

## **Building valves - Copper alloy stopvalves for potable water supply in buildings - Tests and requirements**

Building valves - Copper alloy stopvalves for potable  
water supply in buildings - Tests and requirements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1213:2000 sisaldab Euroopa standardi EN 1213:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 17.03.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1213:2000 consists of the English text of the European standard EN 1213:1999.</p> <p>This document is endorsed on 17.03.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
--	---

<p><b>Käsitlusala:</b></p> <p>The purpose of this standard is to specify:</p> <ul style="list-style-type: none"><li>- the requirements for the materials and the design of stopvalves; - the mechanical, hydraulic and acoustic requirements; - the test methods; - the marking requirements; for copper alloy stopvalves for use with drinking water supply in buildings.</li></ul>	<p><b>Scope:</b></p> <p>The purpose of this standard is to specify:</p> <ul style="list-style-type: none"><li>- the requirements for the materials and the design of stopvalves; - the mechanical, hydraulic and acoustic requirements; - the test methods; - the marking requirements; for copper alloy stopvalves for use with drinking water supply in buildings.</li></ul>
--	--

ICS 23.060.20, 91.140.60

**Võtmesõnad:** acoustic properties, classifications, copper alloys, designation, hydraulic properties, marking, mechanical properties, potable water, stop valves, stopcocks, tests, valves and fittings, valves for water supply in buildings

ICS 23.060.20; 91.140.60

**English version**

Building valves

**Copper alloy stopvalves for potable water supply in buildings  
Tests and requirements**

Robinetterie de bâtiment – Robinets  
d'arrêt à soupape en alliage de cuivre  
pour la distribution d'eau potable  
dans le bâtiment – Essais et prescrip-  
tions

Gebäudearmaturen – Absperrventile  
aus Kupferlegierungen für Trink-  
wasseranlagen in Gebäuden –  
Prüfungen und Anforderungen

This European Standard was approved by CEN on 1999-09-05.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

## Contents

	Page
<b>Foreword</b> .....	2
<b>Introduction</b> .....	3
<b>1 Scope</b> .....	3
<b>2 Normative references</b> .....	4
<b>3 Definition</b> .....	4
<b>4 Classification</b> .....	6
4.1 General.....	6
4.2 The nominal size (DN).....	6
4.3 The flow rate.....	6
4.4 The end connections.....	6
<b>5 Designation</b> .....	8
<b>6 Materials</b> .....	8
6.1 Chemical and hygienic characteristics .....	8
6.2 Body materials.....	8
<b>7 Tests and requirements</b> .....	9
7.1 General.....	9
7.2 Mechanical requirements and tests.....	9
7.3 Hydraulic tests and requirements.....	12
7.4 Acoustic tests and requirements .....	15
7.5 Endurance test .....	15
<b>8 Design requirements</b> .....	17
<b>9 Marking</b> .....	17

## Foreword

This European Standard 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 April 2000, and conflicting national standards shall be withdrawn at the latest by April 2000.

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

## Introduction

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this standard:

- 1) This standard provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA;
- 2) It should be noted that, while awaiting the adoption of the verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

## 1 Scope

The purpose of this Standard EN 1213 is to specify:

- the requirements for the materials and the design of stopvalves,
- the mechanical, hydraulic and acoustic requirements,
- the test methods,
- the marking requirements.

for copper alloy stopvalves for use with drinking water supply in buildings.

This standard applies primarily to copper alloy stopvalves, dimensions DN 10 to DN 100, for potable water supply in buildings up to PN 10 and a distribution temperature of 65 °C. Occasional excursions up to 95 °C are permitted for a period of 1 h maximum.

Other metallic materials can be used if it can be verified that they are suitable for the application.

This standard applies also to stopvalves in combination with accessories in the same body.

This standard does not apply to regulating or servicing valves, designed specially to isolate sanitary tapware or other sanitary appliances.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 200	Sanitary tapware - General technical specifications for single taps and mixer taps (nominal size 1/2) PN10 - Minimum flow pressure of 0,05 Mpa (0,5 bar)
EN 1254-1	Copper and copper alloys - Plumbing Fittings - Part 1: Fittings with ends for capillary soldering or capillary brazing to copper tubes.
EN 1254-2	Copper and copper alloys - Plumbing Fittings - Part 2: Fittings with compression ends for use with copper tube.
EN 1254-3	Copper and copper alloys - Plumbing Fittings - Part 3: Fittings with compression ends for use with plastics pipe.
EN 1982	Copper and copper alloys - Ingots and castings
prEN 10255	Carbon steel tubes suitable for welding or threading.
EN 12420	Copper and copper alloys - Forgings
EN ISO 3822-1	Acoustics - Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 1 Method of Measurement. (ISO 3822-1: 1999)
EN ISO 3822-3	Acoustics - Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 3: Mounting and operating conditions for in-line valves and appliances. (ISO 3822-3: 1997)
EN ISO 6509	Corrosion of metals and alloys – Determination of dezincification resistance of brass (ISO 6509 : 1981)
ISO 7-1	Pipe threads where pressure-tight joints are made on the threads - Part 1 Dimensions, tolerances and designation.
ISO 228-1	Pipe threads where pressure-tight joints are not made on the threads - Part 1 Dimensions, tolerances and designation.

## 3 Definition

For the purposes of this standard, the following definition applies:

**Stopvalve:** Valve in which the manually operated obturator moves in a straight line and, in the seating area, longitudinally against the direction of flow. It ensures the complete prevention of flow in a water pipe.