

Selecting the correct meter size Factsheet

Water meter requirements

To help ensure accurate flows are recorded and customers don't pay more than they need to during the life of their water meters, Urban Utilities requires the correct sized meter to be installed during construction. The meter size is to be identified when lodging a Non-standard Water Application and the meter size will be conditioned in the Water Approval Decision Notice; this is to ensure the correct sized meter will be purchased and installed. In summary, the meter size must:

- be able to manage expected flow (further information below), and
- be the smallest sized meter (further information below), and
- be sized independently of the service pipe, and
- meet the Urban Utilities Metering Guidelines, and
- comply with the South East Queensland Water and Sewerage Design and Construction Code (SEQ Code).

Compliant methods of calculating Peak Design Flow Rate for dwellings

Compliant calculation method:

- use the Probable Simultaneous Demand method per AS/NZS 3500.1 Clause 3.2.3.
- two options for determining demand:
 - olookup values in Table 3.2.3.
 - ouse the formula in Note 1 of Table 3.2.3.

Example: use AS3500.1 Appendix C method to size supply piping in residential developments.

Note: for **non-dwelling** components (e.g., commercial fixtures), calculate peak flow using **first-principles engineering methods**.

Compliant methods of sizing Property Service Meters

As per section 3.5 of the <u>Urban Utilities Metering Guidelines</u>, key requirements are:

- **independent sizing:** meter sizing is independent of the service pipe size
- **pipe-to-meter sizing compatibility**: upstream (utility-side) and downstream (plumbing-side) pipework may be **larger** than the meter; use appropriate reducers as needed
- **meter selection criteria**: select the smallest meter with a Q3 value (R49-1 standard) that exceeds the calculated peak design flow rate. Refer to:
 - Table 8 <u>Urban Utilities Metering Guidelines</u>: Dwelling count vs. meter size
 - o Table 9 Urban Utilities Metering Guidelines: Peak design flow rate vs. meter size

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Note: manufacturer/supplier data sheets take precedence over Tables 8 and 9.