

Omnia Slab

Omnia Slab is a reinforced Precast Concrete Slab incorporating a triangular lattice girder that is attached to a lower layer of reinforcement. The lattice girder is manufactured using high strength steel wire providing rigidity to the panel and enables it to bind easily with in-situ concrete which is poured later on site.



This latticed girder also provides support for the upper mesh reinforcement and is used as an anchor point when lifting panels into position on site.

Each panel is designed and manufactured to your specific shape requirements and structural capacity making it an extremely versatile building product.

Benefits Of Using The Omnia Slab

- Large areas can be erected quickly and safely.
- Designed to withstand heavy loading conditions.
- Excellent sound insulation and fire resistant.
- Designed to withstand exposure to weather.
- Can accommodate irregular or complex building designs.
- Integral lattice girder helps makes progressive collapse design easy.
- Soffit can be left exposed saving on additional costs for suspended ceilings.
- Dispenses with site shuttering.

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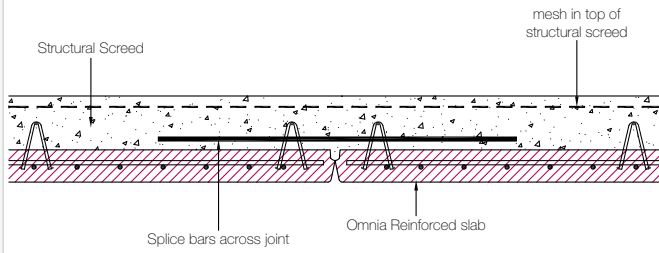
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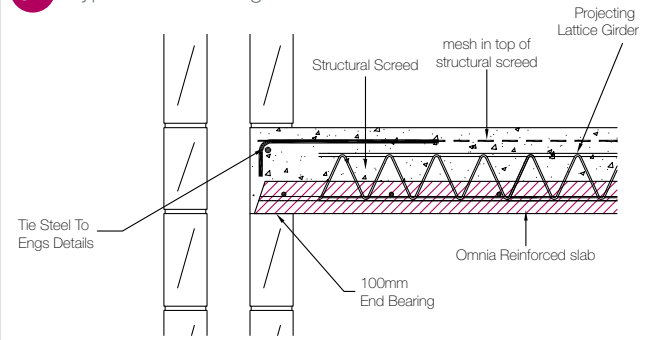
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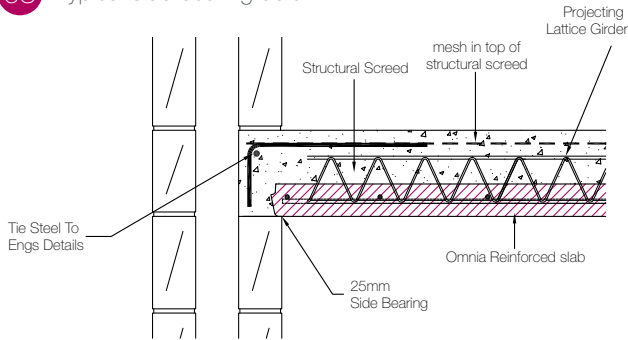
01 Typical joint at adjoining slabs.



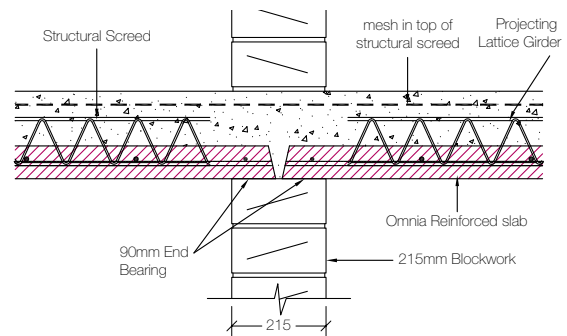
02 Typical end bearing detail.



03 Typical side bearing detail.



04 Typical end bearing detail. 215mm Internal Blockwall.



SAFE LOAD TABLE FOR FLOOD REINFORCED OMNIA SLAB

| Precast Slab Depth (mm) | Screed Depth (mm) | Total Depth (mm) | Effective Spans (m) | | | | | | | | | |
|--|-------------------|------------------|---------------------|-------|-------|-------|-------|------|------|------|----|--|
| | | | 1m | 1.5m | 2m | 2.5m | 3m | 3.5m | 4m | 4.5m | 5m | |
| Super-Imposed Unfactored Live Load kN/m² | | | | | | | | | | | | |
| 50 | 75 | 125 | 30.00 | 25.00 | 5.00 | 2.50 | | | | | | |
| 60 | 75 | 135 | 35.00 | 30.00 | 10.00 | 5.00 | 2.00 | | | | | |
| 70 | 75 | 145 | 40.00 | 35.00 | 15.00 | 10.00 | 5.00 | 1.50 | | | | |
| 80 | 75 | 155 | 40.00 | 35.00 | 17.00 | 12.00 | 7.50 | 3.00 | 1.50 | | | |
| 90 | 75 | 165 | 40.00 | 35.00 | 20.00 | 15.00 | 10.00 | 5.00 | 2.50 | 1.00 | | |
| 100 | 75 | 175 | 40.00 | 35.00 | 25.00 | 18.00 | 12.00 | 7.50 | 3.50 | 1.50 | 1 | |

Flood Reinforced Omnia Slab Unpropped
 Flood Reinforced Omnia Slab Propped in temporary condition.

Notes

1. Values are based on 25mm cover to the rebar.
2. Limitations of span/depth = 38 for occupancy comfort.
3. The Table shows typically supported effective spans in metres. Where continuity is available over the supports the effective span can be increased from the values shown (Consult the Flood Flooring Technical Office).
4. These values are based on a Flood Omnia system which requires structural propping in some temporary conditions.
5. Values shown are for guidance. Consult Flood Flooring Technical office regarding specific design queries.
6. Void formers can also be incorporated into the manufacturing process to reduce the self weight of deeper slabs/structural screeds.