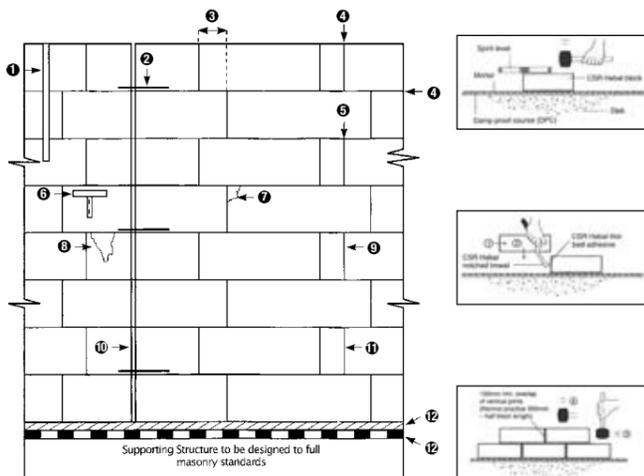


What is CSR Hebel Blockwalls?

CSR Hebel products are made from a lightweight masonry called Autoclaved Aerated Concrete (AAC). This advanced technology produces extremely small, finely dispersed air pockets within the material. The result is a lightweight aerated concrete that is strong and durable, but only about a quarter the weight of conventional brick or concrete.

1. Depth of chasing not to be greater than 1/3 of wall thickness (generally snug fit)
2. Control joint ties in place at every third course with knuckle pointing upwards
3. Block overlap to be minimum 100mm
4. Joint thickness to be 2-3mm using CSR Hebel Thin Bed Adhesive
5. Horizontal joints to be completely filled
6. All fixings to be of an approved type
7. Block damage to be repaired
8. Excess adhesive to be removed
9. Perpend to be completely filled
10. Control joints built in at 6m maximum centres
11. Crosswalls to be keyed or tied in at every second course.
12. Thick bed mortar, and DPC (Damp Proof Course) slip joint membrane to all walls on a concrete support



Block Weights (using working densities and face dimensions of 600mm and 200mm)

Block Thickness	50	75	100	125	150	175	200	225	250	275	300
Thermoblok Weight (kg/block)	3.7	5.5	7.4	9.2	11.0	12.9	14.7	16.5	18.4	20.2	22.0
Pack Quantity	288	204	180	144	120	96	84	72	72	60	60

Advantage

- 1. A Solid Home**
Choose to build with CSR Hebel Block Wall Systems and you can substantially improve the comfort and living qualities of your home, take advantage of cost saving energy strategies, rest-easy with improved sound insulation properties.
- 2. Enviro-Friendly**
By choosing CSR Hebel Block Wall Systems you can create a safe, comfortable and energy saving environment within your home, and be comfortable knowing that your choice has minimised the impact on our environment.
- 3. Energy Saving**
CSR Hebel Block Wall Systems are so efficient that you can choose to build walls that are up to three-and-a-half times more thermally efficient than brick veneer or even double brick construction.
- 4. Solid Silence**
We all cherish our privacy, and CSR Hebel Block Wall Systems can offer a lot of help with creating your private haven. You can significantly reduce the noise from room-to-room, and even cater for special facilities such as a "home theatre". CSR Hebel has proven to be a very effective noise barrier.
- 5. Fire & Pest Resistance**
Solid CSR Hebel Block Walls are very practical in high bushfire or termite prone areas they eliminate the need for any timber wall framing, thereby eliminating much of the fuel for a fire and food for termites. Solid walls also eliminate any cavity, so there's nowhere for pests, insects, dust or mould to hide.
- 6. A Solid Future**
Hebel Lightweight concrete products also provide long-term durability. Structures that have been correctly installed, finished and maintained have proven their performance throughout Europe for more than 50 years.
- 7. Design Freedom**
CSR Hebel Block Wall Systems can be finished in the colour and texture of your choice, placing you completely in charge of just how unique your home will be. Being solid yet lightweight and easy to work, CSR Hebel Blocks can be used in many other applications within ones home, such as stairways, feature walls, sculpture, bbq areas and mouldings.
- 8. A Solid Investment**
By choosing CSR Hebel Block Wall Systems for your home, you are choosing to build a premium quality home using a premium quality construction system. You can also feel secure knowing that CSR Hebel is manufactured and backed throughout Australia by CSR (Established in 1855).
- 9. Render**
CSR High Build is designed to be applied 5-8mm thick in one coat. However, a two coat application will allow the final coat to set evenly and ensure a higher quality finish. In this case, each skim coat is only 2-3mm in thickness and the final coat can be applied as soon as the fist has started to stiffen (can be 15-20 minutes). CSR High Build render is available in 20kg bags. Coverage depends on thickness and is approximately 2.5m2 per 20kg bag for recommended thickness of 5-8mm.
- 10. Profiles** are available to add character to your home. We have a range of profiles - plain bands, sill blocks, chamfer blocks, bands with a splay, keystones, wall & pier caps, port holes to help you with your style of home.



