

Thames Water – Multi occupancy building meter options

V3 – March 2019

Thames Water Policy.

Thames Water (TW) have been deliberating their meter policy for residential apartments over many years.

Finally, TW have decided on a strategy going forward which revolves around the use of smart meters. There is a short transition window between current practice, where meters are sometimes located in the riser and sometimes in the apartment, to smart meters always being located in riser cupboards (albeit some exceptions with refurbishments or small blocks of flats).

TW are also looking at the size of meter specified as oversized meters can lead to inaccurate usage and billing and may not be able to detect smaller leaks such as faulty toilet cisterns.

Strategies for meters in apartments:

Current policy allows for meters in risers or within apartments. However the issues facing TW for accessing meters inside apartments are:

- 1) Inconvenience and disruption for homeowners
- 2) Unable to access 25% of meters inside apartments
- 3) 8x higher costs to service and 5x greater effort in time and resource

TW therefore propose all large new build apartment blocks should place meters in communally accessible locations.

Technical requirements:

Developers and architects are to allow sufficient space to install meters and associated equipment in communally accessible riser cupboards. At present TW report that only 13% of new meters are fitted inside apartments. TW are targeting the change as most projects already meet their criteria.

Types of meters:

Dumb/Manual

Meters are read manually by an operative who then enters data manually into TW's billing system. Usually one read is taken every 6 months.

Smart-capable

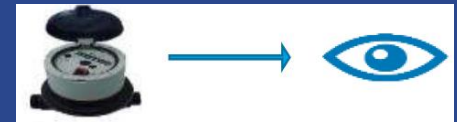
Automatic Meter Reading (AMR) – Readings are taken by driving or walking close to the meter and picking up a signal that is emitted from it.

Smart

Advanced Metering Infrastructure (AMI) – Meters automatically send signals via mobile mast technology. Data is read hourly/daily and fed into billing systems. Rollout is in London initially.

Types of Meter

Dumb/Manual



Smart-capable



Smart



Meter Sizes

TW propose that 15mm meters are fitted in all domestic properties

15mm meters have a 95% accuracy at flow rates down to 6.25l/hr

20mm meters have a 95% accuracy at flow rates down to 10l/hr

TW experiments and experience of installing over 1 million 15mm meters is they are sufficient for almost all domestic properties



**To find out more
speak to one of our
Utility Consultants:
01403 740240**

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Meter size issues:

The industry still runs on British Standard loading units which will still be used, however industry research projects suggest this standard needs updating and there is a project to do this (LUNA).

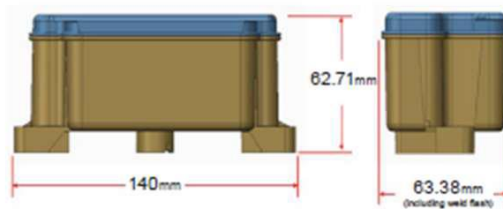
TW encourage developers to consider using 15mm meters instead of the 20mm and above specified currently.

Meters:

Sensus 640 meters

TW's current meter supplier is Sensus and they provide the 640 in-line or concentric versions. Concentric meters will no longer be supplied and only in-line meters will be used, making the 'Tenant Valve Assembly' for concentric meters no longer required.

The Sensus 640 meter has a separate LCE (Local Communication Equipment) unit and space needs to be allowed for this. It has to be located within 2m of the meter, fitted to a permanent surface (not the pipework) and not adjacent to any metal cabinet.



Sensus iPERL meter

TW will be changing meters from the 640 to the iPERL.

From April 2020 these will be available in 15, 20, 25 and 40mm models for internal use in a riser cupboard.

These have the LCE built into the meter so additional space is no longer required. They also have less pressure drop across the meter, silent operation and fit the same pipework as the current in-line meter.



Please see the [Thames Water – Metering Policy 2019](#) document on our [website](#) for more information.