

# Hebel

for future living

# Future Living

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## Issue 3

Welcome to our first 2006 edition of Future Living.

We have started the year on a positive note with several innovations. Featured in this issue is our new internal hi-rise wall system known as the Staggered PowerWall which has patented features.

We have also committed to web-enable the Hebel Designer software to allow you to cost-optimize your custom panels, and we will update you on this project later.

These initiatives clearly demonstrate our commitment to create a sustainable future through continued innovation.

In the residential market, PowerWall for External and Party Walls continue to grow in acceptance as aesthetic, acoustic and thermal solutions that are cost-effective. We have featured two interesting case studies in this issue on their use in Camarena Gardens and the RealGreenHome.

Finally, we have introduced a new organisation structure that will not only improve our service to you, but also facilitate the expansion of our business.

We hope you enjoy this edition of Future Living.

Kind regards,



Andrew Rottinger  
General Manager  
CSR Hebel



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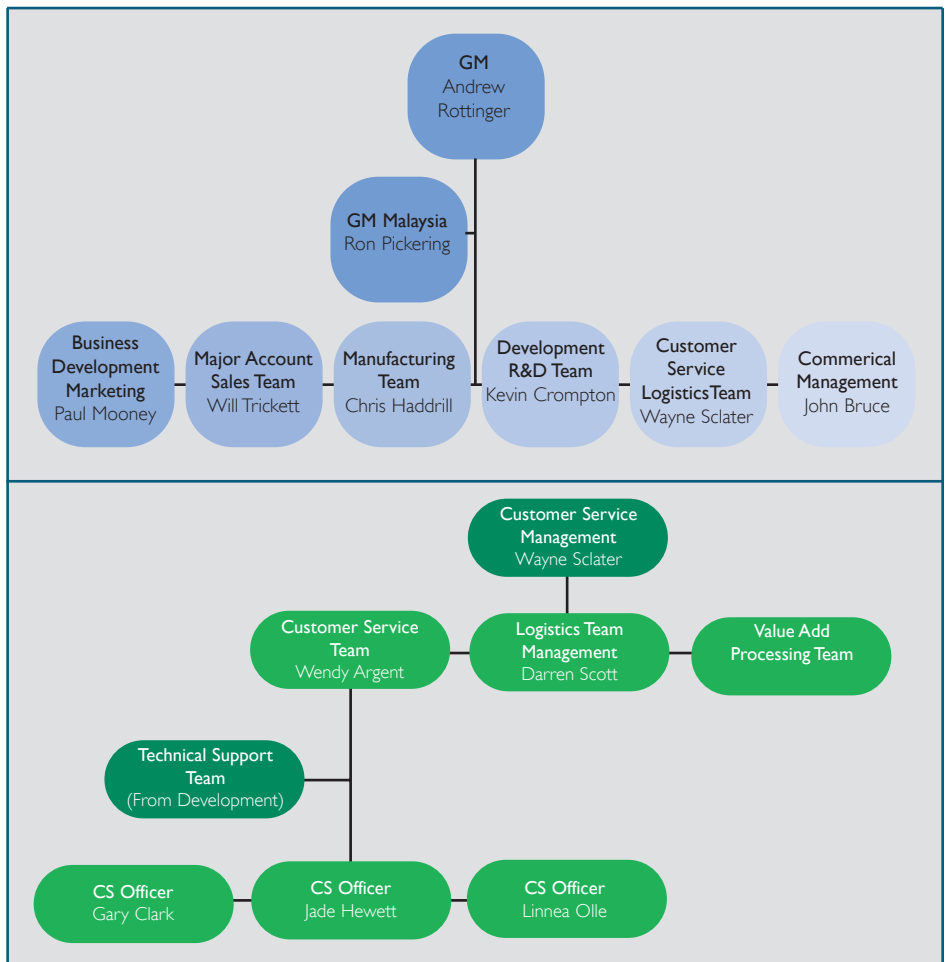


# Hebel Moving Forward

CSR Hebel introduced a new structure with effect from 1st April 2006. The move is to accelerate the attraction of primary demand for Hebel's current and new products in a greater number of market segments and to increase our capacity and effectiveness in commercialising new products and services. This will also enhance the manufacturing team's focus on running the plant and in implementing capital expenditure.

