

DINCEL STRUCTURAL WALLING

AS3660 – TERMITE BARRIER

SECTION 4 DEEMED-TO-SATISFY REQUIREMENTS — CONCRETE SLABS

4.1 SCOPE OF SECTION

This Section sets out the deemed-to-satisfy requirements that meet the performance criteria of Section 2, when using concrete slabs as part of a termite barrier system, to deter termites from gaining concealed access to a building.

4.2 GENERAL

This Section shall be read in conjunction with the requirements of Section 3.

4.3 SLAB-ON-GROUND

4.3.1 General

A slab-on-ground shall be designed and constructed either in accordance with AS 2870 or AS 3600. If constructed in accordance with AS 3600, due regard shall be given to minimizing shrinkage cracking. Any joints and penetrations shall be treated in accordance with Clause 4.3.2, and the edge shall be exposed in accordance with Clause 4.4 or have another suitable barrier installed in accordance with Sections 6, 7 or 8, as applicable.

NOTES:

- 1 Compacting and curing the concrete will enhance the performance of the slab both structurally and in its ability to resist penetration by termites. Thoroughly compacting concrete ensures that maximum density and strength is achieved by eliminating voids. It also provides clean, sharp edges and maximum bond to the reinforcement. For edge beams and footings and in locations where a smooth slab edge is required, compaction is recommended.
- 2 Curing ensures that the concrete will achieve its potential strength and reduce the likelihood of shrinkage and cracking from occurring. Curing is the retention of moisture in the concrete to allow hydration of the cement.

4.3.2 Joints and penetrations

4.3.2.1 Vertical construction joints

Vertical construction joints, regardless of whether the reinforcement is continuous through the joint or not, shall have suitable barriers installed in accordance with Sections 6, 7 or 8, as applicable.

4.3.2.2 Footing/slab construction joints

Where edge beams, stiffening beams, footing beams and retaining walls form part of the slab construction, and they are —

- (a) placed as an integral component of the slab; or
- (b) tied together in accordance with AS 2870, and the surface of the footing is cleaned prior to placing the slab; and
- (c) the concrete is compacted to eliminate voids at the joint,

then termite treatment of the joint is not required (see Figure 4.1).

In all other cases, joints at the junction/support of the slab and the horizontal joint shall have suitable barriers installed in accordance with Sections 6, 7 or 8, as applicable (see also Figure 4.2).

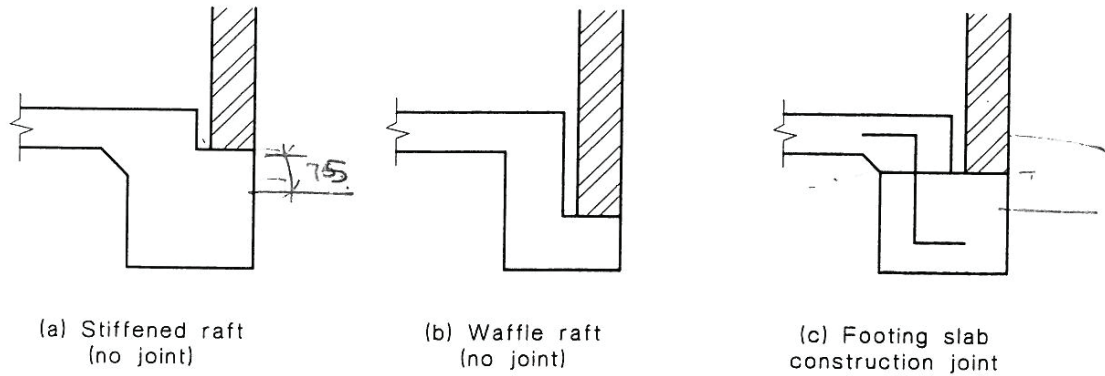


FIGURE 4.1 EXAMPLES OF FOOTING SYSTEMS REQUIRING NO JOINT TREATMENT

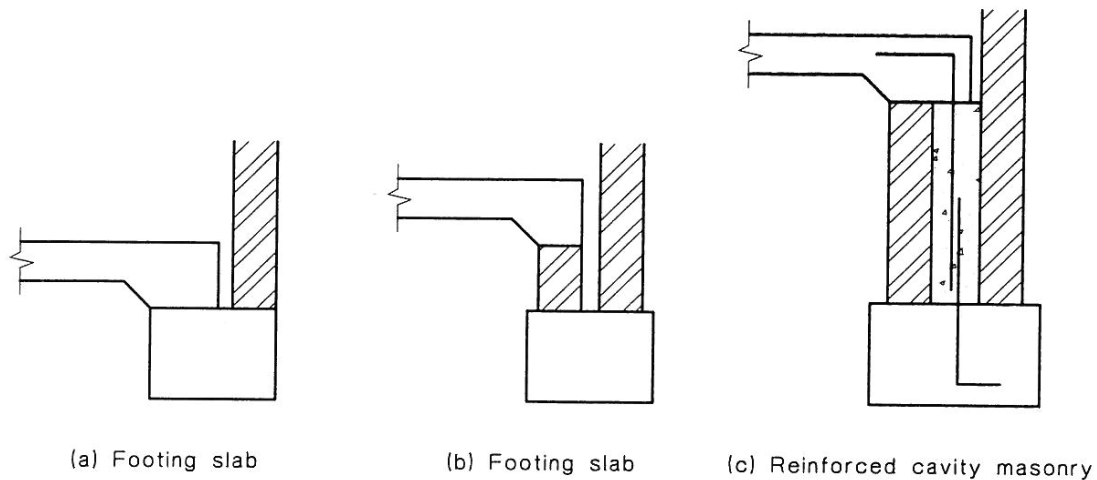


FIGURE 4.2 EXAMPLES OF FOOTING SYSTEMS REQUIRING JOINT TREATMENT

4.3.2.3 Unplanned construction joints (cold joints)

Where unplanned construction joints occur in the slab during placing, for example as a result of plant breakdown or delays in concrete supply, the joints shall have suitable barriers installed in accordance with Sections 6, 7 or 8, as applicable.

4.3.2.4 Isolation, sawn or other movement control joints

Where isolation, sawn or other movement control joints occur in the slab, such joints shall have suitable barriers installed in accordance with Sections 6, 7 or 8, as applicable.

4.3.2.5 Penetrations

Penetrations through slabs, e.g. service pipes, shall have suitable barriers installed in accordance with Sections 6, 7 or 8, as applicable.

Additionally, service pipes set into the cavity adjacent to infill slabs shall have suitable barriers installed in accordance with Sections 6, 7 or 8, as applicable, integrated effectively with the slab or perimeter barrier.