FACTS ABOUT HEBEL

- Hebel is the name of the autoclaved aerated concrete (AAC) developed, manufactured and marketed by CSR Building Products (CSR) as the exclusive licensee of Xella for Australia and New Zealand.
- Hebel is also the name used of the business unit of CSR responsible for Hebel products and systems – also referred to as 'CSR Hebel'.
- 3. CSR is Australia's only manufacturer of AAC with 25 years' experience delivering quality Hebel products.
- 4. Hebel AAC is a high performing building material that is strong, solid, lightweight compared to other masonry products, eco-friendly, non-combustible, fire and termite resistant with good acoustic performance values.
- 5. Produced in block and panel form, Hebel AAC panels are reinforced with corrosion protected steel mesh for strength, robustness and durability.
- 6. Hebel products and systems have been rigorously tested for performance and are well proven in the market as fast and efficient ways to construct quality buildings and structures such as walls and floors, loadbearing and non-loadbearing.
- 7. CSR Hebel provides quality technical support to assist in the design and construction of projects as needed.
- 8. Applications for Hebel products extend right across residential, commercial, industrial, civil and utilities construction with a wide range of product types and sizes available as stock, made-to-length or custom made.
- 9. All Hebel AAC reinforced panel products are rigorously tested to ensure they comply with the Australian Standard for Reinforced Autoclaved Aerated Concrete (AAC), AS 5146. AS 5146 was referenced in the Building Code of Australia in May 2016 giving the following AAC construction systems Deemed-to-Satisfy (DTS) status:

• Houses and Low Rise 75mm AAC External Walls

• Low Rise 75mm AAC Intertenancy / Party Walls

• 75mm AAC Floors

• 75mm AAC High Rise Façade Walls

• 150mm-300mm AAC Floors

WHAT IS AAC?

Autoclaved aerated concrete (AAC) is a solid yet lightweight building material that's widely used in construction throughout the world. The technology to manufacture AAC was developed in Scandinavia over 70 years ago.

In the AAC manufacturing process water and readily available dry ingredients – sand, lime and cement – are mixed with an expansion agent to form a semi-liquid mix called slurry which is poured into a mould. If panels are being produced then steel mesh reinforcement will be appropriately placed in the mould before the slurry pour.

Chemical reactions occur between the ingredients causing hydrogen to form, which in turn causes the slurry to rise. This is called the pre-curing stage. The hydrogen gas then dissipates leaving extremely small, finely dispersed air spaces. This is the essence of why AAC is much lighter than traditional concrete, yet strong and solid with excellent thermal properties.

The solid but still soft mix is separated from the mould and cut to form the right-sized blocks or panels for the batch. Any waste is recycled. The manufacturing process doesn't stop there however. The uncured AAC panels are 'baked' under elevated heat and steam. The blocks and panels are ready when they're hardened or cured.

Strong and solid, Hebel panels contain steel reinforcement for added strength with an anti-corrosion layer on the steel for maximum durability.

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