

VERTICORE – BUILDING STANDARDS

1. CONSTRUCTION & APPLICATION

- Verticore is suitable for use in single-storey or two-storey house construction within the geometric limits of AS4055: 1992, "Wind Loads for Housing".
- Verticore can be used for internal walls, external walls and for cavity walls in full brick construction.
- Verticore is suitable for use in areas where the design wind category as stipulated in AS4055: 1992 is N1, N2 or N3.
- All internal surfaces should be hard plastered or cement rendered.
- Verticore meets the requirements of AS/NZS4455: 1997, "Masonry Units and Segmental Pavers".
- All construction should comply generally with AS3700: 2001 "Masonry Structures".

2. WALL SIZES

- The maximum height of internal walls is 2.7m. See Building Code of Australia (BCA) 2005 Vol. 2.
- The lengths of external walls up to 2.7m high must not be greater than the following:

Wind Category	Walls with four sides supported and no opening	Walls with four sides supported and an opening	Walls with a free end or control joint
N1	9.8m	4.3m	4.9m
N2	7.3m	3.1m	3.7m
N3	5.4m	1.7m	2.7m

3. JOINTS

- All corners must have filled perpend; Gable walls and party walls must have filled perpend.
- Top and bottom courses must have filled perpend; Walls over windows and doors must have filled perpend.
- All perpend joints should be filled when sound and fire ratings are a consideration.
- The widths of any unfilled perpend must not be greater than 12mm but may be zero.

4. WALL TIES

All wall ties shall meet the requirements of AS2699.1: 2000, "Built-in Components for Masonry Construction - Wall ties" and conform in anchorage and embedment to the requirements of AS3700: 2001. Wall ties for cavity walls should be spaced as follows:

- For N1 wind category, light-duty ties at 450mm horizontally and 600mm vertically.
- For N2 wind category, light duty ties at 300mm horizontally and 600mm vertically or medium duty ties at 600mm horizontally and 600mm vertically.
- For N3 wind category, medium duty ties at 450mm horizontally and 600mm vertically.

Austral Bricks recommends intersections must be keyed with units engaged every second course. If ties are used as an alternative they must be medium duty wall ties every second course and the gaps must be filled with mortar.

5. MORTAR

Mortar must comply with AS3700: 2001 and the following:

- M2 (1:2:9) or better for internal walls above the damp-proof course and fully enclosed within the building.

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- M3 (1:1:6) or better for external walls, including below the damp-proof course in non-aggressive soils and in marine environments more than 100mm from a non-surf coast and more than 1km from a surf coast.
 - For other locations, as required by AS3700: 2001, Tables 12.1 and 12.2.

6. CHASING

- Chasing should be kept to a minimum where walls are chased on both sides, the chases must not be made in the same units.

Austral Bricks recommends that a Structural Engineer be consulted before construction of any building commences.