

# Houses

Product and Range guide



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# Better homes are built with Hebel

Hebel PowerPanel provides an attractive, modern masonry exterior that can be completed in individual finishes and colours to provide a wide range of contemporary and aspirational looks that appeal to many new homebuyers.

## What is Hebel?

Hebel is Autoclaved Aerated Concrete (AAC) manufactured from sand, cement, recycled material, lime, gypsum and aerating agents and is moulded, cut and steam pressure cured in an autoclave then cut to shape in various lengths and profiles. Hebel panels are steel reinforced and coated to prevent corrosion giving them both dimensional accuracy and stability.

Hebel is an amazingly innovative building material that has been used in Europe for over 70 years and here in Australia for over 20 years.

## Where can Hebel be used?

Hebel is extremely versatile and is available in panels and blocks of various sizes and widths for a broad range of load bearing and non load-bearing construction applications including external walls, floors and fences.

## Hebel reduces your total cost to build

The unique Hebel System is a high performance masonry product that makes good business sense because it is fast to construct and easy to install.

The unique Hebel system does away with the need for costly and sometimes unreliable bricklayers and requires fewer skilled trades-people on site – whether you choose to install yourself using existing trades or have it supplied and installed by readily available and experienced crews.

## Hebel is better to live in

You'll love coming home to Hebel. It is highly fire resistant, boasts high acoustic absorbing properties and, because Hebel is a masonry product with in-built insulation, it assists in improving energy ratings (and reducing costly energy bills for cooling and heating). It's cool in summer and warm in winter.

## A more sustainable choice

Environmentally friendly, Hebel products and systems are the sustainable choice. Independent testing shows that overall, Hebel has a 30% lower environmental impact than concrete or brick veneer.

Using over 60% less embodied energy, and producing at least 55% less greenhouse emissions than concrete or brick veneer, Hebel is the cleaner, greener choice.

## Proven in the market and Australian made by CSR

Hebel products and systems are developed in Australia by CSR Building Products Limited. With CSR you can depend on the product quality, technical expertise, warranty and stock supplies of Hebel products and systems.

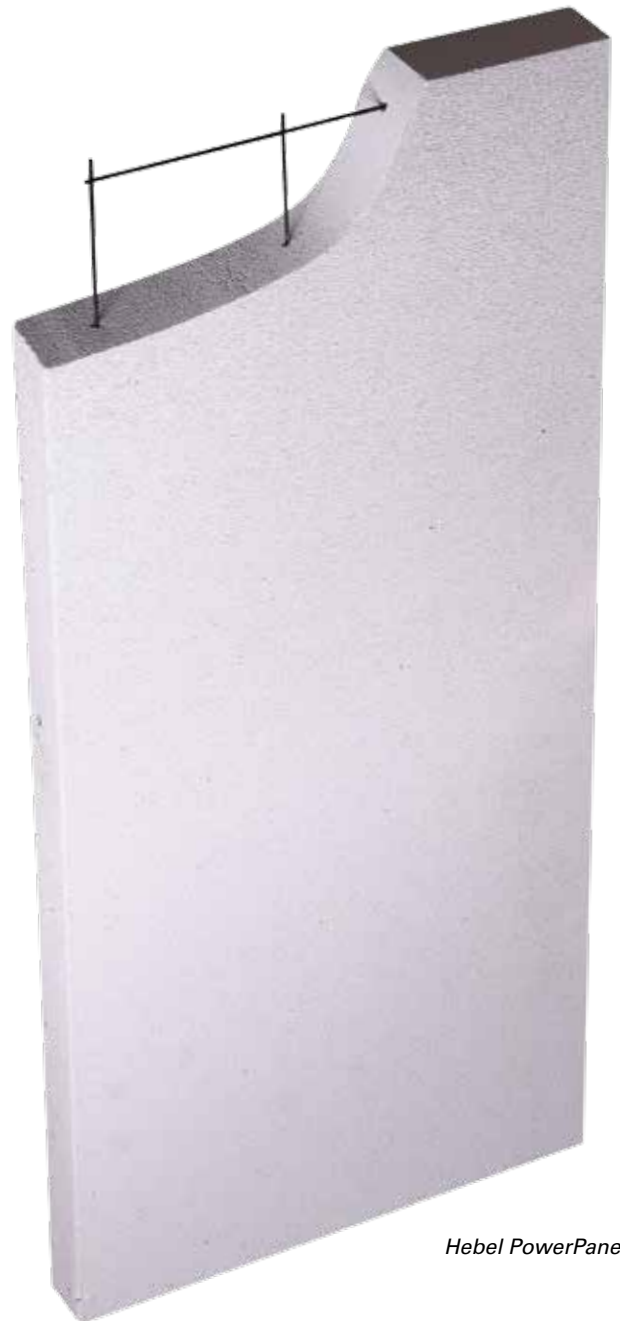






Hebel –  
an incredible  
and innovative  
masonry building  
product

**At the heart of the Hebel system  
is Hebel AAC (Autoclaved Aerated  
Concrete) supplied in either steel  
reinforced building panels or blocks.**



