

# What's inside apartment walls matters



## Why Hebel® matters in apartment walls

Whether you're an architect, designer, builder, wall installer or developer, Hebel wall systems deliver exceptional benefits in terms of quality, project efficiency, risk minimisation and cost and time certainty.



### Value-adding with solid and secure walls

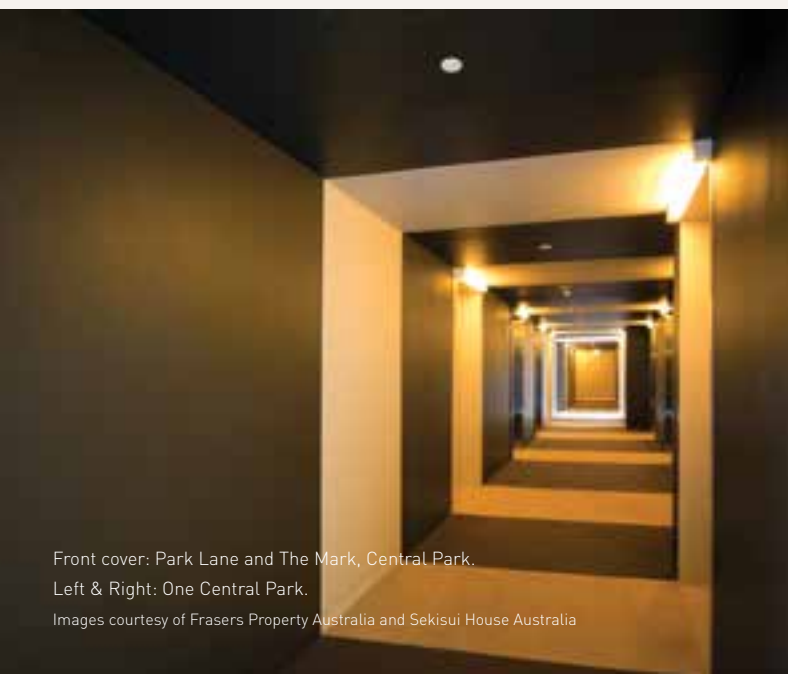
At the heart of the Hebel internal wall systems is the Hebel PowerPanel, a 75mm thick, steel-reinforced masonry panel made from aerated autoclaved concrete (AAC).

It is such a remarkable value-adding product that developers include an open Hebel wall system in their display apartments, confident in the knowledge that investors are attracted by a solid secure wall for resale and long term investment - and residents for a sense of peace and security.

### Value-adding floorspace

The Hebel intertenancy and corridor wall systems, for concealed services on one side, are two of the narrowest systems on the market - just 185mm thick. This means greater flexibility in design and greater value-add potential in the market offering.

Single mesh and caged PowerPanel for solid, secure and durable internal walls.



Front cover: Park Lane and The Mark, Central Park.

Left & Right: One Central Park.

Images courtesy of Frasers Property Australia and Sekisui House Australia



Leading the way in AAC innovation, CSR Hebel achieved a FRL rating of -/120/120 for PowerPanel stacked horizontally to an unlimited height. This testing was done without thin bed adhesive at panel joints, proving Hebel is a highly efficient system for shaft riser applications at all heights.

### Design and build versatility

At its base system level PowerPanel is suitable for applications with fire ratings up to 90 minutes and heights up to 3.3 metres. When higher fire ratings up to 2 hours for wall heights to 4.65 metres are needed, caged tongue and groove PowerPanel steps in. What's more, this PowerPanel can be installed horizontally to an unlimited height and without the need for thin bed adhesive at the panel joints.

### Design quality, efficiency and risk minimisation

Hebel wall systems cut through complexity in specifying internal walls in terms of system simplicity. The reason is straightforward. PowerPanel isn't affected by wet or damp conditions. The only consideration is wet or dry plasterboard for the lining in any given application. This streamlines the design process and minimises the potential for error.

The Hebel wall systems also enable architects and designers to be confident in specifying a quality solution that's robust, proven, tested, fast and efficient to install and value-adding in terms of solidity and security.

Further, as Hebel wall systems cover the full range of applications - intertenancy, corridor, shaft and service walls - system referencing and technical support is easy and efficient through the one reliable and trusted source, CSR Hebel.



The Hebel Express Head system simplifies design and construction and minimises risk. The Hebel PowerPanel is installed from slab to soffit with only one fire sealant position required.



Array by Mirvac. Image: John Gollings

Epping Park by Meriton Apartments.

### Installation speed and efficiency

Hebel internal walls systems go up quickly and easily which is why so many developers and construction companies rely on CSR Hebel to keep control of their project schedule and costs. The panels are lightweight, simple to install to BCA compliance, unhindered by wet or damp conditions, create minimal waste and can be ordered to size for even faster installation and less waste.

There's no time-consuming work cutting, affixing and joining several horizontal plasterboard sections - just two sections and one joint. Ceilings can be installed either before or after linings as the Hebel

panel is the fire-rated element. Steel stud and ceiling frames can be installed together, rather than in separate workflow processes.

Service penetrations are easily completed as fire and acoustic sealing is done from one side only, negating the need to seal on both sides.

Often unnoticed but a significant contributor to project efficiency, the Hebel systems don't require fire-rated GPOs, reducing project time, streamlining workflow and contributing to getting the project completed with expediency.

