INSTALLATION

To facilitate the connection of branch pipes to the main pipes, superposition of the inner medium-carrying PE-Xa pipes is recommended (as shown in the drawing).

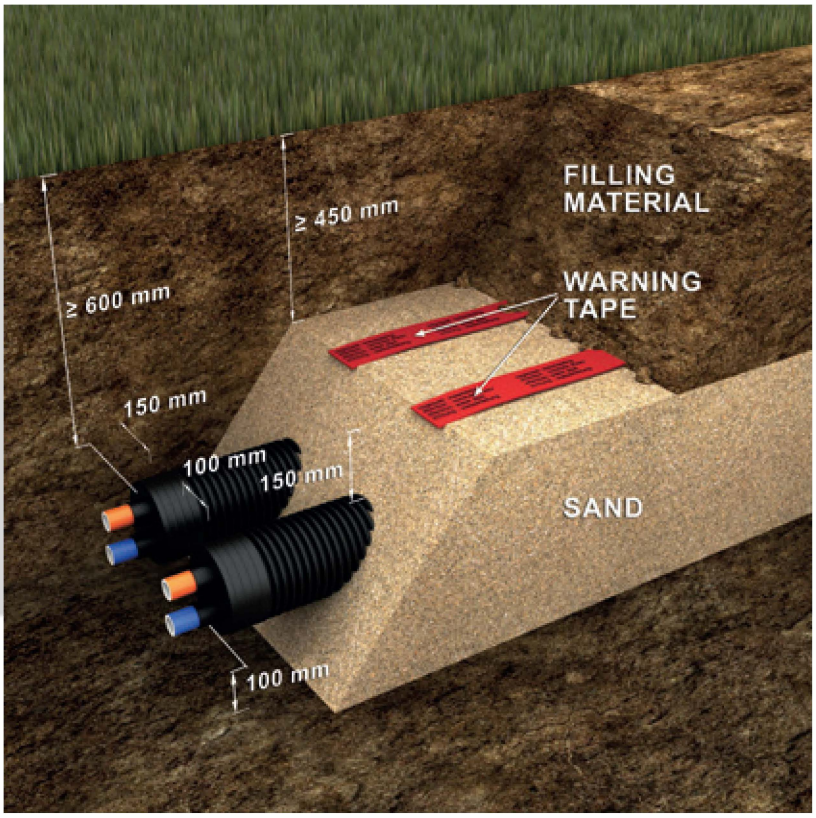
Always consider the local frost depth to determine the minimum placement depth of the pipes.

To avoid damaging the outer protective HDPE jacket, always lay the pipes in a sand bed. Backfill only after fully covering the pipes with sand, respecting the minimal layer dimensions as indicated in the drawing.

Warning tape or warning mesh positioned above the buried pipes should avoid damaging these pipes when carrying out ground works at a later stage.

To avoid potential contamination during transportation and/or installation, our pre-insulated pipes are always delivered with the medium-carrying pipes closed with plastic plugs.

All pipe systems intended for potable (drinking) water and other sanitary domestic tasks, such as washing and showering applications, should always be thoroughly rinsed before commissioning, following the locally applicable hygienic regulations and accepted practices.



For a state-of-the-art installation, the following guidelines should be respected. Failing to do so involves a genuine damage risk and automatically voids the system warranty.

- The installation of adequately anchored fix points at the system's extremities (typically at wall penetrations) is mandatory. This to secure the connected plumbing against the potential impact of the PE-Xa system's dilatation forces (thermal expansion/retraction).
- All buried pipe connections should be executed with our purpose designed PE-X connectors.
- To prevent ingress of (ground) water, the EN 15632-3 standard prescribes the usage of shrink end caps to seal the extremities of the non-bonded piping system.
- Prior to concealing, the methodical execution and documentation of the standardised pressure test of the entire system is required to determine the integrity of the buried plumbing.

PRESSURE TEST ACCORDING TO DIN 1988-2

The pressure test procedure is mandatory before backfilling over any pipes.

Prior to concealing, fill the finished pipework with water, taking care to avoid air locks. The pressure test must be conducted in two stages, starting with the preliminary test, followed by the main test.

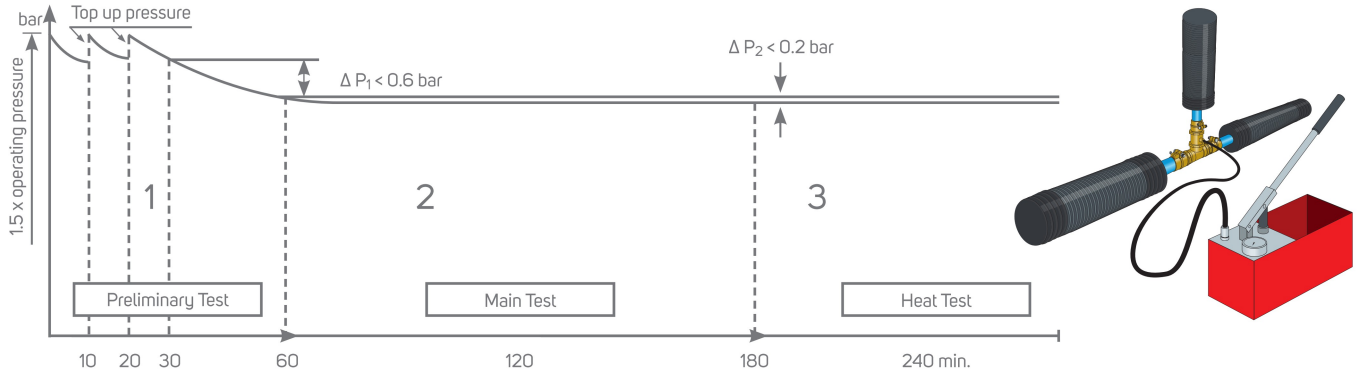
1. Preliminary test

The preliminary test involves applying a test pressure equal to 1.5 times the admissible operating pressure. This pressure must be regenerated twice within the space of 30 minutes at intervals of 10 minutes. Following a test period of another 30 minutes, the test pressure must not have fallen by more than 0.6 bar. Leakages must not occur at any points in the system being tested.

2. Main test

The main test has to be conducted immediately after the preliminary test. The test takes 2 hours. At the end of this period, the test pressure recorded after the preliminary test must not have fallen by more than 0.2 bar. Leakages must not occur at any point in the system being tested.

Leakage testing - DIN 1988-2



1	Preliminary test	Bar/psi
1.1	Operating pressure x 1.5	
1.2	After 10 min (restore 1.1)	
1.3	After 20 min (restore 1.1)	
1.4	After 30 min (restore 1.1)	
1.5	Admissible pressure drop after 60 min < 0.6 bar	

2	Main test	Bar/psi
2.1.1	Beginning (hh:mm)	:
2.1.2	End (hh:mm)	:
2.2	Test pressure	
2.3	After 120 min	
2.4	Admissible pressure drop after 120 min < 0.2 bar	

WARNING:

- Always pressure test the completed pipe-work before concealing! The conscientious execution and documentation of the standardised pressure test for the entire piping system is a warranty requirement!
- Failing to do so involves a genuine damage risk and automatically voids the system warranty.