*Hebel PowerPanel*



*Hebel PowerBlock+*

The impressive attributes that make Hebel such an innovative, sustainable and proven building product are summarised by the following qualities:



#### **SOLID AND STRONG**

Hebel PowerBlocks and steel reinforced PowerPanels provide the solid feel, security and peace-of mind associated with traditional bricks. In fact, independent tests show that a rendered Hebel wall has similar impact resistance to brick. The steel reinforced Hebel internal panels also add strength and security between rooms compared to plasterboard systems.



#### **FIRE RESISTANT**

Hebel is renowned for its fire resistant properties. A non-combustible material, Hebel block and panel systems achieve Fire Resistance Levels (FRLs) from 60 minutes through to 240 minutes (tested at CSIRO) and meet or exceed the requirements for all six Bushfire Attack Level (BAL) categories. When building with Hebel, you're building with peace-of-mind that your home is safe and secure.



#### **COMFORTABLE LIVING ENVIRONMENT**

Hebel panels have superior insulation qualities compared to other masonry products. With better thermal resistance and thermal mass, Hebel is a smart choice for meeting Australia's stringent building regulations. And, for homeowners, it means there is less reliance on heaters or air conditioners – helping to save money and being kinder to the environment, too.



#### **SUSTAINABILITY FOR A BETTER WORLD**

Environmentally friendly, Hebel products and systems are the sustainable choice. Independent testing shows that overall Hebel has a 30% lower environmental impact than concrete or brick veneer. Using over 60% less embodied energy, and producing at least 55% less greenhouse emissions than concrete or brick veneer, Hebel is the cleaner, greener choice.



#### **FAST TO CONSTRUCT & COST EFFECTIVE**

Hebel is a strong and robust building material that's extremely cost effective. Given that Hebel panels can be easily cut on-site using standard tools, construction times are slashed and there is less wastage. The result is lower labour costs and significant savings for the homeowner.



#### **BETTER ACOUSTICS**

Hebel gives you more peace and quiet. When compared to polystyrene and fibre cement external walls, and particleboard for flooring, Hebel significantly reduces sound transmission between rooms and also reduces noise from external sources such as traffic.



#### **PROVEN AND BACKED BY CSR**

Hebel products and systems are designed, developed and warranted in Australia by CSR.





# The Hebel product range at a glance



**Hebel PowerPanel** is the traditional Hebel panel system that is quick and easy to install using vertically installed PowerPanels that are suited to a supply and installation service. Designed for homes built using either timber or steel framing and can be used in new dwelling construction, extensions or re-cladding.

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**Hebel PowerPanel<sup>XL</sup>** External Wall System is one of the most efficient ways to build exterior residential walls. Suitable for use on houses and low-rise multi residential projects, Hebel PowerPanel<sup>XL</sup> is 20% lighter while maintaining its structural integrity to the existing Hebel PowerPanel. Combined with the patented Top Hat and screw design, these lighter panels are easier to handle and quicker to install.

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**Hebel PowerBlock+** delivers load-bearing solid masonry qualities comparable to double brick. Hebel PowerBlock+ provides an economical, solid masonry building system and delivers superior thermal, acoustic and fire protection better than double brick. Hebel PowerBlock+ affords excellent design flexibility due to its capacity to be shaped and routed for added individuality and aesthetic appeal.

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**Hebel PowerFloor** gives you the feel of a concrete floor at significantly lower costs and can be easily laid by your normal on-site tradesman such as carpenters. The combination of strength, thermal and acoustic insulation properties of Hebel PowerFloor make it an ideal choice for both elevated ground floor and second storey applications. Hebel PowerFloor is installed over a standard timber or steel framed sub-floor.

