

SVENSK STANDARD

SS-EN 806-5:2012



Fastställt/Approved: 2012-02-08
Publicerad/Published: 2012-02-13
Utgåva/Edition: 1
Språk/Language: engelska/English
ICS: 91.140.60

Vattenförsörjning – Tappvattensystem för dricksvatten – Del 5: Drift och underhåll

Specifications for installations inside buildings conveying water for human consumption – Part 5: Operation and maintenance

This preview is downloaded from www.sis.se. Buy the entire standard via <https://www.sis.se/std-84933>

Standarder får världen att fungera

SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.

Delta och påverka

Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

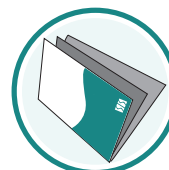
Ta del av det färdiga arbetet

Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

Utveckla din kompetens och lyckas bättre i ditt arbete

Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på www.sis.se eller ta kontakt med oss på tel 08-555 523 00.



Standards make the world go round

SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.

Take part and have influence

As a member of SIS you will have the possibility to participate in standardization activities on national, European and global level. The membership in SIS will give you the opportunity to influence future standards and gain access to early stage information about developments within your field.

Get to know the finished work

We offer our customers everything in connection with standards and their application. You can purchase all the publications you need from us - everything from individual standards, technical reports and standard packages through to manuals and online services. Our web service e-nav gives you access to an easy-to-navigate library where all standards that are relevant to your company are available. Standards and manuals are sources of knowledge. We sell them.

Increase understanding and improve perception

With SIS you can undergo either shared or in-house training in the content and application of standards. Thanks to our proximity to international development and ISO you receive the right knowledge at the right time, direct from the source. With our knowledge about the potential of standards, we assist our customers in creating tangible benefit and profitability in their organisations.

If you want to know more about SIS, or how standards can streamline your organisation, please visit www.sis.se or contact us on phone +46 (0)8-555 523 00



Europastandarden EN 806-5:2012 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 806-5:2012.

The European Standard EN 806-5:2012 has the status of a Swedish Standard. This document contains the official version of EN 806-5:2012.

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

Uppllysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna uppllysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Vattenförsörjning, SIS/TK 198/AG 164.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD

EN 806-5

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2012

ICS 91.140.60

English Version

Specifications for installations inside buildings conveying water for human consumption - Part 5: Operation and maintenance

Spécifications techniques relatives aux installations d'eau
destinée à la consommation humaine à l'intérieur des
bâtiments - Partie 5: Exploitation et maintenance

Technische Regeln für Trinkwasser-Installationen - Teil 5:
Betrieb und Wartung

This European Standard was approved by CEN on 19 November 2011.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, 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, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	7
4 General.....	7
5 Documentation.....	7
6 Operation	8
7 Interruptions to operation and disconnection.....	8
8 Resumption of supply	9
9 Damage and faults	9
9.1 Change in water quality	9
9.2 Insufficient water supply.....	9
9.3 Noise emission.....	10
10 Alterations, extensions and refurbishment	10
11 Accessibility of installation components.....	10
12 Maintenance	10
Annex A (normative) Frequencies for inspection and maintenance of components for potable water installations.....	12
Annex B (normative) Inspection and maintenance procedures.....	14
B.1 Air gaps (protection device family A)	14
B.2 Pipe interrupters (protection unit family D type C)	14
B.3 Backflow preventer with controllable reduced pressure zone (protection unit BA)	15
B.4 Backflow preventer with different non-controllable pressure zones (protection unit CA)	17
B.5 Controllable antipollution check valves (protection units EA and EC).....	18
B.6 Non-controllable antipollution check valves (protection units EB and ED).....	19
B.7 Inline anti vacuum valve (protection units DA)	19
B.8 Pipe interrupter with atmospheric vent and moving elements (protection unit DB).....	20
B.9 Hose union backflow preventer (protection unit HA)	21
B.10 Hose union anti-vacuum valve (protection unit type HB)	22
B.11 Automatic diverter (protection unit type HC).....	22
B.12 Hose union anti vacuum valve combined with check valve (protection unit family H type D)	23
B.13 Pressurised air inlet valve (protection unit family L type A).....	24
B.14 Pressurised air inlet valve combined with a check valve located downstream (protection unit family L type B).....	24
B.15 Hydraulic safety groups and expansion groups	25
B.16 Pressure safety valves, expansion valves and combined temperature and pressure relief valves	26
B.17 Inline hot water supply tempering valves	27
B.18 Pressure reducing valve	27
B.19 Pressure booster pump	28
B.20 Water heaters	28
B.21 Fire fighting installations	28
B.22 Pipework	28
B.23 Water meters	28

