



# SLOVENSKI STANDARD

## SIST EN 15161:2007

01-oktober-2007

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**Oprema, ki se uporablja za pripravo pitne vode v stavbah - Vgradnja, delovanje, vzdrževanje in popravilo**

Water conditioning equipment inside buildings - Installation, operation, maintenance and repair

Anlagen zur Behandlung von Trinkwasser innerhalb von Gebäuden - Einbau, Betrieb, Wartung und Reparatur

Équipement de traitement d'eau à l'intérieur des bâtiments - Mise en oeuvre, fonctionnement, entretien et réparation

<https://standards.iteh.ai/catalog/standards/sist/186e8b80-3f74-4c71-97cd-a81eea28401c/sist-en-15161-2007>

**Ta slovenski standard je istoveten z: EN 15161:2006**

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**ICS:**

13.060.20	Pitna voda	Drinking water
91.140.60	Sistemi za oskrbo z vodo	Water supply systems

**SIST EN 15161:2007**

**en,fr,de**

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EUROPEAN STANDARD

EN 15161

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2006

ICS 91.140.60

English Version

## Water conditioning equipment inside buildings - Installation, operation, maintenance and repair

Équipement de traitement d'eau à l'intérieur des bâtiments -  
Mise en oeuvre, fonctionnement, entretien et réparation

Anlagen zur Behandlung von Trinkwasser innerhalb von  
Gebäuden - Einbau, Betrieb, Wartung und Reparatur

This European Standard was approved by CEN on 4 November 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN 15161:2006) has been prepared by Technical Committee CEN/TC 164 "Water supply", the secretariat of which is held by AFNOR.

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 June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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**EN 15161:2006 (E)****1 Scope**

This European Standard specifies general requirements for installation (including ancillaries) methods for checking the functionality during normal operation and requirements for maintenance and repair to prevent and repair failures of water conditioning devices inside buildings for the treatment of drinking water.

This European Standard concerns devices which are permanently connected to the water distribution system in a building at the point of entry (downstream from the delivery point of the mains supply) and/or at the point of use.

NOTE Influence of the water quality on the distribution system downstream of the device is not covered by this European Standard but is covered by documentation for specific devices.

**2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1717, *Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow*

**3 Terms and definitions**

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For the purposes of this document, the following terms and definitions apply.

**3.1 ancillaries**  
parts, components or products necessary to make the installed device complete and ready for operation

**3.2 cleaning**  
removal of soil, dirt, organic/inorganic deposits or other objectionable matter by means of water, mechanical action and/or chemical agents

**3.3 commissioning**  
series of actions intended to put in operation the assembled system and to hand it over, as well as instruct the keeper

**3.4 competent person**  
individual or enterprise having the necessary qualifications in accordance with national regulation, if any, to be working on water conditioning devices

**3.5 conditioned water**  
water passed through the water conditioning device to the distribution system

**3.6 device**  
water conditioning equipment in the scope of this European Standard complying with the relevant product standard (see [1] to [9])

**3.7****domestic water distribution system**

pipework, fittings and appliances that are installed between taps that are normally used for human consumption and the distribution network

**3.8****installation**

permanent connection of the water conditioning device inside the building to the water distribution system including the electrical supply and ancillaries possibly needed for the correct operation of the equipment and for fulfilling the requirements of the relevant product standards (see [1] to [9]) and/or the existing legislation

**3.9****keeper**

individual or enterprise operating and monitoring the device

**3.10****log book**

document supplied together with the device or released to the keeper on which there are recorded the main actions required to be performed on the device during its lifetime starting from its commissioning

NOTE The logbook in its simplest form could be a sticker.

**3.11****maintenance**

periodic action for keeping and ensuring the continuous design performance of the device at the appropriate time, irrespective of the frequency of the required actions

NOTE Maintenance can include cleaning the device and replacing predefined worn or exhausted parts.

**3.12****maintainer**

individual or enterprise performing maintenance

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**3.13****manufacturer**

enterprise that manufactures, assembles or imports the water conditioning device

NOTE The manufacturer may be the supplier.