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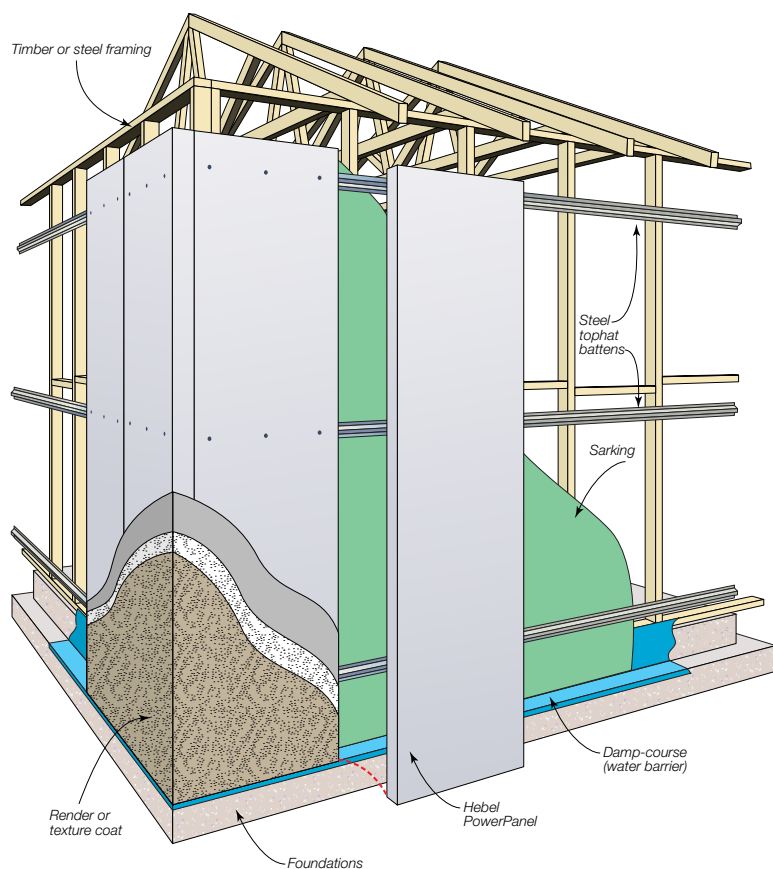
**Hebel PowerFloor+** for load-bearing solid concrete floors is the ultimate concrete flooring solution, providing superior strength, thermal and acoustic properties. Hebel PowerFloor+ panels create a consistently flat, solid surface ready for all floor covering from carpet to direct fix tiles. PowerFloor+ is ideally suited to solid home construction such as a Hebel PowerBlock+ home.

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**Hebel PowerFence** is an extremely attractive and versatile fence system that provides an efficient and effective privacy and noise barrier for residential applications.

# Building external walls with Hebel



PowerPanel	
Fire	240/180/180
Thermal	R1.54 to R3.53
Wall Thickness	165mm to 205mm*

*\*Depending on stud, cavity and Top Hat selection*



## High volume using specialist trades

Hebel PowerPanels are fixed vertically to horizontal battens attached to the load bearing frame. PowerPanels are steel reinforced 75mm thick and are available in lengths of 1200mm to 3300mm for widths of 600mm. A 3000mm PowerPanel is equivalent in area to approximately 75 standard bricks, making for faster installation than bricks.

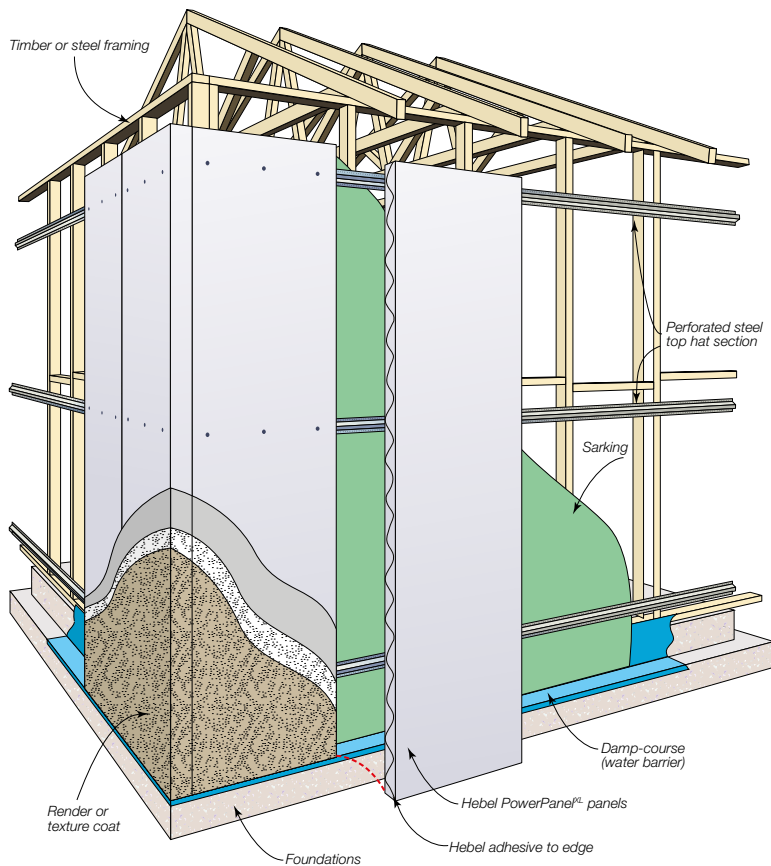
- The steel reinforced aerated concrete and acrylic coated panels are strong and solid and highly durable making them perfect for building in the Australian climate
- Steel reinforcing is specially coated to prevent corrosion
- Non-combustible with an FRL of 240/180/180
- Outstanding thermal and acoustic insulation qualities increase levels of comfort and save on energy heating and cooling costs

### The unique benefits of building with PowerPanel

- Fastest most efficient way to install Hebel (2 people can install up to 150m<sup>2</sup> within 3 days depending on site conditions)
- Recommend supply and install service through specialist Hebel installers.



