APRIL 2016
TECHNICAL BROCHURE

GTEK™

PREMIUM GYPSUM TECHNOLOGY

GTEK™ **SOUND**
GTEK™ **IMPACT**

gtekplasterboard.com.au

WHY GTEK™?

WITH OUR ALL-AUSTRALIAN GTEK™ RANGE OF INTERIOR LINING PRODUCTS, YOU BENEFIT FROM SUSTAINABLE, QUALITY-TESTED TECHNOLOGY, FULL BGC INTERIOR LINING SYSTEMS COMPATIBILITY AND OUR CLASS-LEADING SERVICE NETWORK.

- **TECHNOLOGY /** Light, modular GTEK™ technology eases installation for seamless results
- **SUSTAINABILITY / GECA certified:** sustainable manufacture means higher Green Star ratings for your building
- **AUSTRALIAN MADE / All-Australian:** closest available links between local manufacture and supply
- **SERVICE /** Vast distribution network assures best-in-class service delivery
- **QUALITY /** Independent testing accords with Australia's toughest build-quality accreditations
- **SYSTEMS /** Full compatibility with extensive BGC interior lining systems range

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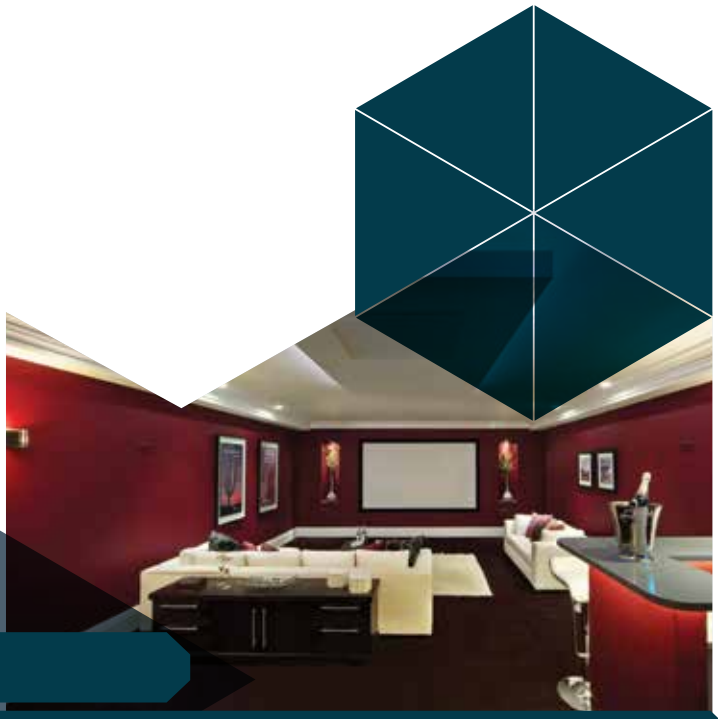

GTEK™ **SOUND**

GTEK™ Sound is high-density plasterboard specifically designed to reduce unwanted noise detectable through walls and ceilings. With installation and handling similar to standard board, GTEK™ Sound has a higher-density core than standard plasterboard.

BGC-2014
GECA 04-2011 v2
Panel Boards

Eliminating or greatly reducing noise travelling between rooms, GTEK™ Sound is ideal for quiet, stress-free living environments.

What's good about GTEK™ Sound:

- High density for superior acoustic performance
- Upgrades acoustic performance of existing walls and ceilings
- For more information on acoustic ratings please refer to the GTEK™ Fire and Acoustic Guide

GTEK™ PREMIUM GYPSUM TECHNOLOGY

PRODUCT INFORMATION

GTEK™ Sound is purpose designed as a complete plasterboard wall and lining system, which complies with the requirements of the Building Code of Australia (BCA). GTEK™ Sound has been tested by the CSIRO (Manufacturing & Infrastructure Technology) in accordance with AS 2588 Gypsum Plasterboard; see report DTS698, April 2003.

GTEK™ Sound is to be installed as detailed in AS 2589 'Gypsum Linings – Application and Finishes'.

