



A home in Hebel creates a beautiful way to live.

why is this so?

A beautiful way to live means different things to different people. The decisions you make about your new home will be unique to you and your family, so that when completed, it will be a reflection of your individuality.

Design and building materials are often at the top of most people's list when planning a new home. All homeowners want a home that is comfortable to live in, feels solid and secure, reflects their individual style and taste and works well with their lifestyle.

The life of the house is another important consideration. This involves questions such as: What maintenance will be needed? Will there be any major issues down the track? What will energy cost overtime? These are questions that can sometimes be forgotten in the excitement of building a new home.

Addressing this from the outset of a project will help you to save money in the long run, whilst also helping to create a beautiful home that is beautiful to live in.

Building your home with Hebel will give you the reassurance that your design and comfort needs are met, whilst ensuring that your Hebel home will stand the test of time.

Strong and solid, a home built in Hebel provides that sense of security. At the same time it's like a protective cloak that wraps itself around you, helping to keep you warm in winter, cool in summer and shielding you from outside noises.

If you build in a bushfire zone, it enables you to enjoy the view of your surrounds with the reassurance that Hebel products and systems meet or exceed all six Bushfire Attack Level (BAL) categories.

A home built in Hebel is eco-friendly, giving you the peace of mind that Hebel products step lightly on this planet.

Your home reflects your individual style and aspirations and you should feel proud in the choices you make. With Hebel you can. A home built with Hebel provides you with a beautiful way to live, year after year.



PowerPanel^{KL}



PowerFloor[®]

Hebel steel reinforced autoclaved aerated concrete (AAC) wall and floor panels.

Strong, solid, non-combustible, termite resistant and eco-friendly, they help keep your home cool in summer, warm in winter and reduce unwanted sound.

Beautiful outside



Building your new home with Hebel offers versatility in design, helping to create different looks and finishes that provide you with a beautiful way to live.

In addition to looking good, a Hebel house offers a whole host of benefits including durability, termite resistance and high thermal and acoustic performance. Moreover, it's non-combustible which is important when it comes to safety and security.

External walls built with Hebel are paired with an acrylic coating system, giving you the freedom to choose your own colour palette, knowing you can easily change it over time. Use colour to add personality, work with your environment or to highlight an architectural element. Include a feature wall overlaid with different materials to make a style statement or use colours or a pattern routed into the Hebel. Add decorative architectural mouldings to your façade if you want a period style. All these choices are possible when you build your home with Hebel external walls.

And let's not forget outdoor living space, an integral part of the Australian way of life. Balancing openness with privacy and integrating inside with outside are among the considerations to take into account when choosing your home design.

For example, if you are building on a sloping site, the Hebel flooring system makes spacious outdoor living possible because of its combined strength and lightness. Cantilever out to blend in with your environment, blend inside with out by choosing a complementary floor covering, use a floor finish that suits your overall design – with Hebel, you have the flexibility to achieve what you want.

You can even go one step further in your design aspirations by choosing Hebel for your fencing. It's a simple and cost effective way to add privacy and deflect outside noise, along with the Hebel attributes of non-combustibility, termite resistance, durability and solidity.



Although it looks similar to cement render, an acrylic-based coating system for Hebel is quite different. It's flexible enough to allow for building movement so isn't prone to cracking and doesn't leach unsightly white powder.

What it will do is protect your home against the elements, help release moisture from the inside, resist impact and give you the final say on a look that's yours.



There is a wide range of colours available and your designer or coating manufacturer consultant can assist you with your choices. Warranty periods typically range from 7 to 20 years, and in some instances longer.



Left: Three coat render system

- PowerPanel
- Base coat
- Texture coat
- Paint



beautiful inside

The choice of external walls for your home will have an impact on your personal comfort, energy use and health. Although other factors such as use of glass play a role, a home built with Hebel will be a big contributor to a beautiful way to live on the inside.

For starters, Hebel is an excellent thermal performer. It helps to prevent outside heat from transferring inside in summer, and in winter helps keep internal warmth contained. That means less reliance on heating and cooling and greater control over your energy costs.

One thing we do expect from a new home is no leaks during wet weather so it's good to know that the Hebel external wall system has proved itself over a very long time and passed the rigorous CSIRO test for weather tightness. The exterior coating system on Hebel also plays an important role in protecting your home from the elements.

Although it's not as obvious as keeping water out, controlling moisture in your home is important to your family's health as well as to the structure and longevity of your home. It may be surprising to learn that moisture is generated through inside living – breathing, showering, cooking – and can lead to condensation forming on walls or within them. Hebel is great at controlling moisture and allows watervapour (that moisture) to move in and out easily which is great for good air quality.

