# uponor



### **Installation manual**

## Chambers, Storm water management



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#### 1. Intended use

This document describes the installation of Uponor chamber types that are used in storm water management (storm water retention systems) to collect surface water via a grate cover and underground inlet pipes. Storm water chambers are equipped with a silt trap and possibly also a water trap.

#### 2. Always follow local regulations

This document refers to local regulations for infrastructure, listed below:

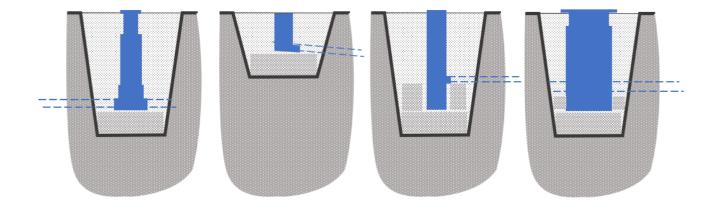
Finland: FI FIL77, Infra RYL

Sweden: AMA Anläggning

• Denmark: DS430 and DS475

Norway: NPG

#### 3. Examples of different Uponor chamber installations



#### 4. Before installation

When receiving the chambers, handle carefully to avoid damage by lifting equipment. Never unload by tipping. Check each chamber for transport damage or product flaws.

Prepare the storage site so that chambers are stored away from direct sunlight and heat, set on wooden racks. Do not stack the chambers.

#### 5. Installation

The following instructions are the main guideline for installing Uponor chambers for storm water management systems.

1. Dig the chamber pit to correct depth (non-frost depth).

The chamber height is the distance between the outlet flow line and the ground level. If the chamber has a silt trap, add the trap depth to the total chamber height. Note that storm water chambers can be installed up to 4 meters deep.



2. Add sand layer to correct chamber invert level. Compact the sand.

Make sure the base is level.

3. Assemble the chamber bottom, riser pipe and telescope from bottom up (if they are delivered in parts) and place in the pit.

Cut the riser pipe in length if necessary.



4. Install pipe connections.



5. Fill the chamber pit with gravel. Compact in layers up to the top according to local regulations.

To prevent sinking, take special care to ensure proper compaction of the backfill material beneath the pipe-chamber joints.



6. Install seal ring inside the top full groove.



- 7. Apply lubricant to the tip end of the telescopic tube and install it internally in the well pipe.
- 8. Fill up and pack to the desired level.



#### 6. After installation

Check tightness according to local regulations or specifications.

#### 7. Service

Ensure that a proper maintenance plan is in place in line with local requirements and depending on the chamber application. Typically, these are regular inspections with subsequent maintenance action, emptying the sand traps and the maintenance of other possible applications in the chamber.

#### 8. Technical data

For technical data, see Uponor chamber-specific datasheets.

#### 9. References

The following documentation is available at <u>www.uponor.com</u> for your reference.

- Uponor Infrastructure Solutions Technical Handbook
- Uponor Storm water management installation manuals for storm water system parts (pipes, fittings, road drums, tanks)

# Moving > Water

## uponor

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