# A better way to build framed houses



PowerPanel <sup>XL</sup>	
Fire	180/180/180
Thermal	R1.54 to R3.54
Wall Thickness	185mm to 205mm*

*\*Depending on stud, cavity and Top Hat selection*



## The more efficient way to build

Hebel's PowerPanel<sup>XL</sup> external wall system has been specifically developed to go up faster. The system consists of 75mm thick steel reinforced Autoclaved Aerated Concrete (AAC) panels fixed vertically to horizontal top hats attached to the load-bearing timber or steel frame. The panel is solid to feel, but lighter to work with.

Hebel PowerPanel<sup>XL</sup> has been developed to be 20% lighter while maintaining its structural integrity. This lighter panel, combined with our new perforated steel top hat and hex head fixing system, speeds up the installation process by around 20% with a whole lot less fatigue.

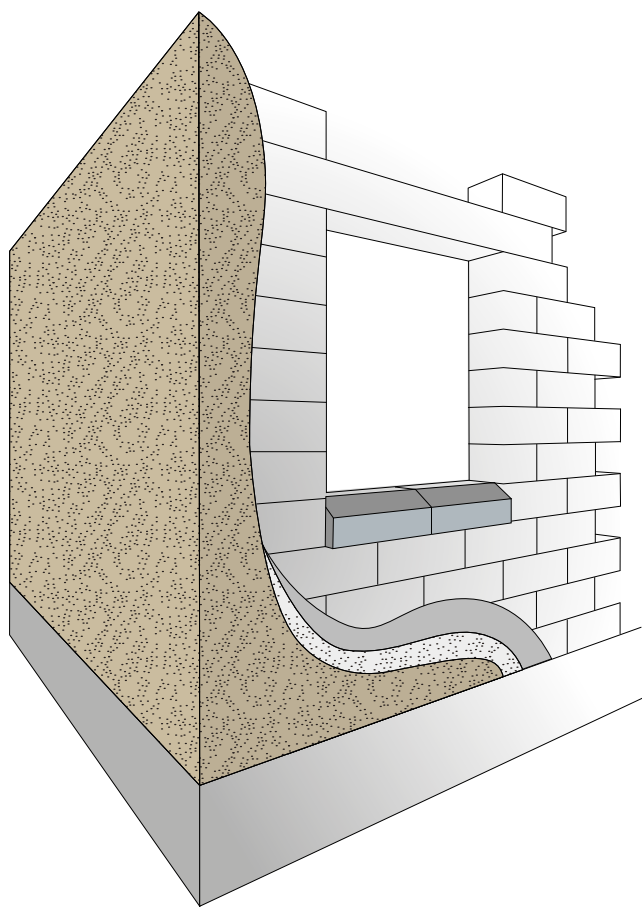
Hebel PowerPanel<sup>XL</sup> is ideal for houses and low-rise multi-residential applications, including extensions and re-cladding of existing homes.

- Fastest most efficient way to install Hebel (2 people can install up to 150m<sup>2</sup> within 3 days depending on site conditions)
- Installation 60% faster than masonry using semi skilled trades.
- Easier to grip, lift and move with less wear and tear on your body (20% lighter and 25% faster to install than traditional PowerPanel)
- Non-combustible with an FRL of 180/180/180
- Design patterns are easily machined into the PowerPanel<sup>XL</sup> Panels.

### The unique benefits of building with PowerPanel<sup>XL</sup>

- Faster construction period – panels are faster to install and require significantly less labour compared to traditional masonry
- Lightweight yet solid and tough as brick.

# PowerBlock+ the premium alternative to double brick



Block Walls	
Fire	240/240/240
Acoustic	$R_w + C_{tr}$ 35 to 42
Thermal	R2.04 to R4.19
Wall Thickness	266mm to 356mm



Solid masonry construction in Australia has long been regarded as a premium home building method. Hebel Block is the ideal alternative to double brick, giving you an extremely solid construction with exceptional acoustic and thermal insulation properties to provide a more comfortable and energy efficient home.

