

Irish Water Self Lay Quality Assurance

Toolbox Talk 8 of 8: Watermain Fittings

Step 1 – Before You Start

- Ensure safety is considered during the planning and execution of the works. If working on behalf of Irish Water, adhere to Irish Water's HSQE requirements.
- All operatives should complete Water Hygiene Training and adhere to the requirements.
- Materials should be in accordance with the Irish Water Codes of Practice (CoP), and should have CE marking.
- All equipment should be in good working order and, where applicable, have a relevant calibration certificate and CE marking.
- All workers should be familiar with and adhere to the approved layout and long section drawings. If any changes are required, consult with Irish Water before doing so.
- Before installation of any water or wastewater infrastructure works refer to Irish Water's Codes of Practice and Standard Details which are available, along with the full library of Quality Assurance Toolbox Talks, on the Irish Water website water.ie/connections/
- Refer to Toolbox Talk 2 for information on chamber construction and marker posts.
- Maintain required separation distances in all directions from all utility services pipework.

Step 3 – Scour Valves

- Scour valves are to be located off line from the water main in a separate valve chamber. Refer STD-W-30, 30A & 30B.
- The scour take-off from the water main shall be provided by a flanged tee piece fitting with a level invert outlet of appropriate size.
- The connection pipe between tee piece at the take-off point on the water main and the scour valve, as well as between the scour valve and the scour chamber, shall be of ductile iron material.
- Each specific scour valve location will require the approval of Irish Water and the relevant Local Authority.

Step 4 – Air Valves

- Air valves are provided at localised high points, and can be either on-line or off-line. Refer STD-W-20 to 23.
- Service connections are not to be installed within 2m from air valves.



Step 2 – Sluice Valves

- A three-way sluice valve arrangement shall be provided at all water main junctions, distance pieces may be required to achieve adequate separation. Refer to STD-W-14 & 15.
- Sluice valves shall be double flanged with ductile iron resilient seal gate valves.
- Valves shall be fitted to an appropriate dismantling joint.
- Distance from top of spindle to top of cover/finished ground level is to be 250mm to 350mm. Extension spindles may be used to achieve this.
- Sluice valves shall be anti-clockwise closing.



Document No.: IW-AMT-CDS-GL-008
Revision No.: 1.00

Effective Date: 29/10/20

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Step 5 – Fire Hydrants

- Fire Hydrants can be either on-line or off-line. Refer STD-W-16 to 19.
- The outlet type shall be confirmed with the Fire Authority prior to commencement of the works. The outlet shall be provided with a cap and iron chain.
- Distance from top of spindle to top of cover/finished ground level is to be 250mm to 350mm, riser pieces for Hydrants may be required.



Step 7 – Meters

- Meters are installed by Irish Water. Refer to water CoP Section 3.15 for details.
- Meter Chambers are to be provided by the developers to the required dimensions depending on the size of the meter – refer to STD-W-26 & 26A to 26F.
- Meter Chambers are to be located in a non-trafficked area where possible.
- Kiosks are required for all meters except mechanical meters located in a non-trafficked area. Refer to water CoP Section 3.15.4.



Step 6 – Boundary Boxes

- Refer to STD-W-03 for Boundary Box (BB) details.
- Position BBs on public side and avoid vehicle crossing points where possible.
- Set BBs plumb, founded on a 100mm deep C12/15 concrete base.
- Service pipes are not to be bent or wrapped around BB.
- Frost plugs are required on each BB.
- Clean out the BB and ensure it is free from debris and water.
- A concrete plinth around the BB may be required to support the lid and frame.



Step 8 – Fittings

- All fittings shall be supplied in sealed bags and they shall remain in these bags until immediately prior to installation.
- All valves and fittings are to be free from damage and compliant with Irish Waters requirements.
- Check all materials prior to use. If any damaged materials are found, mark them up and discard of them.
- Wrap buried flanges with anti-corrosion tape.



Step 9 – As-Constructed Records

- Record and maintain Irish National Grid (ING) co-ordinates for each BB location and for all valves and hydrants.
- As-constructed records are to be included in the final documents which are submitted to Irish Water prior to connection.