Support framing must conform to the BCA and Australian Standards, be plumb, true and level, prior to the application of the plasterboard. Refer to AS2589 section 4.2.2.

GTEK™ Sound may be fixed to timber or CFS (Cold-Formed Steel) light-steel framing or masonry, using plasterboard screws, nails and/or adhesive. Only screws or nails must be used for tiled areas and over existing lining or vapour barriers. Refer to AS2589 Sections 2.6 and 2.7

FIRE RESISTANCE

Plasterboard is naturally fire resistant and is classified as non-combustible according to the Building Code of Australia (BCA) Section C1.12.

DIMENSIONAL STABILITY

Plasterboard is dimensionally stable when compared to other building materials. Two measures of dimensional stability are listed below:

- Thermal coefficient of linear expansion (a) = 16.7 x 10^{-6} /°C, measured unrestrained over the temperature range of 3°C - 32°C
- Hygrometric coefficient of expansion 6.5 x 10^{-6} /%RH, measured unrestrained over the Relative Humidity (RH) range of 10% - 90%

THERMAL PROPERTIES

The R value of plasterboard is a measure of its thermal insulation ability. Higher numbers indicate a better insulator. The 'R' values for plasterboard are:

10mm plasterboard = 0.05Km^2/W
13mm plasterboard = 0.05Km^2/W
16mm plasterboard = 0.06Km^2/W

HANDLING & STORAGE

GTEK™ Sound should be stacked flat,up off the ground and supported on level, equally spaced (max 450mm) gluts.

Care should be taken to ensure edges of the GTEK™ Sound are not damaged when handling.

GTEK™ Sound should be delivered to site immediately prior to installation to reduce the risk of damage.

As per AS/NZ 2588 – The area to be lined or partitioned shall be protected from the weather and sufficiently dry to ensure that the fixed gypsum lining will not suffer subsequent deterioration due to moisture absorption.

TABLE 1 – SIZE AND WEIGHT

THICKNESS (mm)	WEIGHT (kg/m^2)	WIDTH (mm)	LENGTH (mm)		
			3000	3600	4800
10	8.5	1200	✓	✓	✓
		1350			✓
13	11.8	1200	✓	✓	
		1350		✓	

PERFORMANCE

The use of GTEK™ Sound can achieve high levels of sound insulation when used in an acoustic system.

Rw – Weighted Sound Reduction Index
A single number rating of the sound insulation performance of a specific building element such as walls or ceilings.
Rw is measured in a laboratory.

Ctr – Sound Adaption Term
A sound insulation adjustment, commonly used with Rw. It adjusts for low frequency noises such as noise from trucks and subwoofers.

Rw + Ctr – The combined value of Weighted Sound Reduction Index Rw and Sound Adaption Term Ctr.
A single number rating of the sound insulation performance of a building element with the Ctr correction included. Rw + Ctr values are measured in a laboratory and are lower than Rw values.

If acoustics are important for your project we recommend that you contact a qualified acoustic consultant for advice and refer to GTEK™ Fire and Acoustic Guide for details on acoustic systems.

INSTALLATION

GTEK™ Sound is installed using the same method as standard plasterboard. Please refer to the GTEK™ Wall and Ceiling Solutions brochure for detailed installation instructions.

GTEK™ IMPACT

Ideal for high-traffic areas where walls are subjected to regular stress, GTEK™ Impact can be used in residential and commercial applications. Specify GTEK™ Impact where furniture and equipment are frequently moved; from hallways, garages and games rooms to schools, universities, hospitals, shopping centres and transport hubs.

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GTEK™ Impact features a unique core structure and a heavier paper liner, delivering more strength than regular plasterboard.

What's good about GTEK™ Impact:

- Specifically designed for high-impact environments
- High resistance to soft body contact
- Fewer indentations from hard body impact
- Acoustic performance as GTEK™ Sound
- Stronger than 13mm plasterboard
- Same installation method as standard plasterboard – easy to join and finish and repair

PRODUCT INFORMATION

GTEK™ Impact is purpose designed as a complete plasterboard wall and lining system, which complies with the requirements of the Building Code of Australia (BCA). GTEK™ Impact has been tested by the CSIRO (Manufacturing & Infrastructure Technology) in accordance with AS 2588 Gypsum Plasterboard; see report DTS698, April 2003.