Specifically the changes include:

- Splitting the sales team into Business Development/Marketing and Major Account Management, headed by Paul Mooney and Will Trickett respectively. Paul's team will focus on building new business and commercialising new products, while Will's team will ensure the delivery of growth plans established with existing customers.
- The customer service/logistics team will now be led by Wayne Sclater. While continuing to provide excellent levels of delivery performance, Wayne's team will also service customers who were not previously attended to by our sales staff. In addition, the team dealing with custom product will now be part of Wayne's team, which will improve our service to them.
- Kevin Crompton has joined us as Development Manager with all technical and development staff reporting to him. Kevin brings with him 15 years of expertise in project and operations management within the building industry and will improve the speed and rigour with which we develop and commercialise new products. In addition, the new structure will bolster the technical service available to customers via the customer service and sales teams. Joe Zarb has also joined us as part of Kevin's team and will enhance our technical support with installers on residential construction sites. Joe has over 10 years of experience in the building industry and is well known among residential builders.



# The difference is staggering!

CSR Hebel, the market leader of high performance wall systems, has developed Staggered PowerWall – a revolutionary and cost-effective system designed specifically for high-rise multi-residential.

This new product offering is a superior Hebel solution that has yet again raised the standard of lightweight walls while providing better value at lower costs than competing systems.

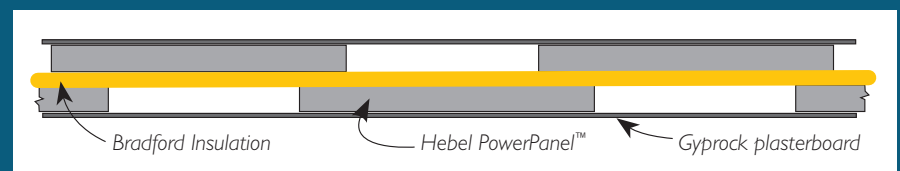
The product's easy workability and light weight enables rapid, on-site assembly, requiring less labour. When compared to full masonry, Staggered PowerWall provides opportunities for significant savings in the cost of the structure by optimising the design of slab and columns and by reducing the weight of the sub-structure. It also allows a more simplified process because there is less cutting (reducing wastage), little or no adhesive and no IBS rod required.

Another key advantage of the Staggered PowerWall is that the same system can be applied to a variety of wall applications. As fewer products are used, this enables builders to significantly streamline projects, saving time and costs.

Staggered PowerWall has a wide range of benefits including:

- lightweight, yet solid wall (dual leaf system);
- no studs nor realignment prior to screwing board;
- no need to batten out for services; and
- no fire or acoustic box on either side if electrical points are located directly on the panel.
- speed of construction (totally dry system and trade continuity)

The system consists of overlapped offset panels, which are fitted to top and bottom tracks in a system that achieves an FRL of up to 180/180 (depending on the plasterboard used).



The Staggered PowerWall when used with CSR Gyprock® plasterboard for internal walls and CSR Bradford SoundScreen Insulation provides smooth, strong and long-lasting walls delivering excellent thermal and acoustic performance – key selling points to home buyers of high-rise multi-residential projects.

Enjoy the staggering difference of the PowerWall in your next high-rise multi-residential project. Contact CSR Hebel at 1300 369 448 for more information.

# Real Green, Real Smart

The RealGreen project in the eastern suburb of Donvale, Melbourne is yet another testimony of how GreenSmart principles can be applied to the development of environmentally responsible housing.

Typically driven by industry, GreenSmart homes are energy, water and cost-efficient, and aim to minimise waste and environmental impact as a result of the construction.

What is unique about the RealGreen project is that it is the homeowner and project manager, Marc Niemes, who has applied GreenSmart principles to his family home.

The project – completed in January this year – uses simple and innovative practices to deliver construction and recurrent energy savings estimated to be around 15 and 40 percent respectively.