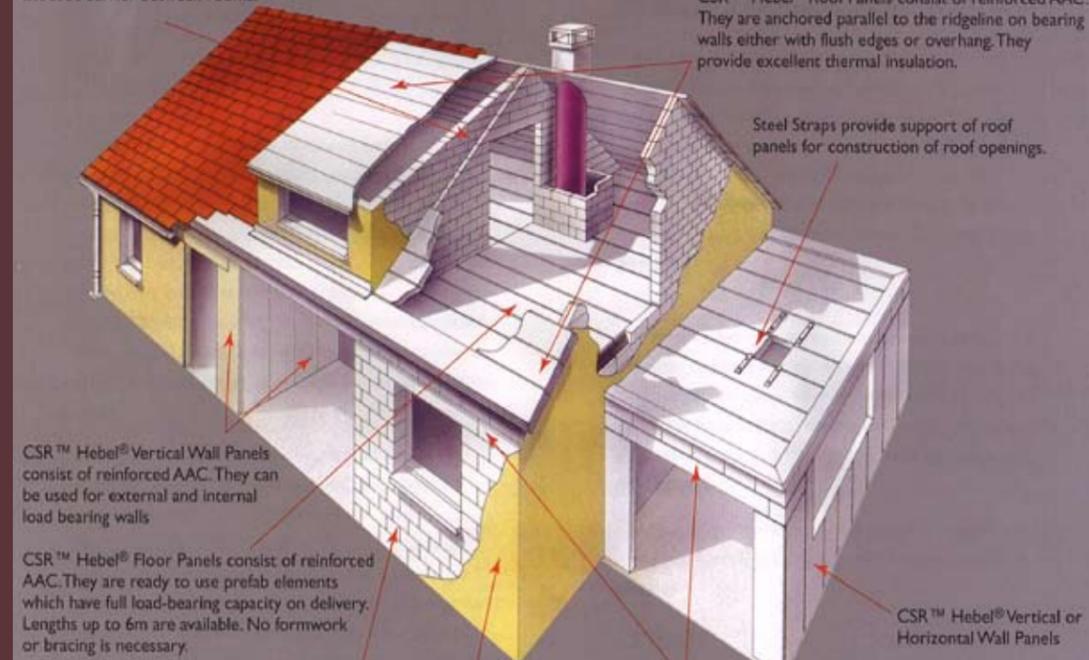
guardian hebel products

Application of CSR Hebel products in Solid Construction

CSR™ Hebel® blocks provide an excellent acoustic barrier between rooms.

CSR™ Hebel® Roof Panels consist of reinforced AAC. They are anchored parallel to the ridgeline on bearing walls either with flush edges or overhang. They provide excellent thermal insulation.

Steel Straps provide support of roof panels for construction of roof openings.