GTEK™ Impact is to be installed as detailed in AS 2589 'Gypsum Linings – Application and Finishes'.

Support framing must conform to the BCA and Australian Standards, be plumb, true and level, prior to the application of the plasterboard. Refer to AS2589 section 4.2.2.

GTEK™ Impact may be fixed to timber or CFS (Cold-Formed Steel) light-steel framing or masonry, using plasterboard screws, nails and or adhesive. Only screws or nails must be used for tiled areas and over existing lining or vapour barriers. Refer to AS2589 Sections 2.6 and 2.7

FIRE RESISTANCE

Plasterboard is naturally fire resistant and is classified as non-combustible according to the Building Code of Australia (BCA) Section C1.12.

DIMENSIONAL STABILITY

Plasterboard is dimensionally stable when compared to other building materials. Two measures of dimensional stability are listed below:

- Thermal coefficient of linear expansion (a) = 16.7 x 10^{-6} /°C, measured unrestrained over the temperature range of 3°C - 32°C
- Hygrometric coefficient of expansion 6.5 x 10^{-6} /%RH, measured unrestrained over the Relative Humidity (RH) range of 10% - 90%

THERMAL PROPERTIES

The R value of plasterboard is a measure of its thermal insulation ability. Higher numbers indicate a better insulator. The 'R' values for plasterboard are:

10mm plasterboard = 0.05Km²/W
13mm plasterboard = 0.05Km²/W
16mm plasterboard = 0.06Km²/W

HANDLING & STORAGE

GTEK™ Impact should be stacked flat,up off the ground and supported on level, equally spaced (max 450mm) gluts.

Care should be taken to ensure edges of the Water Resistant Plasterboard are not damaged when handling.

GTEK™ Impact should be delivered to site immediately prior to installation to reduce the risk of damage.

As per AS/NZ 2588 – The area to be lined or partitioned shall be protected from the weather and sufficiently dry to ensure that the fixed gypsum lining will not suffer subsequent deterioration due to moisture absorbtion.

TABLE 2 – SIZE AND WEIGHT

THICKNESS (mm)	WEIGHT (kg/m²)	WIDTH (mm)	LENGTH (mm)	
			3000	3600
13	11.8	1200	✓	✓
		1350	✓	✓

INSTALLATION

GTEK™ Impact is installed using the same method as standard plasterboard. Please refer to the GTEK™ Wall and Ceiling Solutions brochure for detailed installation instructions.

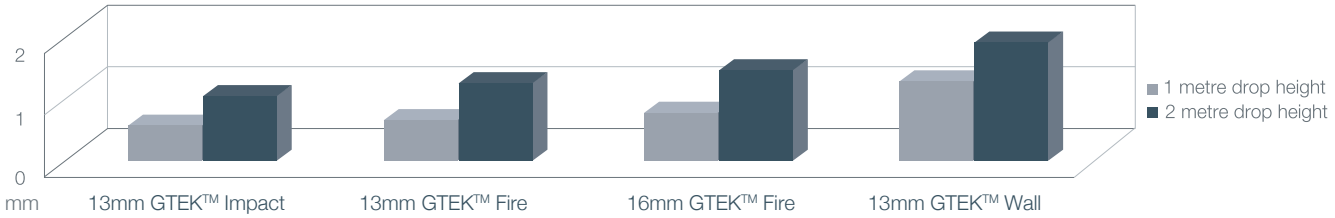
GTEK™ Impact is not intended to withstand deliberate damage or to be installed in areas where heavy moving machinery such as forklift trucks are used.

IMPACT TESTING

GTEK™ Impact has been subjected to a number of hard and soft body impact testing. GTEK™ Impact was compared against other GTEK™ products.