You know just how important it is to keep external noises to a minimum. The right external wall system can go a long way to creating a sense of peace and quiet. Hebel panels are good acoustic performers, which is one reason why they're widely used in walls between apartments in Australia and also makes them an ideal choice for your external walls. Hebel flooring is also an exceptional solution for first level flooring as you won't get the creaks and squeaks experienced with particleboard.

As you can see, there are plenty of reasons why Hebel is designed to make inside living beautiful.



**‘The house
was warm
all winter!
We love how
quiet it is!’**

Safa a R.

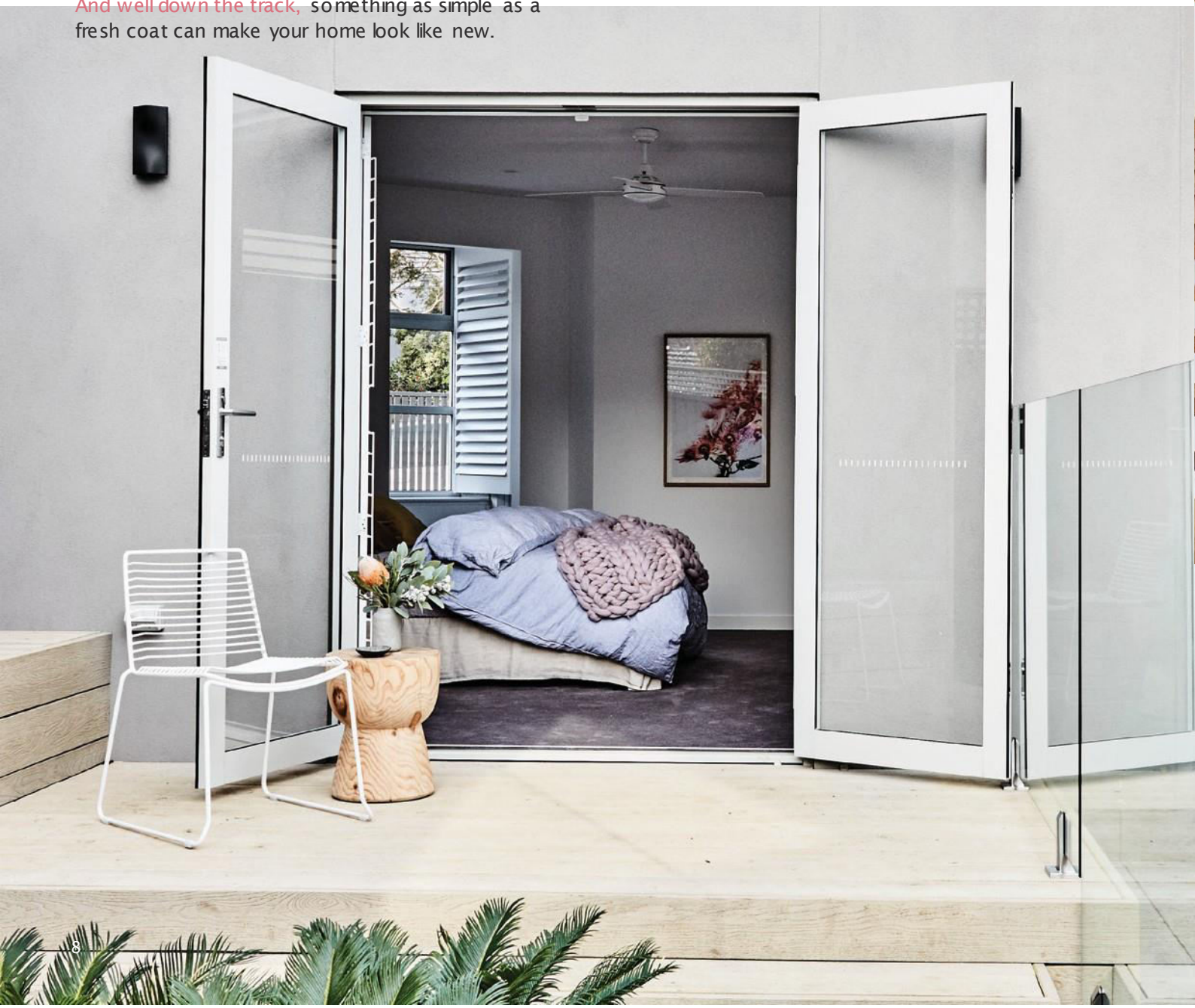
Beautiful living year after year

Hebel homes are strong, durable and stand the test of time, helping to create a beautiful way to live that continues to benefit homeowners year after year.

Hebel panels won't burn or rot, aren't a food source for termites, aren't affected by sunlight or adversely affected over normal temperature ranges and of course they are solid and strong with corrosion protected steel reinforcement.

The durability of your Hebel external walls can be maximised by periodic inspection and maintenance. This includes your coating system which performs best if you maintain it according to the manufacturer's recommendations.