Every facet of the construction was considered in the RealGreenHome including sealed lighting units to minimise heat loss, double glazed windows and shutters on west facing walls, a solar hot water system, two 18,000 litre water tanks and even a worm farm for water and septic treatment. Where possible, all fittings were made with the most environmentally friendly materials based on manufacture and durability, including CSR Hebel's PowerWall™ and PowerFloor™ systems and CSR Bradford's ComfortSeal™ insulation.

Said Marc, "We chose Hebel's PowerWall and PowerFloor as they proved to be the simplest, quickest and most environmentally responsible way to build our walls and floors. In combination with CSR Bradford's ComfortSeal™ insulation, they provide our home with good thermal and acoustic benefits."

Hebel PowerWall is a non-loadbearing wall solution consisting of 75mm thick, steel-reinforced Hebel PowerPanels. PowerWall provides a solid masonry feel and the panels are a perfect substrate for a beautiful rendered finish. PowerWall is quick to install with minimal waste as a result of the modular nature of the system and standard panel sizes.

Hebel PowerFloor utilises steel reinforced AAC panels affixed to timber or steel joists and joined with Hebel Adhesive. The composite action of the system delivers a solid floor with greater resistance to 'bounce' making PowerFloor an excellent stable base for tile, slate, marble and other hard surface flooring including bathrooms, laundry and other wet area applications. In the RealGreenHome project, the sunfilled areas were tiled for maximum solar gain and carpeted for all other areas.

The Hebel production process is also ecologically responsible: its use of non-toxic and low-bulk density materials mean that fewer resources are required during manufacture than conventional masonry products. As a result, very little waste is produced.

CSR Bradford's ComfortSeal insulation, which was used in ceilings and walls of the RealGreenHome, is another environmentally friendly feature reducing up to 70% of all heat transfers and hence contributing to further savings in energy costs.



# The face of Camarena Gardens

Hebel PowerWall was recently installed in the External and Party walls of Camarena Gardens, a multi-residential building located at 12-18 Orara Street, Waitara in NSW. The nine-level development consists of 48 one and two bedroom apartments and three, three-bedroom penthouses.

Hebel PowerWall is a slim, non-loadbearing external wall solution, ideal for use in concrete frame structures for low to high-rise multi-residential buildings. The primary component of PowerWall is CSR Hebel's 75mm-thick, steel-reinforced PowerPanel.

Builder, Michael Gremmo of Gremmo Homes Pty Ltd said, "We concurred with the architects involved in the project that CSR Hebel products – in particular Hebel PowerWall for External Walls and Party Walls – should be used in this premium project given their excellent acoustic and thermal performance, superior quality and opportunities for construction efficiencies."

Hebel PowerWall is a solid, yet light-weight masonry building system, providing builders cost-savings in structural components as the overall structure is subjected to lighter loads than traditional masonry or precast concrete products. This allows for increased spans, reduced column sizes and beam depths.

Other benefits include speed and ease of construction leading to reduced labour requirements, and less on-site wastage as panels can be custom-made to meet height requirements.

PowerWall also boasts superior thermal performance contributing to lower energy use and a more comfortable living environment. It has fire-resistance properties, and exhibits strong acoustic performance.

Given its range of benefits, it is no wonder that the Hebel PowerWall for External Walls (formerly known as Faacade) won the Master Builders Excellence in Construction Awards for the most innovative new product in 2005.