The face size of a Hebel Block is 600mm x 200mm. External Hebel Block walls are typically constructed using 250mm thick Hebel Blocks whilst internal non-loadbearing block walls generally use the 100mm thick block. The large format blocks are lightweight and, forming a single wall, are rapidly installed.

## The unique benefits of home building with Hebel PowerBlock+

- A solid load-bearing masonry home
- Exceptional thermal resistance and improved moisture control over other building systems, means the home 'breathes' leading to higher energy efficiency and greater homeowner comfort
- Excellent acoustic performance and sound insulation attributes
- Design and build freedom and flexibility – easily worked with standard power tools
- Non-combustible – up to a four hour fire rating makes Hebel Block ideal for rural or bush fire prone areas
- Enhanced design freedom can be achieved through routing and shaping. Lintels and sill blocks complement the high aesthetic appearance.

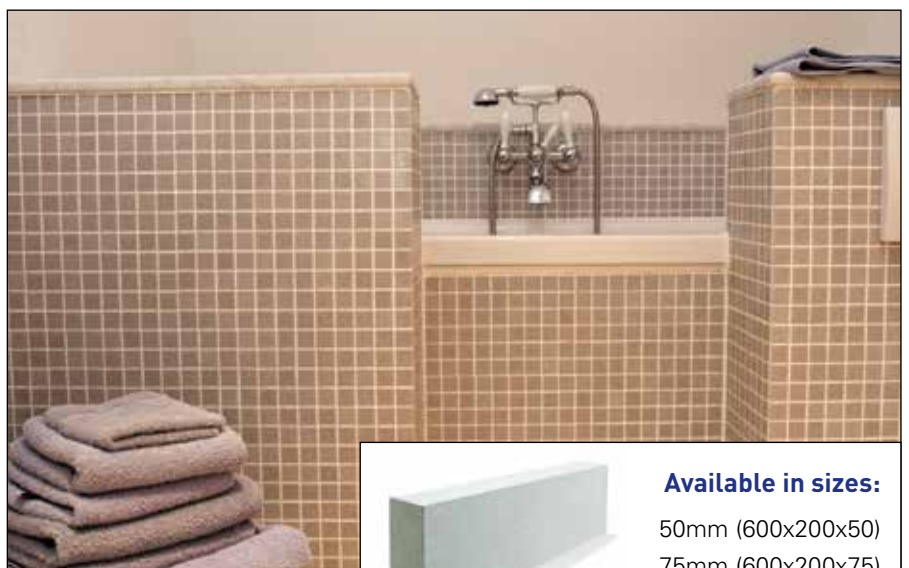


## Hebel is ideal for bath, shower and spa hobs

Hebel is light, easy to work with and quick to install. The excellent thermal properties help maintain the heat in spas and baths, thereby saving energy and money.

