

## CONCRETE BLOCK CONSTRUCTION & DETAILING

### Responsibility

All work in this section shall be the responsibility of the *Main Contractor*. All concrete block construction must be in accordance with the project drawings, specifications and block manufactures technical data. The *Main Contractor* is to ensure they are fully conversant with all **Sto** standard installation and fixing details (**Sto** ACAD details [www.sto.co.nz](http://www.sto.co.nz)) and their responsibilities before the block works commences. The *Main Contractor* is also responsible for all liaison with the various sub contractors to ensure that all items or elements affecting the **Sto Plaster System** are correctly detailed before installing the **StoArmat Miral Plaster System**.

### Concrete Blocks

The concrete block installation including reinforcement and concrete infill shall be made in strict accordance with the project drawings, specifications and the block manufactures technical documentation. In particular the blocks shall be laid true in both vertical and horizontal planes with all joinery and service openings correctly formed and waterproofed in accordance with **Sto** details. Control joints must be installed as per the projects structural drawings or manufactures details to manage shrinkage and structural stress. The ground floor slab to block junction should be rebated to provide waterproofing and inter-storey floors should be poured within the block structure leaving the outer block shell to continue to avoid cracking. At least 28 days should be allowed after concrete placement - as per **AS/NZS 2311:2000** for curing and stabilization to take place before commencing the **StoArmat Miral Plaster System**. All maximum tolerances shall be in strict accordance with NZS4210:2001 2.7.1.4, Table 2.2 IE: no more than 3mm surface alignment deviation over a 1200mm radius. The concrete blocks shall be clean, dry and free of all surface contaminants before plastering and the Main Contractor is to ensure that any area or details adjacent to the **Sto Plaster System** have been adequately waterproofed or flashed to avoid any water migration behind the plaster system.

### Construction Block Construction

- A rebate is recommended in foundations for residential projects unless an exterior insulation system is detailed.
- Joinery openings are to be formed using rebated blocks & sill blocks (*cut sill flush as required*).
- Blocks should be covered on site and laid dry.
- Vertical control joints are placed at 6.0M max.centres - refer project documentation and NZS4229 for placement and detailing.
- Mortar to be 12.5MPa min.tool smooth and compressed as per NZS4210
- Manufacturers bagged mortar is recommended to meet the specifications
- Mortar to full depth of webbing up to 20MM thick in first course and then 10MM +/- 3mm
- Washout ports required to remove mortar droppings from foundation
- Ensure there is no impediment to grout flow, remove ends or biscuits to prevent air pockets
- Stack bonded, column blocks and insulation block voids may need to be grouted by the block layer during laying process to ensure a solid fill is achieved
- Blocks should be filled in 1.2 lifts and mechanically vibrated to avoid air voids and subsequence efflorescence
- Sill block should be filled by leaving one sill block out to avoid air entrapment
- Remove any grout slurry from block faces before it sets

<b>STO CONCRETE BLOCK</b>	<b>STO CONCRETE BLOCK</b>	<b>CB 004</b>
	<b>CONSTRUCTION &amp; DETAILING</b>	<b>2014</b>