

## Balcony Blades

## An Engineered solution for Balcony Blades

CSR Hebel has developed a fully engineered Slim line Balcony Blade system for use in High Rise Multi-Residential Apartments.

The blade design has been refined to an overall wall thickness of 200mm. This assists in maximising the usable balcony space, as well as aligning the width with internal walls; an important design aspect where balcony blades are aligned with internal walls at sliding door junctions.

CSR Hebel blade design is fully engineered and supported by simple to read capacity tables and fixing instructions.

Hebel PowerPanel for external Balcony Blades – reduces labour, material and installation costs



Save on materials



Save on installation time



Save on labour costs



Save on waste materials





## **Key Installation Benefits**

- Slim 200mm blade thickness maximises balcony space and aligns with internal walls
- Fast and easy to construct
- Uses proprietary framing members which are readily available
- Fully engineered system with easy to read fixing instructions
- Hebel Powerpanel balcony blade panels provide solid, secure, steel-reinforced walls compared to FC sheet
- Less waste and off-cuts on site significantly reduces site waste and management costs



Lightweight yet solid, secure and durable



Hebel delivers superior environmental benefits compared to concrete

Overview of Hebel PowerPanel System for Balcony

**Blades** 

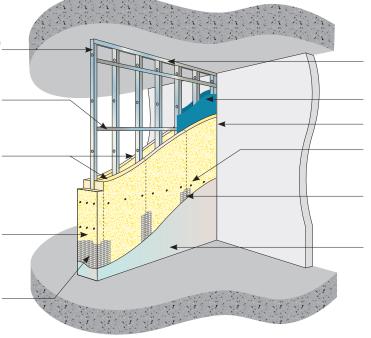
Rondo 51mm x 0.7 BMT studs @ max 300mm centres. Fixings as per Rondo specifications

Rondo noggin spaced 100mm from top & bottom and equally spaced (max 900 ctrs) fixed as per Rondos specifications

75mm Hebel Power Panel on both sides; glued edge to edge with Hebel Adhesive; and fixed to noggin with 3 of 14-10 x 100mm bugle head (max edge dist 100mm)

200mm wide Hebel nose capping fixed thru to 50mm stud and panels @ 300mm centres and Hebel adhesive

Reinforced fibreglass mesh wrapped around end capping and returns 200mm along each face



51mm x 0.7 BMT Deflection Head Track fixed underside of slab @ 600mm cnts using M10 masonry anchors

Wall Wrap

Control Joint

Fasteners:

Maximum 100mm edge distance

Reinforced fibreglass mesh 200mm wide centred over joint

Acrylic Coating System

| Fixings Tables                       |  |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|--|
| Deflection head to underside of slab | M10 Ramset Dynabolt or equivalent spaced @ max 600mm centres max. Edge distance ≥ 100mm, min. 90mm Embedment |  |  |  |  |  |
| Base track to slab                   | as per head track  |  |  |  |  |  |
| Stud to btm track                    | #10-16 Hex Head self drilling screw 1 fixing per side  |  |  |  |  |  |
| Noggin to stud                       | #10-16 Hex Head self drilling screw 1 fixing per side  |  |  |  |  |  |
| 75mm Hebel PowerPanel to noggin      | #14-10x100mm bugle head 3 per noggin per panel max edge distance 100mm                                       |  |  |  |  |  |

| Panel Height (m)                   | 2.1  | 2.4  | 2.7  | 3    | 3.3  | 3.6  | 3.9  | 4.2  | 4.5  |
|------------------------------------|------|------|------|------|------|------|------|------|------|
| Ultimate Wind Pressure (kPa)       | 9.63 | 8.43 | 7.15 | 5.79 | 4.78 | 4.02 | 3.43 | 2.95 | 2.57 |
| Serviceability Wind Pressure (kPa) | 7.88 | 6.03 | 4.48 | 3.27 | 2.23 | 1.57 | 1.14 | 0.85 | 0.65 |

## NOTES:

- Minimum Steel grade has been assumed as 250MPa
- Minimum concrete grade has been assumed 25MPa
- Maximum Masonry Anchor spacing of 600mm.
- Installation of masonry anchors to be as per manufacturers recommendations.
- Assembly of and fixings of the steel frame to be in accordance with Rondos recommendations.
- Local pressure factors must be taken into consideration (in accordance with AS/NZS1170.2) in determining serviceability wind pressure applicable to the Hebel blade walls.
- Serviceability wind pressures are based on span/240 or max 12.5mm deflection.
- The Hebel Blade Wall system has not considered cyclonic wind loading.

For more information on Hebel high rise internal walls please call **1300 369 448** or visit **www.hebel.com.au** 





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