### The unique benefits of using Hebel for Hobs

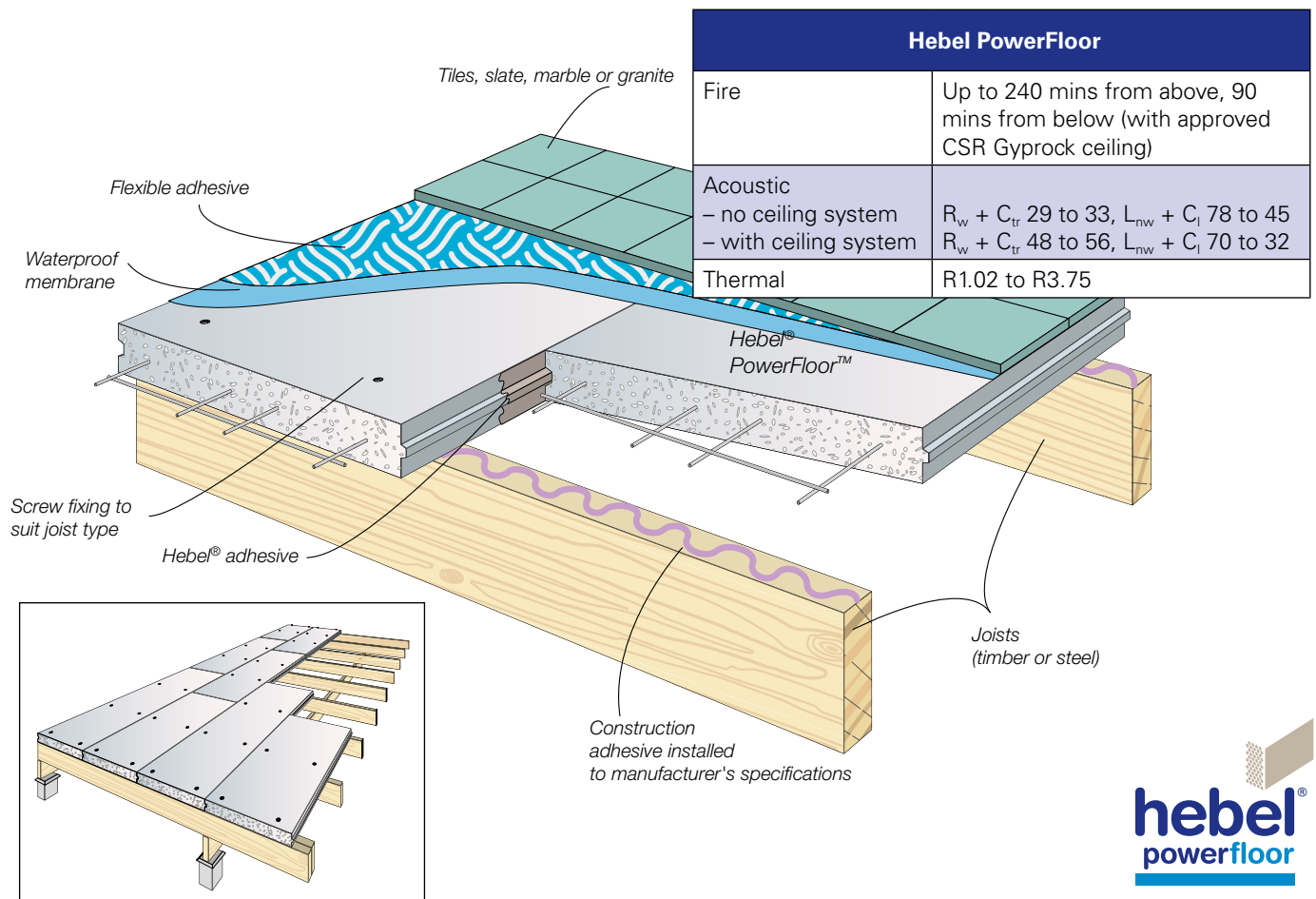
- Easy to use and easy to lay
- Easily cut to size
- Quality Australian made product.



#### Available in sizes:

50mm (600x200x50)  
75mm (600x200x75)  
100mm (600x200x100)

# Building solid floors with Hebel



## The feeling of concrete for a lot less

Hebel PowerFloor consists of 75mm steel-reinforced aerated solid concrete floor panels installed over steel or timber joists to give an excellent, solid base for just about any floor covering.

This provides a superior floor solution with acoustic and thermal insulation benefits and provides the feel of a solid concrete floor at a significantly lower cost and much less time.

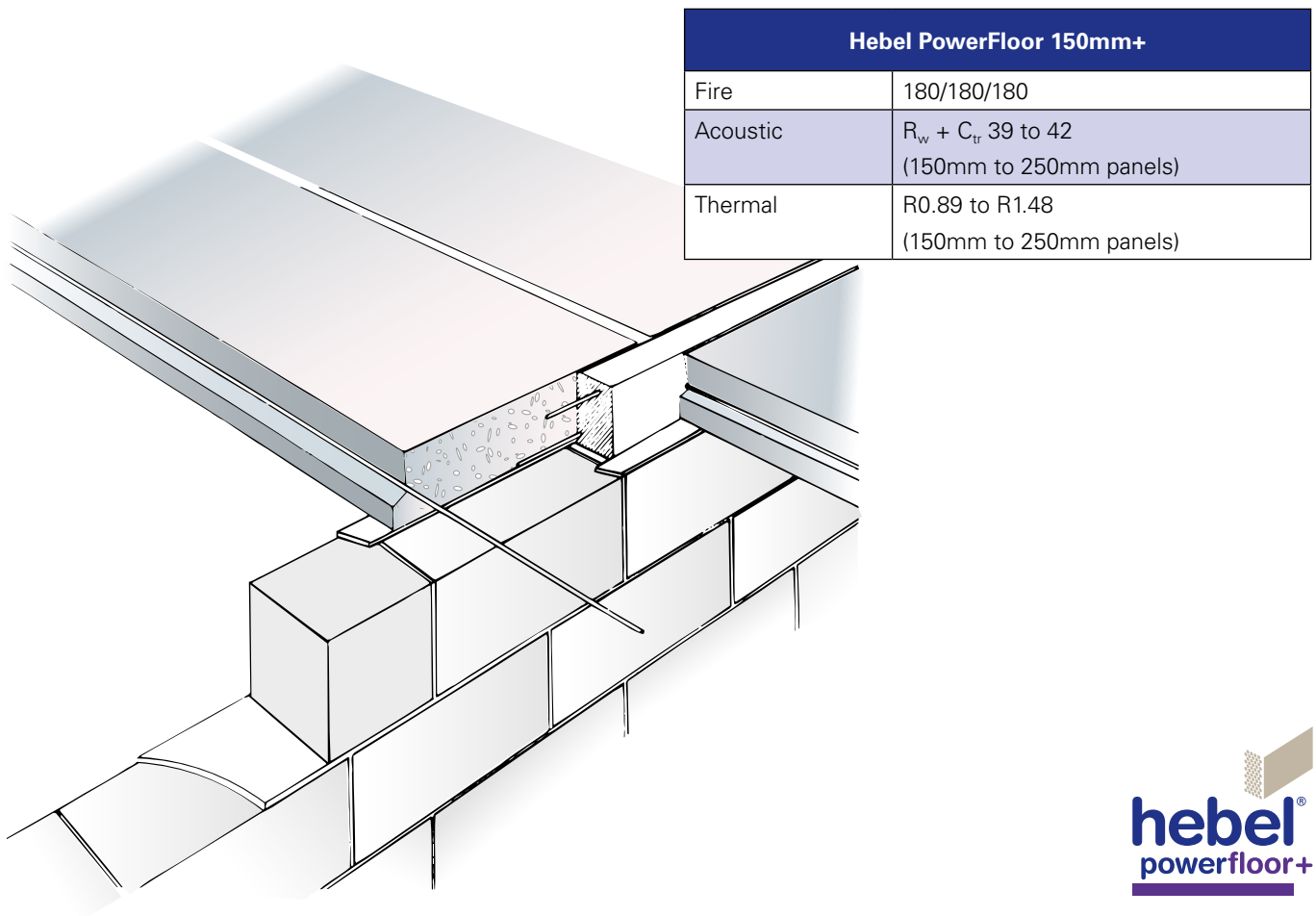
## The unique benefits of constructing your floor with Hebel PowerFloor