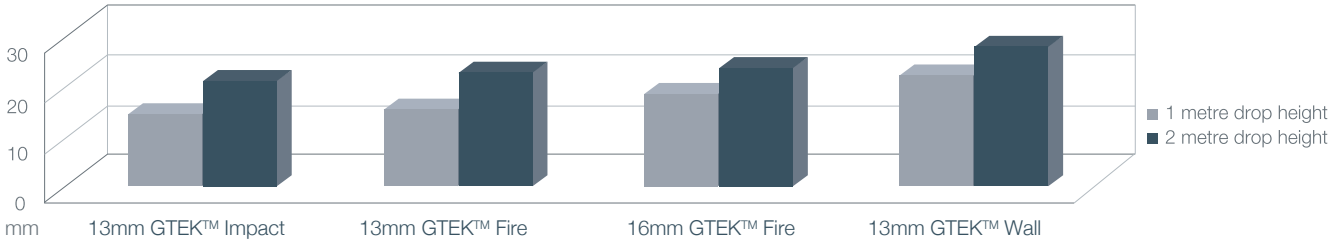
HARD BODY INDENTATION DEPTH (MM) FROM FALLING HARD BODY PROJECTILE

More Impact Resistant - causing less indent. The smaller the number, the better the performance of the product.



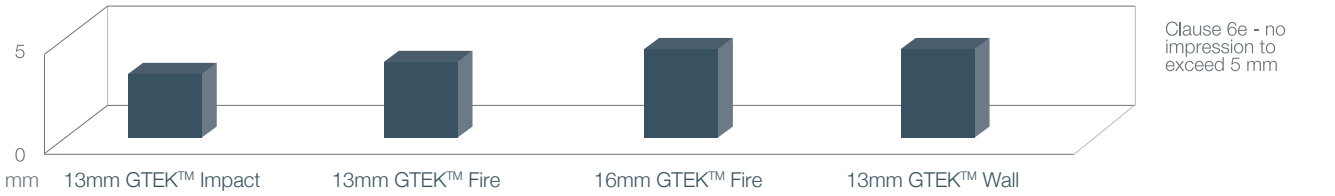
HARD BODY INDENTATION DIAMETER (MM) FROM FALLING HARD BODY PROJECTILE

The smaller the number, the better the performance of the product.



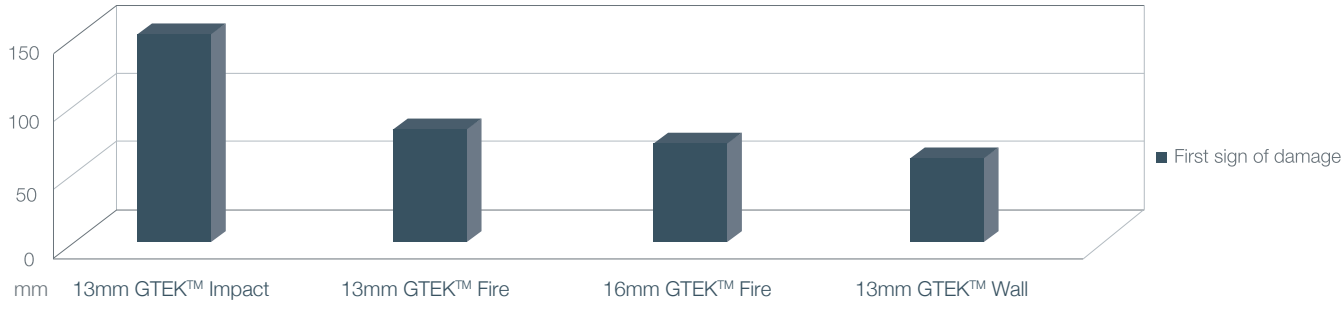
BCA SURFACE INDENTATION CLAUSE 5A AND CRITERION OF CLAUSE 6E - 150 NEWTON FORCE APPLIED

150 Newton Force applied and surface indentation measured in mm. The smaller the number, the better the performance of the product.



FIRST SIGN OF DAMAGE - SOFT BODY (27.2 KG) DROPPED ONTO BOARD FROM VARIOUS HEIGHTS(MM)

The higher the number, the better the performance of the product.