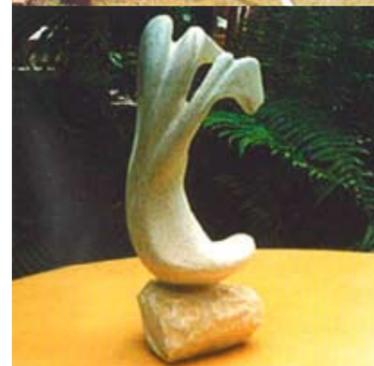
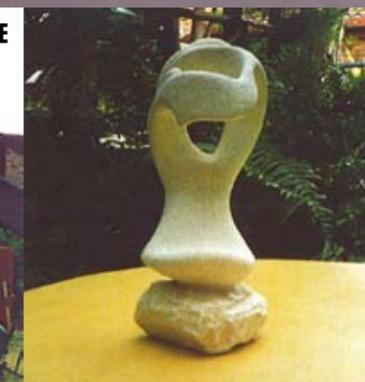
CSR™ Hebel® Vertical Wall Panels consist of reinforced AAC. They can be used for external and internal load bearing walls

CSR™ Hebel® Floor Panels consist of reinforced AAC. They are ready to use prefab elements which have full load-bearing capacity on delivery. Lengths up to 6m are available. No formwork or bracing is necessary.

CSR™ Hebel® Blocks are produced to narrow dimensional tolerances and laid with 2-3mm thick joints. This results in a high quality wall structure.

A wide range of renders and surface treatments can be applied to CSR™ Hebel® AAC.

CSR™ Hebel® Lintel Beams consist of reinforced AAC. They allow uninterrupted block-laying to continue over doors and windows.



sales@guardianbuilding.com.au
www.guardianbuilding.com.au
TOLL FREE 1800 249 603

What is CSR Hebel SoundFloor™?

CSR Hebel products are made from a lightweight masonry called Autoclaved Aerated Concrete (AAC). This 50 year old European technology produces extremely small, finely dispersed air pockets within the material. Steel reinforcing mesh (which has been treated with an anti-corrosion coating) is cast into the panel, resulting in a lightweight aerated concrete panel that is strong and durable, but only about a quarter of the weight of conventional concrete.

Installation

CSR Hebel SoundFloor™ panels are 75mm thick and 1800mm long x 600mm wide to suit industry standard joist spacings. Panels are generally installed by two people, without the need for special lifting equipment. Panels are fixed to joists with a combination of construction adhesive and self drilling countersinking screw fasteners. Panels are also fixed edge-to-edge to all adjoining panels using a CSR Hebel Thin Bed Adhesive.

Advantages

1. Makes a good floor even better...

A CSR Hebel SoundFloor™ system provides the perfect solution, blending many of the solid performance characteristics of the 'concrete slab floor' with the best attributes of 'lightweight, framed floor construction'.

2. Versatility that's hard to equal!

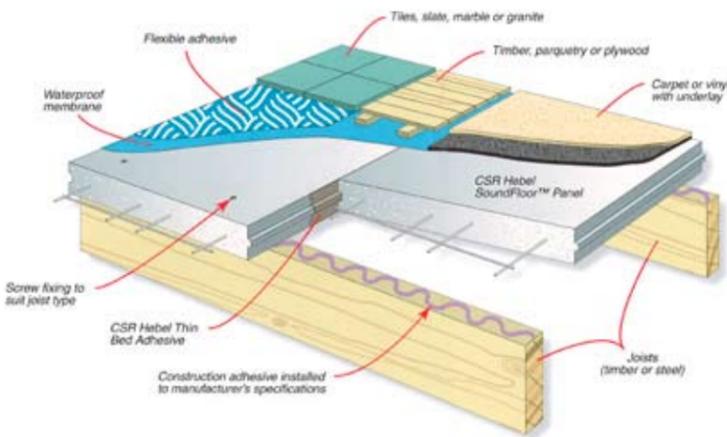
CSR Hebel SoundFloor™ is a highly versatile flooring system, which is quickly installed over engineered timber or steel joists. During installation the SoundFloor™ panels are fixed to the joists with screws and adhesive. This composite action results in greater resistance to 'bounce' making Sound Floor™ and excellent solid, stable base for surface flooring.

3. Energy Saving

CSR Hebel SoundFloor™ systems help to keep your room temperatures more stable, reducing the energy required to heat and cool your home, and thereby reducing your energy bills and improving your thermal comfort.

4. Peace & Privacy

One of the most common problems in modern two storey homes is foot noise. The unique structure of SoundFloor™ assists in reducing sound transmission, and when complemented with appropriate ceiling systems, very high sound insulation performance can be achieved.