And well down the track, something as simple as a fresh coat can make your home look like new.



a beautiful world

While building a new home will always have some environmental impact, Hebel AAC treads fairly lightly on this planet.

Readily available raw materials are used in its manufacture. Waste generated in the manufacturing process, even the steam used, is recycled. During construction there's minimal waste, especially when panels are ordered to size.

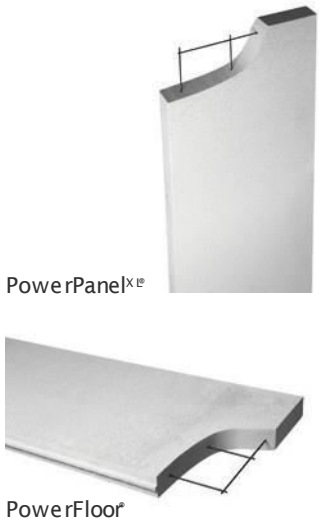
Once built, your Hebel panels will help minimise energy use throughout the year and they won't release any toxic gases into the environment.

Quite simply, a home built in Hebel helps create a beautiful way to live, inside and outside, day after day, year after year.

what you need to know about building with Hebel

Hebel autoclaved aerated concrete (AAC) is a remarkable building material replicating a mineral that already exists in nature. It's made from readily available raw materials such as sand, cement, lime and gypsum, which are combined with water and an expansion agent. The result is a high quality product with a cellular structure that allows water vapour to flow in and out efficiently.

Hebel steel reinforced autoclaved aerated concrete (AAC) wall and floor panels are strong, solid, non-combustible, termite resistant and eco-friendly. They help keep your home cool in summer, warm in winter and reduce unwanted sound.



Strong and solid

Hebel panels are a high-performance, solid building material made from autoclaved aerated concrete (AAC). Each panel contains steel reinforcement with an anti-corrosion layer for maximum strength and durability.



Energy efficient

Hebel panels have superior insulation qualities compared to other masonry products. Tests have shown that a house built with Hebel PowerPanel^{XL} performs better than brick veneer in terms of both heating and cooling. This can save the homeowner approximately \$400 a year in heating and cooling energy costs, and earn the home half a star more in energy star ratings*.



Quality and speed

Building with Hebel can mean faster construction times without sacrificing on quality. One standard Hebel panel is the equivalent of 75 traditional bricks, which means a 150m² home can go up as quickly as within 3 days when installed by experienced Hebel installers.

A high quality building material, Hebel provides a great solution in terms of speed and ease of construction, which is why it is increasingly becoming the builder's choice.



Eco-friendly

Independent testing shows that overall, Hebel has a 30% lower environmental impact than concrete or brick veneer. Hebel panels use 60% less embodied energy and produce 55% less greenhouse emissions compared to concrete or brick veneer, making it a more sustainable, environmentally friendly choice of building material.



Noise reduction

A Hebel home is a quiet one. Building your home in Hebel can reduce outside noise, and when used for floors, can reduce sound transference between levels as well.



Fire resistant

Hebel is a non-combustible material, renowned for its fire resistant properties. Hebel systems have been tested by the CSIRO and are proven to achieve Fire Resistance Levels (FRLs) of 60 minutes through to 240 minutes. Plus they meet or exceed the requirements for all six Bushfire Attack Level (BAL) categories making it an ideal choice in bushfire zones.

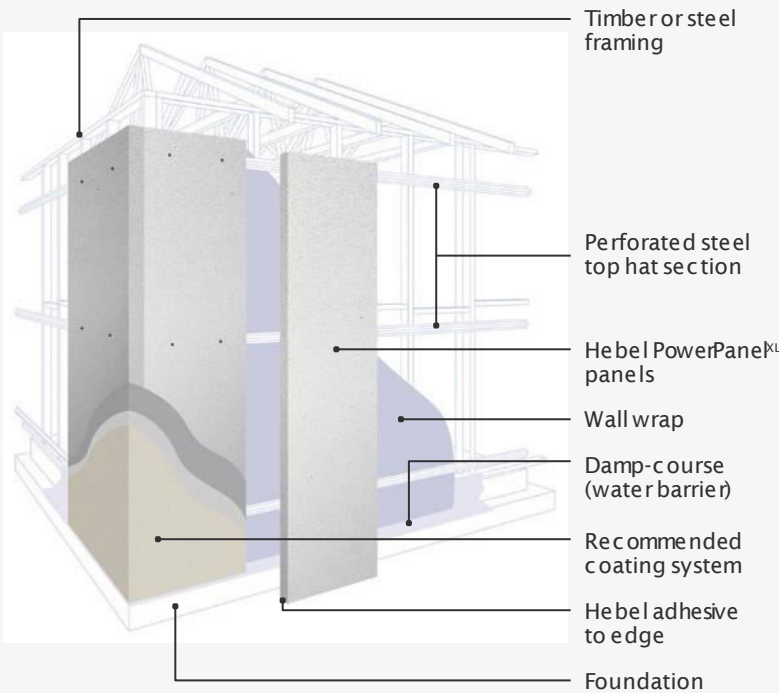


Proven

CSR Hebel is the only manufacturer of AAC in Australia. With over 25 years of experience in developing, testing and producing AAC you can be assured you're getting high quality products and systems and unmatched technical expertise with Hebel.