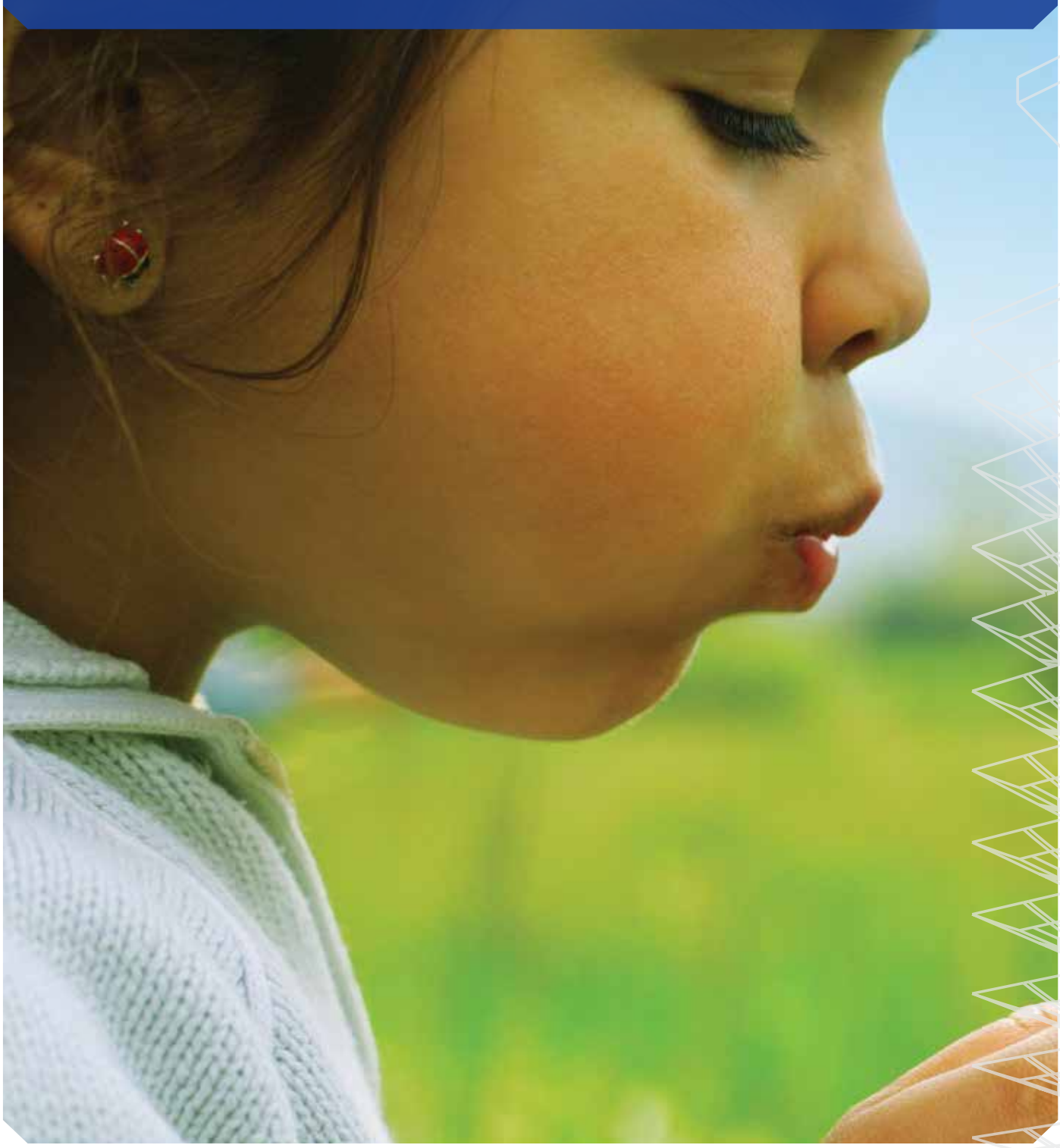


GTEK™ Impact is not intended to withstand deliberate damage or to be installed in areas where heavy moving machinery such as forklift trucks are used.

NOTES

NOTES

At BGC we care about the environment and now have a range of GECA Certified Plasterboard Products available. As part of our commitment to sustainability we are offering our Environmentally Certified GTEK™ range at no extra cost to you. So now you save money whilst together we save the environment.



