Emergency safety showers - Part 1: Plumbed-in body showers for laboratories

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15154-1:2006 sisaldab Euroopa standardi EN 15154-1:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 24.11.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 15154-1:2006 consists of the English text of the European standard EN 15154-1:2006. This document is endorsed on 24.11.2006 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This document is a product specification, giving performance requirements for emergency safety body showers connected to the water supply. It is applicable to plumbed-in body showers only, located in laboratory facilities. It is not applicable to emergency safety showers used on industrial sites or in other such areas. Requirements are given in respect of the performance, installation, adjustment and marking of the showers as well as installation, operation and maintenance instructions to be given by the manufacturer.	**Scope:** This document is a product specification, giving performance requirements for emergency safety body showers connected to the water supply. It is applicable to plumbed-in body showers only, located in laboratory facilities. It is not applicable to emergency safety showers used on industrial sites or in other such areas. Requirements are given in respect of the performance, installation, adjustment and marking of the showers as well as installation, operation and maintenance instructions to be given by the manufacturer.

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English Version

Emergency safety showers - Part 1: Plumbed-in body showers for laboratories

Douches de sécurité - Partie 1 : Douches pour le corps raccordées au réseau d'eau utilisées en laboratoire

Sicherheitsnotduschen - Teil 1: Körperduschen mit Wasseranschluss für Laboratorien

This European Standard was approved by CEN on 19 August 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 document (EN 15154-1:2006) has been prepared by Technical Committee CEN/TC 332 “Laboratory equipment”, 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 March 2007, and conflicting national standards shall be withdrawn at the latest by March 2007.

EN 15154 consists of the following parts, under the general title *Emergency safety showers*

— Part 1: Plumbed-in body showers for laboratories

— Part 2: Plumbed-in eye wash units

— Part 3: Portable body showers (in preparation)

— Part 4: Portable eye wash units (in preparation)

— Part 5: Plumbed-in body showers for production facilities (in planning)

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.

Introduction

Plumbed-in body showers are designed and intended to be installed in close range of persons working in a potentially hazardous area. The main purpose of these devices is to immediately deliver a flushing fluid in a sufficient volume to extinguish flames and/or to flush the body following exposure to injurious substances or heat. With this accomplished the injured person can proceed to medical care.

1 Scope

This document is a product specification, giving performance requirements for emergency safety body showers connected to the water supply. It is applicable to plumbed-in body showers only, located in laboratory facilities. It is not applicable to emergency safety showers used on industrial sites or in other such areas.

Requirements are given in respect of the performance, installation, adjustment and marking of the showers as well as installation, operation and maintenance instructions to be given by the manufacturer.

NOTE Attention is drawn to national regulations which may apply in respect of the installation and use of emergency safety showers.

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 420, *Protective gloves — General requirements and test methods*

ISO 3864-1, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs in workplaces and public areas*

3 Terms and definitions

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

3.1
emergency safety shower
device specially designed and intended to deliver a flushing fluid to extinguish flames and to sufficiently wash away contaminants or to dilute them, rendering them harmless

3.2
plumbed-in body shower
emergency safety shower that is permanently connected to a continuous water supply and designed to deliver water sufficient to flush the whole body

4 Performance

4.1 Flow rate of water

The water supplied by the body shower shall be of constant flow rate in accordance with national regulations at a flow pressure to be specified by the manufacturer. The flow pressure shall be specified and measured where the shower is connected to the water system. The body shower shall be capable of delivering this supply for a minimum of 15 minutes.

NOTE When no national or local regulations apply, a constant flow rate of min. 60 l/min is suitable.

4.2 Water distribution

The water distribution of the emergency body shower shall be measured by the following type test procedure.

As shown in Figure 1, at a distance 700 mm below the shower head, (50 ± 10) % of the volume of water delivered shall fall in a circle with a radius of 200 mm; the water level in the individual compartments in this circle shall not deviate by more than 30 % from the mean value.