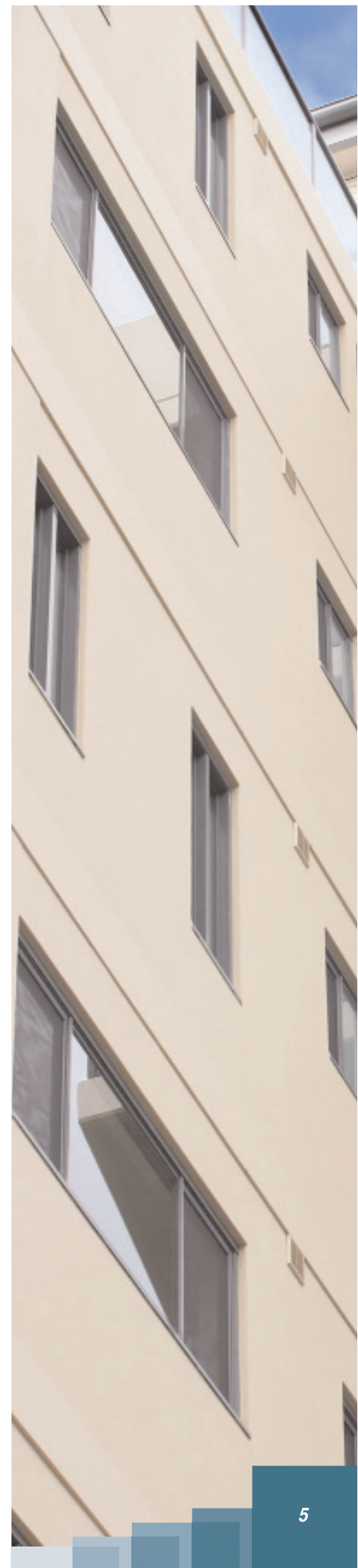


An estimated 5,000m<sup>2</sup> of standard length Hebel panels (75mm) were used throughout Camarena Gardens, with the exception of the foyer where 100mm panels with marble cladding were used. Standard length 75mm Hebel panels were also used in the fire stairs and shaft walls.

PowerWall for external walls have been noted for their design flexibility around windows and balconies as they can be easily cut and shaped to produce curves and angles. This was applied to some balconies at Camarena Gardens which were installed with Hebel cladding to provide a uniform column size.

In addition to the External Walls, PowerWall was installed as party and corridor walls in the development. These are a combination of 75mm, steel reinforced Hebel Powerpanel, CSR Bradford Insulation and CSR Gyprock plasterboard. These compact asymmetrical wall systems are noted for their excellent acoustic performance, exceeding BCA sound insulation requirements of  $R_w + C_{tr} \geq 50$ .

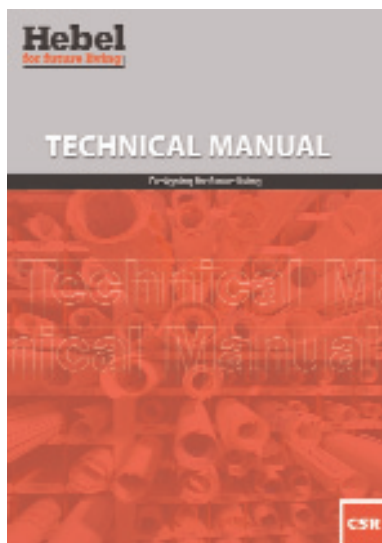
A relatively new product launched in April 2005, PowerWall for external walls is fast gaining acceptance among architects, specifiers and builders, and has been used in several projects in Wollongong, including the Watermark and Strand Apartments (comprising six nine-storey residential towers), and Breakfast Point (consisting four residential buildings known as 'The Village Green') in Sydney's inner west.



# Changes to the Technical Manual

CSR Hebel's Technical Manual, which provides customers technical information on the application of its product offerings, has been updated. The manual will now only be made available online. As you design your project, you can download the relevant sections ensuring you have the most up-to-date version. You can add this to your library as you go and we will keep a version control document on the website. As we update each section, you will be notified by email that a new section is available for download.

The following table summarises the key changes to the manual, the most notable of which is the creation of an entirely new section - 'Fire Design'. This is a unique benefit of Autoclaved Aerated Concrete (AAC) material, a component of CSR Hebel products. In addition, the manual now separates the panel applications into sections with their own particular benefits, considerations and design information. This technical mine of information is available at [www.hebelaustralia.com.au](http://www.hebelaustralia.com.au) under the section 'Literature'.