- Solid feel eliminating the bounce and flex of timber sheet flooring
- Superior thermal performance – particularly for suspended floors on sloping sites
- Extremely strong, each panel is reinforced with corrosion-protected steel mesh. The panels fit snugly together to form a strong and smooth floor
- Not affected by weather during installation
- Faster and cleaner than installing concrete floors
- Hebel PowerFloor can be easily installed by normal on-site tradesmen such as carpenters
- Reduces foot-fall, airborne noise between floors and eliminates squeaking associated with particle board floors.





# PowerFloor+ the sound investment when it comes to solid floors

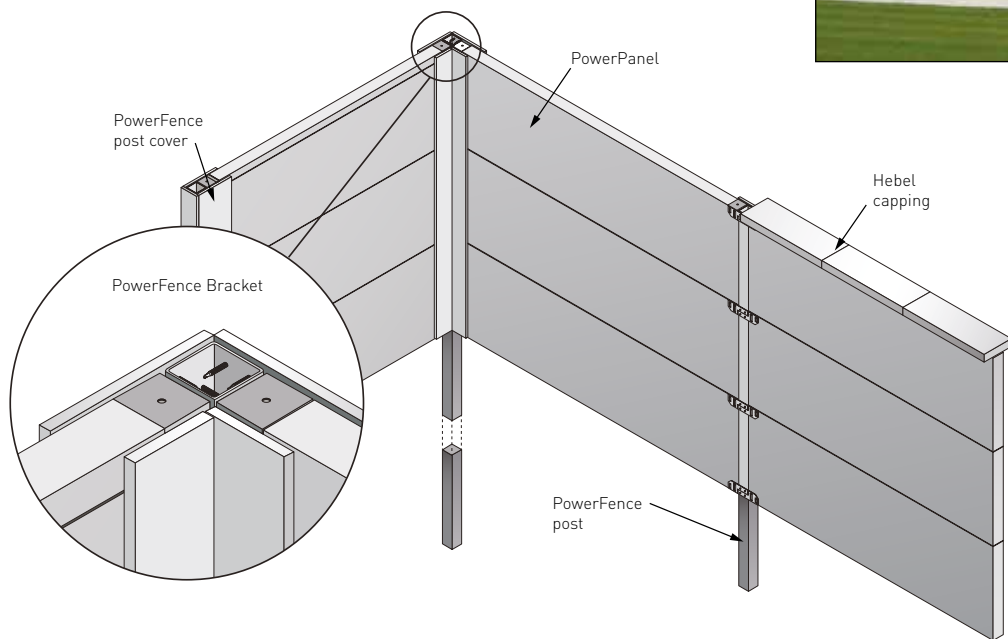


Hebel PowerFloor+ is the ultimate concrete flooring solution, providing superior strength, thermal and acoustic properties in a load bearing modular solid aerated concrete flooring system. Hebel PowerFloor+ is available in 150mm to 250mm thickness and eliminates the need for timber or steel floor framing or the pouring of concrete.