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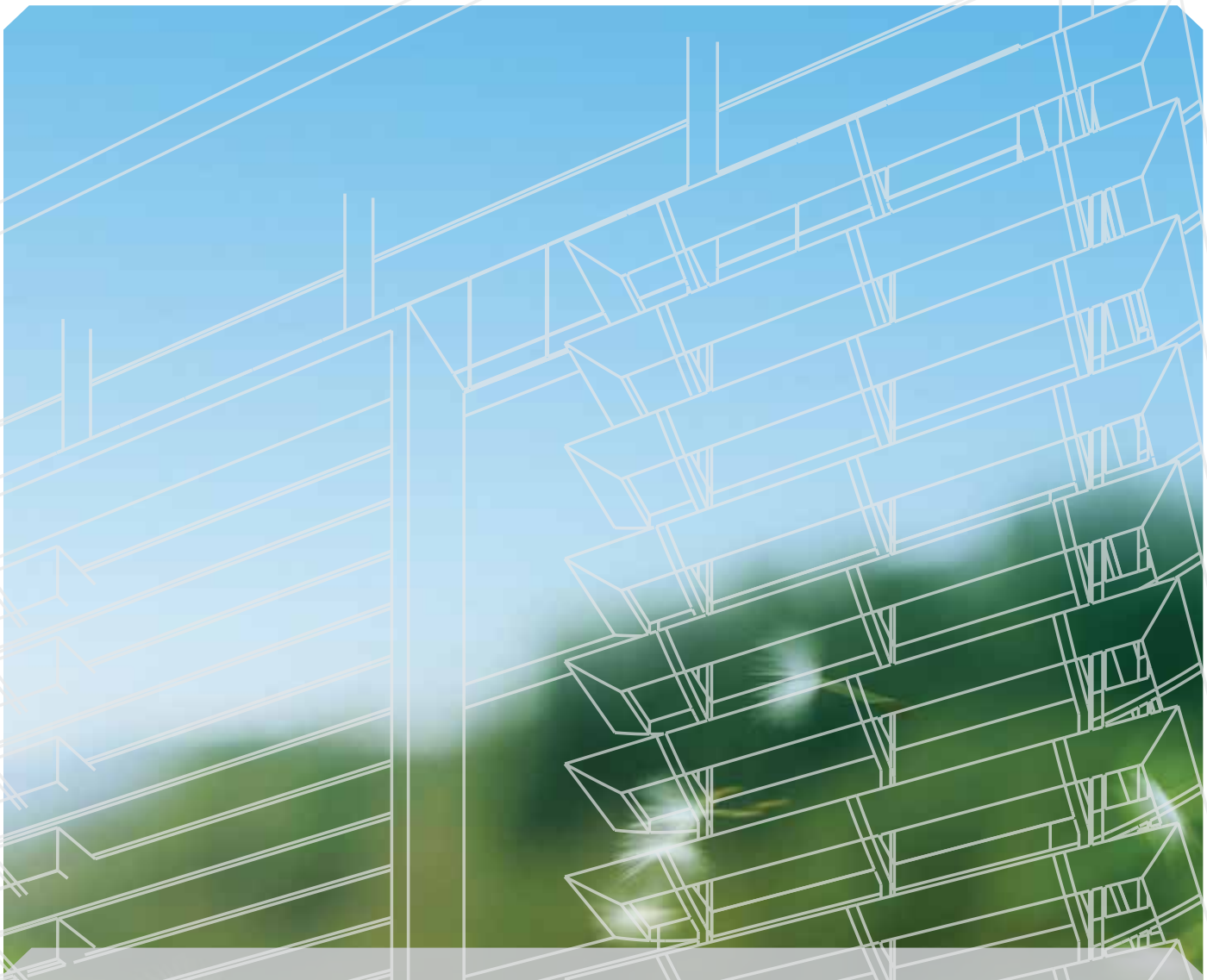

BGC Plasterboard shares the general community concern for the environment and seeks to reduce its environmental footprint in all aspects of its operations. That means you can specify GTEK™ to help create you next green star rated home or project.

We use up to 15% recycled gypsum in our boards and we use 100% recycled paper lining front and back.