Content	Section	Changes/Updates
Introduction	1	No changes.
Product Range and Properties	2	Product range (2.1) and material properties (2.3) tables have been revised.
Energy Efficiency	3	Thermal insulation table has been provided for wall configurations.
Acoustic Performance	4	Acoustic performance table has been revised.
Fire Design	5	New section with fire performance information for block and panel products.
Block Wall Design and Construction	6	Previously Section 5. New bracing tables have been added for reinforced blockwork (based on work in New Zealand) Construction details have been revised.
Wall and Floor Panel Design and Construction	7	Construction details have been revised.
Proprietary Fixings	8	Design values for two Hilti products have been upgraded.
Surface Finishes	9	This section has been re-written, including information on SkimCoat and HighBuild render products, and finish coating requirements.
Appendices	F	Additional Fire Test Certificates have been included. Note: When supplying fire performance information, the full fire report should be provided. (Please approach your CSR Hebel Representative for copies. CSR Hebel will be preparing electronic versions of these reports in YEM07.)

# Combating neighbourhood noise with CSR's solutions



CSR has developed Exterior SoundControl systems to dramatically reduce noise inside the home, ensuring peace and quiet in the home at any time of the day.

The systems have been developed in response to the ever increasing problem of neighbourhood noise such as barking dogs, car alarms, and the constant disturbances for homes under flight paths or near busy thoroughfares.

Common noise sources such as normal conversation or rain fall sit at 60dBA, and the sounds of trucks or electric drills are around the 90-95dBA level. Exposure to loud levels of noise for any period of time is not recommended, but it can take as little as one minute and 29 seconds exposed to 110dBA for hearing to be affected permanently. Exposure to environmental noise has been linked to sleep deprivation, annoyance and health issues such as hypertension and heart disease.

The CSR Exterior SoundControl systems reduce the penetration of noise into homes by combining special acoustic building products in tailor made packages. The products include:

- Hebel powerpanel;
- Gyprock® Soundchek wall and ceilings;
- Bradford SoundScreen insulation and EnviroSeal roof sarking;
- Cemintel™ fibre cement sheeting;
- Monier and Wunderlich roof tiles;
- PGH bricks;
- Trend windows;
- Raven door seals; and
- Hume doors.

Bringing together all CSR products into one solution makes it easier for builders and consumers to create a cost effective acoustic solution that works.

There are six SoundControl systems available to suit every home for a range of exterior noise problems. By identifying the most relevant exterior noise threat near a home, and in turn the decibel level of the noise, a suitable package can be devised to achieve either a 35 or 40 dB(A) outcome within the home.

All systems have been meticulously modelled and assessed by an Acoustic Consultant, ensuring drastic noise reduction in the home.

For a comprehensive information kit on CSR Exterior SoundControl Systems, phone 1300 306 556 or visit [www.csr.com.au](http://www.csr.com.au).





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## Designing for future living

CSR Hebel manufactures and markets quality building products and is backed by CSR Building Products Limited. Further details on engineering and building with Hebel systems are available in the CSR Hebel Design Guides and Technical Manual. For further sales or technical assistance, please visit our website or contact our help line:

CSR Hebel Website:

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

For sales enquiries or further information, please telephone us from anywhere in Australia:  
**1 300 369 448**

## Look out for CSR Hebel in the following exhibitions!

To create awareness of CSR Hebel's range of products and services, we have participated and will be participating in these exhibitions.

Exhibition	Date	Location
The Good Ideas Home Expo	31 March – 2 April	Exhibition Park in Mitchell Canberra, ACT
Form & Function 2006	6 – 8 April	Sydney Convention & Exhibition in Darling Harbour Sydney, NSW
HIA Home Show, QLD (Greensmart Exhibition)	5 – 7 May	Brisbane Convention & Exhibition Centre Southbank, QLD
Sydney Home Show	18 – 21 May	Sydney Convention & Exhibition in Darling Harbour Sydney, NSW
Designbuild Australia	28 – 31 May	Melbourne Exhibition Centre 2 Clarendon St Southbank Melbourne, VIC
National Greenbuild & Eco Show	9 – 11 June	Rosehill Gardens Exhibiton Centre Sydney, NSW

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