

**Specifications for installations inside
buildings conveying water for human
consumption - Part 3: Pipe sizing -
Simplified method**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 806-3:2006 sisaldab Euroopa standardi EN 806-3:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.06.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 806-3:2006 consists of the English text of the European standard EN 806-3:2006.</p> <p>This document is endorsed on 29.06.2006 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>
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<p>Käsitlusala:</p> <p>This European Standard is in conjunction with EN 806-1 and EN 806-2 for drinking water systems within premises. This European Standard describes a calculation method for the dimensioning of pipes for the type of drinking water standard-installations as defined in 4.2. It contains no pipe sizing for fire fighting systems.</p>	<p>Scope:</p> <p>This European Standard is in conjunction with EN 806-1 and EN 806-2 for drinking water systems within premises. This European Standard describes a calculation method for the dimensioning of pipes for the type of drinking water standard-installations as defined in 4.2. It contains no pipe sizing for fire fighting systems.</p>
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ICS 91.140.60

Võtmesõnad:

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English Version

**Specifications for installations inside buildings conveying water
for human consumption - Part 3: Pipe sizing - Simplified method**

Spécifications techniques relatives aux installations d'eau
destinée à la consommation humaine à l'intérieur des
bâtiments - Partie 3: Calculations des diamètres intérieurs -
Méthode simplifiée

Technische Regeln für Trinkwasser-Installationen -
Berechnung der Rohrlinnendurchmesser - Teil 3:
Vereinfachtes Verfahren

This European Standard was approved by CEN on 3 February 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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Foreword

This European Standard (EN 806-3:2006) 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 October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

NOTE This is the third part of the European Standard (EN 806) consisting of five parts as follows:

Part 1: General

Part 2: Design

Part 3: Pipe sizing

Part 4: Installation

Part 5: Operation and maintenance

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.

1 Scope

This European Standard is in conjunction with EN 806-1 and EN 806-2 for drinking water systems within premises.

This European Standard describes a calculation method for the dimensioning of pipes for the type of drinking water standard-installations as defined in 4.2.

It contains no pipe sizing for fire fighting systems.

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 806-1, *Specifications for installations inside buildings conveying water for human consumption — Part 1: General*

EN 806-2, *Specifications for installations inside buildings conveying water for human consumption — Part 2: Design*

3 Terms, symbols and units

This Clause is enlarged in completion to EN 806-1, to have in the field of pipe sizing the same definitions in European standards.

Table 1 — Terms and definitions

Term	Symbol	Unit	Explanation (definition)
Flow-velocity	v	m/s	
Flow-rate, volume flow	Q	l/s m ³ /h	Ratio of the volume of water passing through a specified flow cross-section and the time required for this
Minimum flow-rate at draw-off point	Q_{\min}	l/s	Flow-rate at draw-off point which is just sufficient for the appliance to function
Draw-off flow-rate	Q_A	l/s	Assumed draw-off flow-rate at appliance for calculation purposes
Total flow-rate	Q_T	l/s	ΣQ_A , sum of all draw-off flow-rates of the water appliances supplied
Design flow-rate	Q_D	l/s	Flow-rate for hydraulic calculations, taking into consideration the probable simultaneous demand
Static pressure	p_R	Pa	Gauge pressure at a measuring point in the water supply system when no water flowing
Flow pressure	p_{FI}	Pa	Gauge pressure at a measuring point in the water supply system when water flowing
Minimum flow pressure	$p_{\min FI}$	Pa	Gauge pressure required at the connection to a draw-off point at its draw-off flow-rate
Pressure difference, head loss	Δp	Pa	Difference in pressure between two points in the drinking water installation, resulting from wall friction and individual head loss

(To be continued)