## The unique benefits of using Hebel PowerFloor+ for your floor construction

- Reduces foot-fall, airborne noise between floors and eliminates squeaking associated with particle board floors
- Hebel Floor provides a load bearing span up to 5.85 metres without floor framing or joists
- Achieves structure fire rating of FRL 180/180/180 without relying on ceiling systems
- Extremely strong, each panel is reinforced with corrosion-protected steel mesh. The panels fit snugly together to form a strong and smooth floor
- Superior thermal efficiency assists in achieving thermal ratings that results in reduced heating and cooling costs
- No propping or curing of concrete required.

# PowerFence makes fencing easy



## The innovative, alternative to brick

Hebel PowerFence is an extremely attractive and versatile fence system that provides an efficient and effective privacy and noise barrier for residential applications. It blends perfectly with rendered masonry homes.

Perfect for boundary fencing and low front walls, Hebel PowerFence provides a modular masonry structure using lightweight panels and steel posts which can be easily and quickly erected without the need for extensive excavation or strip footings, as is normally the case for traditional masonry fence construction.

The standard Hebel PowerFence system can also be adapted to include a range of different decorative treatments such as timber panels or ironwork.

There are two standard PowerFence systems – Exposed and Monolithic and panels can be routed to add a stylish, finishing individual design touch. The standard PowerFence system can also be adapted to include a range of different decorative treatments such as timber panels or ironwork.

### The unique benefits of building fences with Hebel PowerFence

- Simple, cost effective and attractive. Creates privacy and acts as reflective noise barrier system
- Perfect for boundary fencing and as an alternative to standard masonry for low front fences
- Range of wall profiles and looks can be created giving you design freedom and flexibility
- Non combustible – the perfect choice for bushfire prone areas.

# Individualise the look of your home



**Hebel provides greater design possibilities by adding individual detailing and patterns to your facade, entry or feature walls.**

While Hebel is strong, solid robust and resilient, it is also perfectly suited to creating patterns through a routing process. Choose from a range of pre-routed panel designs or create your own individual and unique design statement.

You can select from a range of visual effects from high build acrylic renders and textures to simple acrylic coatings to achieve the visual appeal you want to complete your design. If you choose a rendered finish which includes painting, you always have the freedom to give the building a totally new look and refresh when you want.

Coatings are available to help you deliver the perfect finish to any Hebel project and engineered to accommodate the unique physical characteristics of Hebel.

Please ensure you select an appropriate external coating system that is compatible with the Hebel substrate and provides the performance requirements as recommended and specified by CSR Hebel. Application and maintenance of such a coating system is to be as directed by the coating suppliers specification and conditions of warranty.



## The better way to build

### CSR HEBEL

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### Health & safety

Information on any known health risks of our products and how to handle them safely is on product packaging and / or the accompanying documentation. Additional information is listed in the Material Safety Data Sheet (MSDS). To obtain a copy of a MSDS, download from [www.hebel.com.au](http://www.hebel.com.au). Contractors are required by law to perform their own risk assessments before undertaking work.

### Performance & certification

Hebel® products and systems are developed in Australia by CSR Building Products. ABN. 55 008 631 356. It is a manufacturer and supplier of Hebel Autoclaved Aerated Concrete (AAC) products. Because it is a manufacturer and supplier only, CSR does not employ people qualified as Accredited or Principal Certifiers.

CSR is therefore unable to provide Construction Compliance Certificates or Statements of Compliance. CSR conducts appropriate testing of its products and systems to determine performance levels. These include structural, fire and acoustic tests. Testing is conducted and certified by appropriate specialists in these fields. When using Hebel products and systems in specific projects, such specialists should be consulted to ensure compliance with the Building Code of Australia and relevant Australian Standards.

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### Other

The design of a wall, floor or fence system requires the services of professional consultants. This document has been prepared as a source of information to provide general guidance to those consultants – and in no way replaces the services of the professional consultant and relevant engineers designing the project.

No liability can therefore be accepted by CSR or other parties for the use of this document. Hebel products and systems undergo constant research and development to integrate new technology and reflect ongoing performance enhancement.

Hebel systems are constantly reviewed so as to reflect any changes in legislative building requirements and or general developments in common building practice, due to our commitment to continual development and improving our building systems.

We advise that all users of this document should regularly check that this document is current, and they are applying our latest design information.

The latest editions of our documents are available on our website:

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

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## The better way to build

Hebel is a quality building product, and is backed by CSR Building Products Limited.

For more information visit our website:

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

For sales enquiries or further information, please telephone us from anywhere in Australia:

# 1300 443 235

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