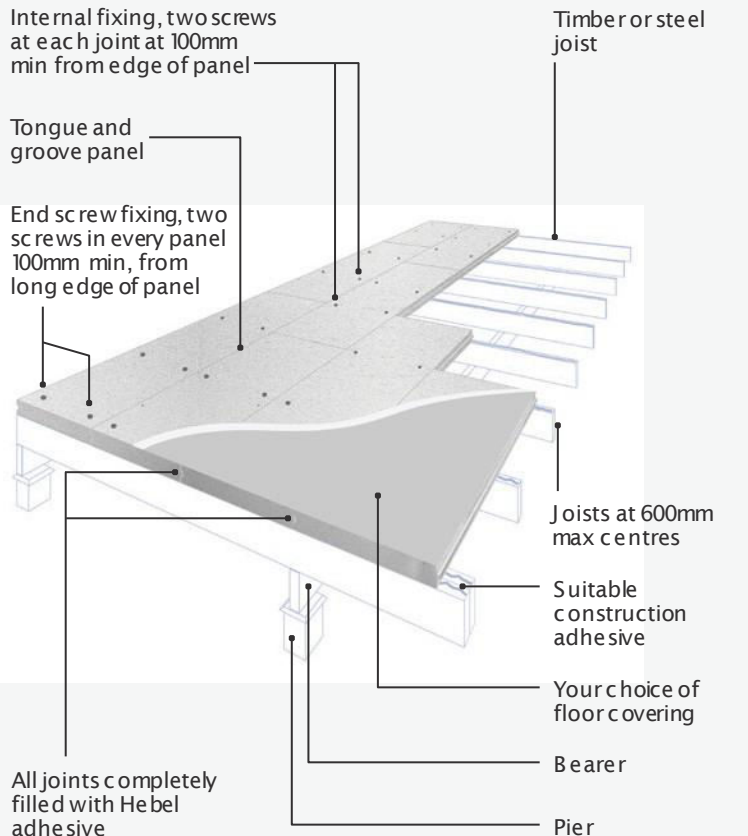
PowerPanel^{XL} External Wall System

Hebel product	75mm PowerPanel ^{XL}
Fire rating level (FRL)	180/180/180
Acoustic rating	R _w + C _{tr} 35 to 39
Thermal values	R1.61 to R3.57
Wall thickness	179mm to 210mm
BAL category	BAL-Low BAL-12.5 BAL-19 BAL-29 BAL-40 BAL-FZ



PowerFloor System

Hebel product	75mm PowerFloor
Fire rating level (FRL) ¹	Up to 240 minutes from above, up to 90 minutes from below (with approved CSR Gyprock ceiling)
Acoustic rating ² – no ceiling system	R _w + C _{tr} 30 to 33, L _{nw} + C _i 83 to 45
Acoustic rating ² – with ceiling system	R _w + C _{tr} 48 to 54, L _{nw} + C _i 70 to 32
Thermal values ³	R0.60 to R4.07
Floor thickness	75mm
BAL category	BAL-Low BAL-12.5 BAL-19 BAL-29 BAL-40 BAL-FZ



1. Fire rating level (FRL): this is the rating system that expresses the fire performance of a wall or floor system. It's graded in terms of minutes for three criteria – structural adequacy, integrity and insulation. For instance the PowerPanel^{XL} external wall system for hours achieves 180 minutes or 3 hours for all three criteria. **2. Acoustic rating:** the National Construction Code has performance requirements for two types of sound. One is for airborne sound insulation, the R_w + C_{tr} value. The other is for impact sound insulation, the L_{nw} + C_i value. **3. Thermal value:** also known as R-value, this is a measure of thermal resistance, or the ability of heat to transfer from hot to cold, through materials and the assembly of materials that form a wall or floor system. The higher the R-value, the more a material prevents heat transfer. **4. BAL category:** an Australian Standard AS 3959 was introduced in 2009 to improve the resistance of buildings to bushfire attack from burning embers, radiant heat, flame contact and combinations of these. The standard includes a methodology for assessing categories of bushfire attack, called Bushfire Attack Levels (BAL), in respect of a site situated in an area that has been designated by a relevant authority as bushfire-prone.

* Based on Comfort Tune Assessment conducted in January 2016 on a 346m² house in metro NSW.



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