5. Fire & Pest Resistant

CSR Hebel SoundFloor™ is not a food source for termites and is non-combustible.

6. Solid, Durable, but Light

Hebel autoclaved aerated concrete products have proven their performance throughout Australia for over 15 years and throughout Europe for more than 50 years, with just 25% the weight of conventional concrete – it remains solid and strong with a traditional concrete feel, yet lightweight.

7. Enviro-Friendly

The production of CSR Hebel uses less than 25% of the raw materials used to produce the same volume of standard concrete, yet with no toxic gasses and almost no waste substances. The energy efficiency of a CSR Hebel SoundFloor™ also helps to reduce the consumption of fossil fuels and the creation of pollution in your home.

8. A Sound Investment

CSR Hebel SoundFloor™ is not a luxury, it's a sound investment for your home. When you've finished comparing alternative materials, we're sure you'll agree, it's hard to ignore the compelling advantages of CSR Hebel SoundFloor™ and Panel Wall Systems.



SoundFloor™

turns an ordinary floor into a great floor!

PANEL WALL SYSTEMS



What is a CSR Hebel Residential Wall Panel?

CSR Hebel products are made from a non-toxic lightweight masonry called Autoclaved Aerated Concrete (AAC). The advanced process produces extremely small, finely dispersed air pockets within the material. This results in a lightweight aerated concrete panel, which is about a quarter the weight of conventional brickwork. Steel reinforcing is placed within the panels during production to provide a strong and robust construction panel ready for installation.

Installation

CSR Hebel Panel Wall Systems provide a solid, attractive and versatile external cladding for your home. The following is a short summary of the installation process:

• Foundations

A concrete slab, bearers and joists or most other systems can be used.

• Framing & Windows

Timber or steel wall and roof framing (much the same as for brick veneer or sheet cladding). Windows are installed.

• Damp-course

Appropriate damp-course/flashing (water barriers) installed to the entire perimeter of the framing to the underside of the Hebel panel.

• Tophat Battens

Horizontal steel tophats are fixed to the outside face of exterior wall framing.

• CSR Hebel Wall Panels

Panels are screw fixed to the horizontal steel tophat battens and trowelled at the vertical edges with CSR Hebel Thin Bed Adhesive.

• Exterior Surface Preparation

All screw holes are filled, all window frames and control joints (joints which allow for structural movement) are sealed against moisture.

• Exterior Coating

Your chosen texture coating and colours are applied.

Panel Sizes:

Length (mm)	Width (mm)	Thickness (mm)
1200	600	75
2400	600	75
2400	300	75
2550	600	75
2700	600	75
2700	300	75
2850	600	75
3000	600	75
2700	450	100
3000	450	100

Advantages

1. Design Freedom

CSR Hebel Residential Panel Wall System allows you to capture your inner architectural flare, creating a modern, comfortable – and most importantly – a practical home to suit the way you live.

2. Enviro-Friendly

CSR Hebel requires less raw material – just one third the materials used for clay bricks and a quarter of that needed to produce conventional concrete. Even the steam generated from production is recycled.

3. Heating and Cooling

The efficient insulating properties of CSR Hebel materials mean that your home will require less energy for heating and cooling. CSR Hebel Panel Wall System has almost twice the thermal performance of standard brick veneer.

4. Peace & Quiet

CSR Hebel Panel Wall systems can help you create a tranquil retreat from the hustle and bustle of the outside world. CSR Hebel has proven to be effective against low frequency sounds.

5. Fire & Pest Resistant

CSR Hebel Panels are non-combustible and provide a three-hour fire resistance rating, three times the Building Code of Australia (June 2004) requirement.

6. Solid Durability

It has the reassuring feel of traditional masonry, with the added strength, durability and security provided by the reinforcing steel in every CSR Hebel Panel.

7. Installation Benefits

In terms of wall area, one panel is equivalent to laying about 72 bricks. This makes it considerably easier and faster to install, they are also remarkably to cut, drill, rout and even shape using conventional tools.

8. A Great Choice

When you choose CSR Hebel Panel Wall Systems for your home, you not only benefit from the faster and easier construction methods, while your budget will benefit because your house will gain more internal living space and will be a stand out home in your suburb.

