INVERELL
SHIRE COUNCIL

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DEVELOPMENT SERVICES BULLETIN

Changes to the Residential Slabs and Footings Standards

Australian Standard 2870 - 2011 is now linked to AS 3500 and part of the Plumbing Code. AS 2870 - 2011 is the most radical change to interpreting soils and house engineering we have seen since 1986 and several trades will need to update their knowledge.

Here is how these changes will affect you...

Section 5 - Detailing Requirements

5.6.4 Plumbing Requirements

Buildings on highly or extremely reactive sites shall be provided with a system of plumbing in accordance with the following:

a) Penetrations of the edge beams of a raft and perimeter strip footings shall be avoided where practicable, but where necessary shall be detailed to allow for movement. Closed-cell polyethylene lagging shall be used around all stormwater and sanitary plumbing drain pipe penetrations through footings. The lagging shall be a minimum of 20 mm thick on Class H1 sites and 40 mm thick on Class H2 and Class E sites.

   Vertical penetrations do not require lagging.

   Note: Sleeves allowing equivalent movements may be used as an alternative to the lagging.

b) Drains attached to or emerging from underneath the building shall incorporate flexible joints immediately outside the footing and commencing within 1 m of the building perimeter to accommodate a total range of differential movement in any direction equal to the estimated characteristic surface movement of the site (ys). In the absence of specific design guidance, the fittings or other devices that are provided to allow for the movement shall be set at the mid-position of their range of possible movement at the time of installation, so as to allow for movement equal to 0.5ys in any direction from the initial setting. This requirement applies to all stormwater and sanitary plumbing drains and discharge pipes.

c) On-site wastewater treatments units and associated land application areas shall be located to be minimize soil moisture increase within the foundation

d) Drainage under a slab shall be avoided where practicable.

   Notes:

   1. *Pipes may be encased in concrete or in recesses in the slab when provided with flexible joints at the exterior of the slab.*
   2. *Methods used should comply with the AS/NZS 3500 series.*

e) Cold water pipes and heated or hot water pipes shall not be installed under a slab, unless the pipes are installed within a conduit so that if the pipe leaks water it will be noticed above the slab and will not leak unnoticed under the slab.

   Notes: water service pipes installed under concrete slab should comply with the relevant requirements of AS/NZS 3500.1. Heated water services pipes installed under concrete slabs should comply with the relevant requirements of AS/NZS 3500.4.

Further Information

If you require any further information on the changes to the plumbing code please do not hesitate to contact Council's Building Surveyors.

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