Similar to design ease and efficiency, Hebel walls systems are simple to work

with as only wet or dry plasterboard needs to be used for the lining. No logistical complexity handling a multitude of different wall elements before or during construction.

Hebel also reduces complexity in construction because of its applicability across all wall system types - intertenancy, corridor, shaft and service walls - keeping installation with one trade.

Constructing with Hebel internal wall systems means logistics are simple, work flows easily, project schedules are controlled, cost certainty is enhanced and risk is minimised.



We like it from the point of view of speed because the management of the Hebel system is much simpler than a stud system.

**Peter Cotton**  
National Practice Director  
Mircac Design



We're convinced it's the way to go. The feedback from builders I've worked with is that it is faster.

**Craig Baudin**  
Director  
Fender Katsalidis Architects



We know we can rely on it going up quickly, which contributes to getting the overall project finished on time.

**Allan Johnson**  
Chief Architect  
Meriton Apartments



Viking by Crown Group.

### Simple and easy fire-rating compliance

Hebel panels are non-combustible and reach close to the soffit making BCA fire-rating compliance easy. Only one fire-sealant position is required and apartments can be sealed as you go, removing the need for continuous back tracking. There's no need for fire-rated GPOs and dampers are connected to the Hebel only. Service penetration installation and compliance is easy. For instance in certain applications a single fire collar running through the Hebel panel removes the need to install fire collars both sides. The number of risk points is minimised. Projects aren't hampered by rework. Certification is easy.

### Simple and easy acoustic compliance

The solidity and robustness of the Hebel PowerPanel and the simplicity of the BCA rated systems means acoustic risk points are minimised, installation is fast and certification is easy to achieve.

### Risk minimisation

Hebel wall systems for high rise apartments provide a solid foundation for risk minimisation in design and construction. They are tested, well proven and designed to achieve BCA fire and acoustic rating compliance easily. Combining the non-combustible and solid properties of the Hebel panels with advanced system designs, CSR Hebel delivers high value cost effective solutions that significantly reduce the number of fire and acoustic risk points in construction.

### Leveraging CSR Hebel's high sustainability values

Hebel AAC is a durable inert product, made from raw materials in a process that minimises embodied energy. The low bulk density of Hebel AAC means less than a quarter of the resources and raw materials are used in its production than for other masonry products. Raw materials are sourced locally to minimise energy used in transport. Waste in production is reduced through extensive recycling. Production waste, slurry and even the steam generated are all recycled back into the manufacturing process while waste steel and oil are recycled off site. Even the non-toxic citrus-based solvents used for cleaning are recycled.

On site the combination of panel sizes designed to suit standard building modules and the ease of working with standard power tools means there is very little waste. This goes a step further when panels are made-to-order.

Altogether, Hebel is one of the most environmentally responsible building materials.

### Leveraging the exceptional value-add of Hebel systems

Quite simply Hebel internal wall systems deliver a holistic solution that no other systems can match. They benefit all stakeholders in the project lifecycle through their role in value-adding to the project's quality, design and construction efficiency, risk minimisation and cost and time certainty.



The biggest risk is associated with penetrations going through the wall and the Hebel system has a lot of known solutions to this. With Hebel it is therefore easy to implement compliant penetration treatment.

**Allan Harriman OAM**  
Director  
BCA Logic



We're not called back to deal with problems because they don't arise.

**Gary Cory**  
General Manager Construction  
Crown Group



The [Melburnian] resales have been outstanding.

**Roger Poole**  
Past Chairman  
Bates Smart Architects



## Hebel internal wall system applications



### **Intertenancy walls - dry to dry / wet**

Designed for concealed services on one side using lightweight steel-reinforced PowerPanel, these Hebel Intertenancy Wall Systems provide a solid secure wall that maximises floor space, minimises costs and risks and delivers long-term value.



### **Intertenancy wall - dry / wet to dry / wet**

These Hebel Intertenancy Wall Systems are the ideal solution where there are concealed services on both sides including large services applications such as shower mixers in both apartments. This quality solution using solid and secure PowerPanel maximises floor space and minimises risks and costs.



### **Corridor walls**

Hebel Corridor Wall Systems maximise floor space and provide a solid secure wall for services located on one side between common areas and apartments.



### **Shaft walls - dry areas**

Robust and proven Hebel Shaft Wall Systems provide a solid, secure wall with a narrow width around service shafts to dry habitable areas and between scissor stairs. Uses Hebel PowerPanel to maximise space utilisation and minimise risks and costs in high rise and multi-residential construction.



### **Shaft walls - wet areas**

Hebel Shaft Wall Systems are designed for general partitions between service shafts and wet areas or shafts adjacent to common areas. Constructed with Hebel PowerPanel to maximise floor space and minimise risks and costs.



### **Service walls - plant rooms**

Single mesh or caged Hebel PowerPanel is used in the Hebel Service Wall Systems to isolate and secure plant rooms from other areas of the building. For tall shaft risers with fire ratings up to 2 hours, PowerPanel can be installed horizontally to an unlimited height without the need for thin bed adhesive at the panel joints. Solid and secure, these systems maximise floor space and minimise costs and risks.



For more information on CSR Hebel please call **1300 443 235** or visit **[www.hebel.com.au](http://www.hebel.com.au)**

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