

Tämä standardi sisältää eurooppalaisen standardin EN 12828:2012+A1:2014 "Heating systems in buildings. Design for water-based heating systems" englanninkielisen tekstin.

Eurooppalainen standardi EN 12828:2012+A1:2014 on vahvistettu suomalaisiksi kansalliseksi standardiksi.

## Foreword

This document (EN 12828:2012+A1:2014) has been prepared by Technical Committee !CEN/TC 228 "Heating systems and water based cooling systems"", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2014, and conflicting national standards shall be withdrawn at the latest by October 2014.

### 4.3.2.1 Water requirements

The composition of the water used in the heating system shall be such that the function of the system components is maintained in order to guarantee a safe and economic operation.

Parameters for consideration may include:

- the chemical characteristics of the water, e.g. pH, O<sub>2</sub>, chlorine and derivatives, content of alkaline-earth- and hydrogen carbonate ions and carbonates;
- the electrical conductivity.

When necessary, supplements for water preparation, water treatment and/or anti-freeze, shall be used in accordance with the appropriate manufacturers' requirements.

Further information can be found in VDI 2035.

NOTE The following factors influence the quality of the water in the heating circuit:

- deterioration of the heat transfer on the transmission surfaces due to calcification;
- impairment of the function of the components due to sedimentation of corrosion products or component failure due to corrosion;
- oxygen insertion due to defective pressurisation or diffusion/permeation at membranes, plastic pipes, seals, etc.