When to load?
Loading should only be placed on the concrete slab after its initial setting period. As a rule of thumb:

- 7 days after casting: 75% of design compressive strength is achieved; and
- 28 days after casting 100% of design compressive strength is achieved.

No load should be applied prematurely unless verified by a structural engineer beforehand.

How much to load?

- The **dead load** encompasses all loads that don’t change over time. (e.g. Permanent building components.)
- **Live loads** are loads that can change over time. (e.g. vehicles, materials or persons on the slab.)
- The **service load** is equivalent to the loading that can be supported by a concrete slab as specified by an engineer.

A rough calculation can be used as a rough guide to determine the number of pallets:

![Concrete Masonry Block 20.01](image)

<table>
<thead>
<tr>
<th>Dimensions: 390x190x190mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight: 16kg</td>
</tr>
<tr>
<td>No. per pallet: 108</td>
</tr>
<tr>
<td>Loaded Pallet Weight: 1650kg</td>
</tr>
</tbody>
</table>

![Concrete Masonry Block 15.01](image)

<table>
<thead>
<tr>
<th>Dimensions: 390x140x190mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight: 12kg</td>
</tr>
<tr>
<td>No. per pallet: 144</td>
</tr>
<tr>
<td>Loaded Pallet Weight: 1750kg</td>
</tr>
</tbody>
</table>

Note: Some Australian and international producers may elect to use ISO dimensioned palette sizes instead – please clarify with your manufacturer for more information.
LOADING ONTO SLABS IN MULTI-STOREY BUILDINGS

Industry best practice advises management to place loads on lower floors in multi-storey buildings. This practice improves building stability, site tidiness, reduces electrical dangers and accommodates machinery limitations.

Consult: TBA/CMAA Overhead Power-lines safety factsheet for electrical safety information.

VEHICLES AND MACHINERY

Vehicle Loaded Cranes

Delivery of Masonry will often require the use of cranes. It is crucial that personnel on site ensure:
- The crane set up is following safe operating procedures set out by Safe Work Australia’s General Guide for Cranes.
- The load is rigged correctly by a qualified rigger and licenced doggers when required.

Consult: Safe Work Australia’s High-Risk Work Licensing for Vehicle Loading Cranes Information Sheet for more information.

Industrial Lift Trucks

Industrial lift trucks (e.g. forklifts) are used for unloading and moving masonry during and after deliveries around the site. Safe operation of machinery requires:
- A risk assessment of the activity be performed beforehand, and risks identified are addressed.
- The operator follows the safe operating procedures for industrial lift trucks.


Trucks

Most masonry deliveries will be transported to the site using a truck. Safe operating procedures for trucks include:
- Delivery drivers performing a pre-delivery risk assessment.
- The erection of a designated loading/unloading zone to prevent trucks from interfering with other activities on site.

Consult: TBA/CMAA Transport safety factsheet for more safe loading and unloading procedures.

REFERENCES