



May 2004

## **Plumbing Solutions for Multi-Unit Developments (Excluding Multi Storey Developments)**

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### **GENERAL**

This Plumbing Note has been developed (and must be read) in conjunction with Australian Standards AS/NZS 3500 2003. Water Services 2003 Part 1 Section 15 and Sanitary Plumbing and Drainage 2003 Part 2 Section 12. This note sets out the requirements for the design, construction, and installation, of Multi-Unit Developments of 20 or more residential buildings, up to 3 storeys in height, on a single block and section, this note also applies to 3 or more residential units (sewer installations). Multi Storey Developments greater than 3 storeys are not part of this Plumbing Solution.

### **BACKGROUND**

Before April 2004, the in-ground water plumbing pipes and sanitary drainage lines on the lease of large Multi-Unit developments, were designed to AS/NZS 3500 1996/98. These services are generally owned by the Body Corporate and in most cases are independent from the ACTEW Corporation utility mains. Applying the requirements of AS/NZS 3500 1996/98 to the main sewer and water lines may result in a lower standard of service to consumers.

### **MULTI-UNIT DEVELOPMENTS 20 UNIT OR MORE**

#### **Internal sanitary drains**

In developments of 20 units or more, the common sanitary drainage pipe, main sewer lines (from the point of connection to each individual unit allotment inspection shaft) may be constructed to the Sewerage Code of Australia or AS/NZS 3500 2003. All sanitary drainage work within each individual allotment or unit entitlement must comply with AS/NZS 3500 2003.

#### **Internal sanitary drains for all developments of 3 or more units must also include:**

- Three or more units must have provision for an inspection shaft, overflow relief gully and upstream venting at each unit allotment or entitlement constructed in accordance with the new provisions of AS/NZS 3500 2003. Sewer drainage from each individual unit must flow to the sewer main line via the inspection shaft installed at the unit entitlement boundary. (Inspection shaft complying with PN 3)
- The unit complex located on an individual block and section requires one complying overflow relief gully (see AS/NZS 3500 clause 4.6.6), provided this provision has been complied with all additional gullies at each individual unit may be installed with a lesser separation distance of 100mm. (see AS/NZS 3500 clause 4.6.6.5 notes)
- Sewer mains of 150mm or greater, must comply with Plumbing note 19 "Requirements for on-site sewer manholes". Maintenance shafts on main lines must provide provision for drain cleaning.
- At each individual unit an open upstream vent must be installed.

### **Internal water supply**

In developments of 20 units or more, the common plumbing distribution system pipes (from the water meter to the point of connection to each individual unit) may be constructed to the Water Reticulation Code of Australia or AS/NZS AS3500 2003. All plumbing works within each individual allotment or unit entitlement must comply with AS/NZS 3500 2003.

**However, should the Developer elect to design or install the whole complex to AS/NZS 3500 2003 for units of 20 or more the following additional water requirements will apply;**

- **Division of the Development.**  
The development shall be divided into zones where the number of allotments within a zone affected by any shut-off at the main lines of the water service shall not exceed 40. The dividing or isolation valves that are fitted to the main line itself shall be at intervals not exceeding 300 meters.
- **Ring Mains and Flushing Points.**  
To maintain circulation of water, the main lines of the water service shall form a ring main or be provided, at surface level, with flushing points at any dead end of the main line of the water service.
- **Fire Services.**  
Fire services shall be provided in accordance with the fire authority requirements. External fire hydrants shall be located in accordance with AS 2419.1.

### **MULTI-UNIT DEVELOPMENTS 3 TO 19 (additional requirements)**

Developments of 3 to 19 units on a single block, the common water supply and sewerage services **must** comply with AS/NZS 3500 2003. In unit developments of 3 or more residential buildings on a single block, provision shall be made for:

- A sanitary drain inspection shaft located at the unit entitlement boundary or as close as possible. (Complying with Plumbing Note 3).
- One complying Overflow relief gully AS/NZS 3500 clause 4.6.6.
- Additional overflow relief for sewerage surcharge for each unit, with a minimum 100mm separation for all additional overflow relief gullies.
- An open air upstream vent to each unit.

### **MULTI-UNIT DEVELOPMENTS UTILITY REQUIREMENTS**

ActewAGL generally permit only one water connection to the ACTEW Corporation network mains. Application must be made to ActewAGL for all new, additional, relocated or modified water connections. The location and structure of meter installations must comply with ACTEW standards.

ActewAGL generally permit only one sewerage connection to the ACTEW Corporation network mains. Application must be made to ActewAGL for all new, relocated or modified sewer connections.

### **Further information**

For further information please phone (02) 6207 6505 or 6207 6261. BEPCON's Internet address is <http://www.actpla.act.gov.au/bepcon> The ACT Government's Internet address is <http://www.act.gov.au>