Annex C (normative) Inspection and maintenance procedures for water conditioning devices	30
Bibliography.....	31

Foreword

This document (EN 806-5:2012) has been prepared by Technical Committee CEN/TC "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 August 2012, and conflicting national standards shall be withdrawn at the latest by August 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document is intended for the use of engineers, architects, surveyors, contractors, installers, water suppliers, consumers and regulatory inspectors.

This standard has been written in the form of a practice specification. It is the fifth part of the European Standard "Specifications for installations inside buildings concerning water for human consumption" consisting of five parts as follows:

- *Part 1: General;*
- *Part 2: Design;*
- *Part 3: Pipe sizing — Simplified method;*
- *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, Bulgaria, Croatia, 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, Turkey and the United Kingdom.

1 Scope

This European Standard specifies requirements and gives recommendations for the operation and maintenance of potable water installations within buildings and for pipework outside buildings but within the premises in accordance with EN 806-1.

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 806-1:2000, *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*

EN 806-4:2010, *Specifications for installations inside buildings conveying water for human consumption — Part 4: Installation*

EN 1487, *Building valves — Hydraulic safety groups — Tests and requirements*

EN 1488, *Building valves — Expansion groups — Tests and requirements*

EN 1489, *Building valves — Pressure safety valves — Tests and requirements*

EN 1490, *Building valves — Combined temperature and pressure relief valves — Tests and requirements*

EN 1491, *Building valves — Expansion valves — Tests and requirements*

EN 1567, *Building valves — Water pressure reducing valves and combination water pressure reducing valves — Requirements and tests*

EN 1717:2000, *Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow*

EN 12729, *Devices to prevent pollution by backflow of potable water — Controllable backflow preventer with reduced pressure zone — Family B - Type A*

EN 12897, *Water supply — Specification for indirectly heated unvented (closed) storage water heaters*

EN 13076, *Devices to prevent pollution by backflow of potable water — Unrestricted air gap — Family A - Type A*

EN 13077, *Devices to prevent pollution by backflow of potable water — Air gap with non-circular overflow (unrestricted) — Family A - Type B*

EN 13078, *Devices to prevent pollution by backflow of potable water — Air gap with submerged feed incorporating air inlet plus overflow — Family A, type C*

EN 13079, *Devices to prevent pollution by backflow of potable water — Air gap with injector — Family A - Type D*

EN 13433, *Devices to prevent pollution by backflow of potable water — Mechanical disconnect, direct actuated — Family G, type A*

SS-EN 806-5:2012 (E)

EN 13434, *Devices to prevent pollution by backflow of potable water — Mechanical disconnecter, hydraulic actuated — Family G, type B*

EN 13443-1, *Water conditioning equipment inside buildings — Mechanical filters — Part 1: Particle rating 80 µm to 150 µm — Requirements for performances, safety and testing*

EN 13443-2, *Water conditioning equipment inside buildings — Mechanical filters — Part 2: Particle rating 1 µm to less than 80 µm — Requirements for performance, safety and testing*

EN 13959, *Anti-pollution check valves — DN 6 to DN 250 inclusive family E, type A, B, C and D*

EN 14095, *Water conditioning equipment inside buildings — Electrolytic treatment systems with aluminium anodes — Requirements for performance, safety and testing*

