

VERTICORE

building standards

1. Construction and application

- Verticore is suitable for use in single-storey or the uppermost story of multi-storey house construction within the geometric limits of AS 4055, “Wind Loads for Housing”.
- Verticore can be used for internal walls and for cavity walls in full brick construction.
- Verticore is suitable for use in areas where the design wind category as stipulated in AS 4055 is N1, N2 or N3.
- All internal surfaces should be hard plastered or cement rendered.
- Verticore meets the requirements of AS/NZS 4455.1, “Masonry units, pavers, flags and segmental retaining wall units - Masonry units”
- All construction should comply with AS3700, “Masonry Structures”.

2. Wall sizes

- The maximum height of internal walls is 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 where 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, “Built-in Components for Masonry Construction - Wall ties” and conform in anchorage and embedment to the requirements of AS3700. Wall ties for cavity walls should be spaced as follows:

- For N1 wind category, light-duty ties at 300mm 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.

Wall ties must meet the durability requirements of AS 3700 and have the following durability classification:

- For marine environments R3 classification
- For severe marine environments R4 classification

Austral Bricks recommends light duty ties at 300mm horizontally and 600mm vertically or 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 and the following:

- M2 (1:2:9) or better for internal walls above the damp-proof course and fully enclosed within the building.
- 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 100m from a non-surf coast and more than 1km from a surf coast.
- For other locations, as required by AS3700.

6. Chasing

- Chasing should not exceed 22mm in depth and where walls chased on both sides, the chases must not be made in the same units.

7. Lining

- Walls with unfilled perpend joints, within the limitations of section 3 above, must be cement rendered or hardset plastered.
- Walls to be lined with sheet plasterboard must have all perpend joints filled.

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