

Frost tips

Winter temperatures always lead to frost damage to water pipes whether in or outside the buildings. How to make pipes and water meters frost-proof and what to do if a damage does occur is explained below.

Only a few precautions one may take to avoid such annoying damage:

Water meters which have not been installed yet:

Water meters (especially the wet dial multi jet type MNR) are being tested in the plant before delivery so they may contain residual quantities of test water. During transportation this water may freeze up if the outside temperature or the temperature in the transportation vehicle is below 0°C. This does not necessarily damage the water meter if you proceed as follows:

- Slowly defrost the water meter received during frosty temperatures in a frost-free environment. You may not, under no circumstances, heat up a water meter above 40°C, as the technical features may be damaged!
- If you have to install a water meter during a frosty period, you must verify if it is functional by slightly blowing some air in it (create an air pressure on the inlet side) the start-up wheel must begin to spin. If it doesn't, the water meter may be damaged and should not be mounted.

Pipes and water meters which have already been installed:

- Pipes which are on the outside or which are not in heated spaces are to be prepared in good time by shutting them off and completely draining the water before the frost is starting (close the stopcock, open the extraction point and keep the drain valve open).
- Keep the facade doors and the windows of basement and cellar spaces where the pipes are running through always closed, replace damaged windows to avoid the penetration of cold air or passage.
- Pipes which are particularly threatened by frost shall be insulated with common insulation material. Especially think about the pipes in the basement. Make sure that the insulation material remains dry.
- Water meter shafts outside the buildings have to be properly covered. Ensure an extra frost protection in the shaft using insulation material. Shut-off valves and meters must stay accessible, so leave an opening in the insulation which may easily be opened and reclosed.
- Even a building stays unused for a longer period of time: the heat shall never be entirely turned off, place the thermostatic valve at least in "frost-free" position (the star symbol *). If the heating remains off, several pipes containing water have to be emptied to avoid damage by freezing. Therefore close the main tap and open all water points.
- If it occurs that a water pipe did freeze, you shall be very careful trying to defrost it: use hot water or hot clothes, heating pads or fan heater, but never use open fires such as torches or candles one shouldn't underestimate the existing fire hazard. For safety reasons ask a plumber to assist you, mainly if you are not sure if cracks already may have occurred by the icing. If so, these damages must be repaired by a specialized company.

Legal aspects:

- · Repair works of house connections and water meters are the responsibility of the water supply companies
- For all pipes which come after the house connection or after the water meter the responsibility has to be taken by the house owner, who is also liable to take the appropriate precautions to keep the home connection and the meter frost-proof or to protect them from further damage.
- If a damage still occurs, the fixing costs are to be beard by the owner or by the real estate.

In case of damage of the house connection or water meter one shouldn't lose time: the water supply company has to be informed immediately!

