summary

Green Star rating tool	Credit No.
Education v1	MAN-7
Healthcare v1	MAN-7
Industrial v1	MAN-7
Multi Unit Residential v1	MAN-7
Office v3	MAN-7
Office As Built v2	MAN-7
Office Design v2	MAN-7
Office Interiors v1.1	MAN-6
Retail Centre v1	MAN-7





Printed on 100% Recycled Stock



June 2011

LAFARGE PLASTERBOARD Pty Ltd  
31 Military Road, PO Box 483,  
Matraville NSW Australia 2036  
Customer Service 1300 724 505

[www.lafargeplasterboard.com.au](http://www.lafargeplasterboard.com.au)



bringing materials to *life*™