BGC Plasterboard has set prudent environmental targets for waste minimisation and energy and water use, and is an active participant in environmental reporting through the Energy Efficiency, Waterwise and Emissions reporting programs.

Through strict quality control systems, production waste is minimised and wastage is recycled back into new plasterboard.

Good Environmental Choice Australia is an environmental labelling program which aims to provide consumers with the knowledge that the product they are purchasing has met certain environmental performance standards which have been developed and assessed in line with International labelling standards.

Scientifically recognised benchmarks for environmental performance have been developed against which products and services are assessed and evaluated to determine whether the product or service should be awarded the Good Environmental Choice Label. GECA certification is recognised by the Green Building Council of Australia and may assist in achieving up to 3 Green Star points.

All GTEK™ products have been certified by GECA which means that the products and their manufacturing environment have been evaluated and deemed to comply with the strict guidelines set by GECA

We're proud to wear the Good Environmental Choice label, it shows our products and manufacturing environment comply with GECA's strict guidelines.

Now 'Building it better with BGC' also means building a cleaner and more sustainable environment.

CONTACT

TO CONTACT YOUR NEAREST BGC STOCKIST, PLEASE CALL:

ADELAIDE
TELEPHONE
08 8250 4962

BRISBANE
TELEPHONE
07 3271 1711

MELBOURNE
TELEPHONE
03 9392 9444

PERTH
TELEPHONE
08 9374 2900

SYDNEY
TELEPHONE
02 9771 9660

TECHNICAL HELP LINE
1300 652 242

Certified System
Quality
ISO 9001
SAI GLOBAL

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GTEK™ PRODUCT RANGE

- **GTEK™ Wall** is an interior wall lining system where cost effectiveness and economy of effort is crucial.
- **GTEK™ Curve** flexible plasterboard enables the creative execution of curves on interior walls and ceilings.
- **GTEK™ Ceiling** is a 10mm plasterboard sheet designed specifically for ceiling use where joists are at 600mm.
- **GTEK™ Fire** is used in fire-rated systems, consisting of single or multiple layers of board.
- **GTEK™ Fire & Wet Area** is designed for use in wet areas governed by fire resistance limitations (FRLs).
- **GTEK™ Wet Area** is water-resistant plasterboard for walls in such wet areas as bathrooms, laundries, toilets and cleaning rooms.
- **GTEK™ Sound** is high-density plasterboard specifically designed to reduce unwanted noise detectable through walls and ceilings.
- **GTEK™ Impact** is ideal for high-traffic areas where walls are subjected to regular stress.
- **GTEK™ Total Plus** offers market-leading fire, water, sound and impact resistance, together with GECA certification in recognition of high percentages of recycled materials.
- **GTEK™ Cornice** adds exciting finishing touches to interior wall and ceiling joints in new builds and renovations.

WARRANTY

We warrant that our products are free from defects caused by faulty manufacture or materials for a period of 15 years from the date of purchase. If you acquire any defective products, we will repair or replace them, supply equivalent replacement products or refund the purchase price within 30 days of receiving a valid claim subject to product inspection and confirmation of the existence of a defect by BGC. We will bear the cost of any such repair, replacement or refund.

This warranty is given by:

BGC PLASTERBOARD PTY LTD
Ground Floor, 290 Bushmead Rd,
Hazelmere, WA 6055 Phone: (08) 9374 2900
Fax: (08) 9374 2901

To claim under this warranty, you must provide proof of purchase as a consumer and make a written claim (including any costs of claiming) to us at the address specified above within 30 days after the defect was reasonably apparent, or if the defect was reasonably apparent prior to installation, the claim must be made prior to installation. You may not claim under this warranty for loss or damage caused by:

- faulty or incorrect installation by non-BGC installers (BGC's installation procedures are at **gtekplasterboard.com.au**);
- failure to comply with the Building Code of Australia or any applicable legislation, regulations approvals and standards;
- products not made or supplied by BGC;
- abnormal use of the product; or
- normal wear and tear.

The benefits available under this warranty are in addition to other rights and remedies of the consumer under the law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Design by **The SHAPE Group** www.theshapegroup.com.au

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