**3.14****operation**

series of automatic and non-automatic actions undertaken for the correct functioning of the water conditioning device

**3.15****owner**

person responsible for the domestic water distribution system as in the meaning of the Directive 98/83/EC [10]

**3.16****point of entry system**

system used to treat all or part of the water for the premises inside buildings

**3.17****point of use system**

system used to treat the water upstream from a single tap or multiple taps but not to the entire facility

**EN 15161:2006 (E)****3.18  
removable**

fabricated to be taken away from the system using no or simple tools (e.g. screw-drivers; pliers, open-end wrenches)

**3.19  
repair**

occasional action, performed by competent personnel only, intended to restore the performance of a defective water conditioning device

**3.20  
supplier**

enterprise that puts products and/or services on the market which may be the actual product manufacturer (e.g. private brand name)

NOTE For the scope of this European Standard, the supplier is assumed to be sufficiently expert to undertake the task of providing clear instructions for the equipment installation, operation, maintenance and repair.

**4 Device selection and supply****4.1 Device selection and sizing**

Selection of a device that is appropriate to the performance and operational expectations, and to the intended installation site of the purchaser, is essential. Prior to purchase, information that is available in brochure form, specification sheets or that is clearly marked on the external product packaging, shall be available with the equipment, outlining the key installation and operation requirements. It shall specify limitations on the location for installation in terms of dimensional requirements and environment (e.g. temperature). It shall identify frequency of periodic operation and maintenance and the associated accessibility required. It shall also specify the water supply requirements (pressure limitations, pipe sizes) and proximity requirements for other services which may be necessary such as availability of electric power, drainage facilities etc.

**4.2 Device supply**

All necessary information for installation, commissioning, operation and maintenance (stressing the importance of maintenance) shall be provided with the equipment so that it can be confirmed that the equipment is appropriate for the application, location, resources available, consumable requirements etc.

Maintenance and repair are presumed to be specialist activities and their availability shall be part of the product documentation.

As far as the repair is concerned, it shall be specified, whether the product requires disposal in case of failure/exhaustion (including instruction for disposal) or whether it can be restored almost to the original performance, if properly repaired.

All the documentation (e.g. label, logbook, instruction manual) provided with the device shall be presented in the official language(s) of the country in which the device is purchased.

Where the device is purchased to include the service of installation and commissioning, this shall be clearly stated in the supply contract and the activities shall be conducted in accordance with the requirements of this European Standard.



## 5 Installation requirements

### 5.1 General

Proper installation of a device is a prerequisite not only for achieving the expected results but also for realising them continuously and safely.

Installation of devices shall be performed in accordance with national or local provisions.

If the device, as delivered, does not include the parts or ancillaries necessary to meet the relevant requirements and regulations, they shall be included in accordance with the equipment instructions during installation.

### 5.2 Place of installation

The water conditioning system shall be installed only in a suitable place (e.g. clean, well ventilated, adequately illuminated and protected against pests and frost) within the domestic water distribution system. It shall be remote or insulated from sources of heat (e.g. washing machines, dishwashers, boilers, cookers and hot water pipe work). Location shall take into consideration location of the existing distribution system as well as accessibility of other services (e.g. floor drainage may be essential under some circumstances). Accessibility for operation and maintenance is, however, of high importance.

For cleaning purposes, drinking water shall be available. The drainage shall be suitably designed for collecting and discharging wastewater, where necessary.

### 5.3 Hydraulic connection

Connection to the piping of the domestic water distribution system shall comply with the following main requirements:

- suitable backflow prevention shall be fitted where appropriate which complies with the national implementation of EN 1717;
- device and the related fittings which require regular inspection for operation maintenance and repair purposes (e.g. water meters, check valves, anti-vacuum valves, air gaps, pressure gauges, stop valves, ancillaries), shall be easily accessible and should be kept unobstructed (e.g. by stored goods, furniture);
- connections shall be made in accordance with the equipment instructions;

NOTE To accommodate foreseeable (e.g. maintenance) or unforeseeable (e.g. failure) events, it is recommended, particularly for point of entry devices, that the installation can supply untreated drinking water downstream of the device (e.g. with bypass or isolation valves).

- sampling taps shall be kept at relevant points for checking the device performance, where applicable.

### 5.4 Commissioning

Detailed instructions on the commissioning steps shall be provided with the equipment.

Commissioning is performed by a competent person and shall include any necessary operation (e.g. washing, regeneration, conditioning) and will replicate or mimic all the functional steps that occur during operation.

Appropriate checks shall be carried out to ensure that the equipment has been installed so that it is performing, and will continue to perform. The collected data on the commissioning shall be recorded in the device logbook, if appropriate.