

INFORMATION

FOR

DESIGN ENGINEERS

DISCLAIMER

The information contained in this document is intended for the use of suitably qualified and experienced engineers. This information is not intended to replace design calculations or analysis normally associated with the design and specification of buildings and their components. Dincel Construction System Pty Ltd accepts no liability for any circumstances arising from the failure of a specifier or user of any part of Dincel Construction System to obtain appropriate professional advice about its use and installation or from failure to adhere to the requirements of appropriate Standards and Codes of Practice, and relevant Building Codes.

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WHAT IS THE BENEFIT FOR THE DESIGN ENGINEER SPECIFYING DINCEL CONSTRUCTION SYSTEM (DCS)?

- **DCS reduces the cost and time of construction which results in a RETURN BUSINESS to the engineers.**
 - The cost and time reductions are the prime objectives of your customers. Repeat customers for achieving up to **43% COST SAVINGS**. Refer [Costing Analysis – download](#) for an example.
 - Load bearing walls result in simple one-way slabs which allow the use of mesh reinforcement (preferred by the industry) and 150mm thick slabs (Dincel provides acoustic certification).
 - Column-slab frame structures with infill walls are required to have minimum 200mm thick slabs (Table 5.5.2 (B), AS3600 – 2009) and mesh reinforcement is not allowed to be used (refer [Item 26 of Common Engineering Questions – download](#)) Dincel blade columns can be used without conventional column tie reinforcement.

[\(Download – Compare AAC Walls With Dincel\)](#)

[\(Download – FAQ, Answer No: 3 – WHY DINCEL IS FASTER\)](#)

[\(Download – FAQ, Answer No: 21 – System Advantage/Construction\)](#)

- **Load bearing Dincel-Walls simplify and reduce engineering design and detailing time.** One way spanning in-situ or precast flooring supported by load bearing walls are simpler to design and detail. The DINCEL DESIGN TOOL makes the wall/blade column design simpler. [Refer Item No: 27 – Common Engineering Questions \(download\)](#).
- **Eliminates engineer's liability due to wall crackings and waterproofing.**

No matter how perfect your design detailing and construction supervisions are, cracks will occur as brittle finishes do not need much movement to crack unless walls have joints at very close centres, cracking cannot be avoided. As an engineer you can experience the above noted painful experience if the building you are associated with has brittle material/finishes and/or waterproofing problems. Today's litigious construction world always looks for someone to blame. The structural engineer is usually the first candidate for this blame.

Dincel-Walls' non-brittle, ductile and waterproof polymer encapsulation offers near to perfect curing conditions, eliminates cracks, joints and waterproofing which are a potential liability for the design engineer. Unlike brittle masonry walls, Dincel-Wall behaves homogenously with concrete floor slabs. You also need to understand the following:

- Waterproofing problems due to many reasons [\(Download – Waterproof Walls\)](#).
- Structural behaviour of masonry walls when subjected to lateral loads [\(Download – The Roles of Masonry Infill Walls In An Earthquake\)](#)

The following information is provided for Engineer's use:

- Dincel Design Tool – available upon registration, please register for the Dincel Design Toolkit at <http://www.dincelconstructionssystem.com/Registration.aspx> for application form.
- Structural Design Engineering Manual – available to engineers upon registration, please register for the Dincel Design Toolkit at <http://www.dincelconstructionssystem.com/Registration.aspx>
- Download – Structural Engineering Design Certification.**
- Construction Manual – available upon registration, please register for the Dincel Design Toolkit at <http://www.dincelconstructionssystem.com/Registration.aspx>
- Download – Building Solution for Earthquake Prone Regions**
- Download – Dincel Solution for Concrete Problems and Cement Minimisation**
- Download – Common Engineering Questions.**
- Download – Why Engineers Can Omit Crack Control Steel in Dincel-Wall**
- Download – Dincel-Wall Fire Assessment.**
- Download – Waterproof Walls.**