EN 14367, *Non-controllable backflow preventer with different pressure zones — Family C, type A*

EN 14451, *Devices to prevent pollution by backflow of potable water — In-line anti-vacuum valves DN 8 to DN 80 — Family D, type A*

EN 14452, *Devices to prevent pollution by backflow of potable water — Pipe interrupter with atmospheric vent and moving element DN 10 to DN 20 — Family D, type B*

EN 14453, *Devices to prevent pollution by backflow of potable water — Pipe interrupter with permanent atmospheric vent DN 10 to DN 20 — Family D, type C*

EN 14454, *Devices to prevent pollution by backflow of potable water — Hose union backflow preventer DN 15 to DN 32 — Family H, type A*

EN 14455, *Devices to prevent pollution by backflow of potable water — Pressurised air inlet valves DN 15 to DN 50 — Family L, type A and type B*

EN 14506, *Devices to prevent pollution by backflow of potable water — Automatic diverter — Family H, type C*

EN 14622, *Devices to prevent pollution by backflow of potable water — Air gap with circular overflow (restricted) — Family A, type F*

EN 14623, *Devices to prevent pollution by backflow of potable water — Air gaps with minimum circular overflow (verified by test or measurement) — Family A, type G*

EN 14652, *Water conditioning equipment inside buildings — Membrane separation devices — Requirements for performance, safety and testing*

EN 14743, *Water conditioning equipment inside buildings — Softeners — Requirements for performance, safety and testing*

EN 14812, *Water conditioning equipment inside buildings — Chemical dosing systems — Pre-set dosing systems — Requirements for performance, safety and testing*

EN 14897, *Water conditioning equipment inside buildings — Devices using mercury low-pressure ultraviolet radiators — Requirements for performances, safety and testing*

EN 14898, *Water conditioning equipment inside buildings — Active media filters — Requirements for performances, safety and testing*

EN 15092, *Building valves — Inline hot water supply tempering valves — Tests and requirements*

EN 15096, *Devices to prevent pollution by backflow of potable water — Hose union anti-vacuum valves — DN 15 to DN 25 inclusive Family H, type B and type D — General technical specification*

EN 15161, *Water conditioning equipment inside buildings — Installation, operation, maintenance and repair*

EN 15219, *Water conditioning equipment inside buildings — Nitrate removal devices — Requirements for performance, safety and testing*

EN 15848, *Water conditioning equipment inside buildings — Adjustable chemical dosing systems — Requirements for performance, safety and testing*

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 3822-2, *Acoustics — Laboratory tests on noise emission from appliances and equipment used in water supply installations — Part 2: Mounting and operating conditions for draw-off taps and mixing valves (ISO 3822-2:1995)*

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 3822-4, *Acoustics — Laboratory tests on noise emission from appliances and equipment used in water supply installations — Part 4: Mounting and operating conditions for special appliances (ISO 3822-4:1997)*

3 Terms and definitions

For the purposes of this document, the terms, definitions and graphical symbols given in EN 806-1:2000 and EN 1717:2000 apply.

4 General

Installations shall be operated and maintained in such a manner as to avoid adversely affecting the quality of potable water, the supply to consumers and the equipment of the water supplier.

Installations shall be checked at regular intervals for safety and performance. Appropriate procedures shall be adopted to maintain the performance of the system at the level specified in EN 806-2, EN 1717 and the individual product standards referenced in Annex A.

The system shall be operated in accordance with the original design conditions, e.g. temperature, pressure.

Responsibility for operation, inspection and maintenance is subject to local and national requirements (e.g. qualified personnel).

5 Documentation

In order to enable the correct operation and maintenance, all information relevant to the installation shall be readily available.

Manufacturer's documentation (e.g. Technical Product Information (TPI)) related to the operation and maintenance of appliances shall be available, retained and followed.

The commissioning report shall be part of the documentation.

The maintenance shall be recorded and stored in such a way that the data is auditable.