

Acoustics — Laboratory tests on noise emission from appliances and equipment used in water supply installations —

Part 4: Mounting and operating conditions for special appliances

The European Standard EN ISO 3822-4:1997 has the status of a British Standard

ICS 17.140.20; 91.140.60

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

National foreword

This Part of BS EN ISO 3822 has been prepared by Subcommittee EH/1/6, and is the English language version of EN ISO 3822-4:1997, published by the European Committee for Standardization (CEN). It is identical with ISO 3822-4:1997, *Acoustics — Laboratory tests on noise emission from appliances and equipment used in water supply installations — Part 4: Mounting and operating conditions for special appliances*, published by the International Organization for Standardization. This Part of BS EN ISO 3822 supersedes BS 6864-4:1987 which is withdrawn.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN ISO title page, page 2, the ISO title page, pages ii to iv, pages 1 to 18, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

This British Standard, having been prepared under the direction of the Health and Environment Sector Board, was published under the authority of the Standards Board and comes into effect on 15 August 1997

© BSI 11-1999

Amendments issued since publication

Amd. No.	Date	Comments

Contents

	Page
National foreword	Inside front cover
Foreword	2
Foreword	iv
Text of ISO 3822-4	1

Acoustics — Laboratory tests on noise emission from appliances and equipment used in water supply installations — Part 4: Mounting and operating conditions for special appliances

Acoustique — Mesurage en laboratoire du bruit émis par les robinetteries et les équipements hydrauliques utilisés dans les installations de distribution d'eau — Partie 4: Conditions de montage et de fonctionnement des équipements spéciaux

Akustik — Prüfung des Geräuschverhaltens von Armaturen und Geräten der Wasserinstallation im Laboratorium — Teil 4: Anschluß und Betriebsbedingungen für Sonderarmaturen

This European Standard was approved by CEN on 1996-05-16. 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

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

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

Foreword

The text of EN ISO 3822-4:1997 has been prepared by Technical Committee CEN/TC 126 “*Acoustic properties of building components and of buildings*” the secretariat of which is held by AFNOR in collaboration with the Technical Committee ISO/TC 43 “*Acoustics*”.

The content of this part of the European Standard EN ISO 3822 is not identical with the International Standard ISO 3822-4:1985 “*Acoustics — Laboratory tests on noise emission from appliances and equipment used in water supply installations — Part 4: Mounting and operating conditions for special appliances*”.

Working group CEN/TC 126/WG 3 was instructed, in May 88, to examine and take into account the comments on ISO 3822-4, following the primary questionnaire.

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 July 1997, and conflicting national standards shall be withdrawn at the latest by July 1997.

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

INTERNATIONAL STANDARD

ISO 3822-4

Second edition
1997-02-01

Acoustics — Laboratory tests on noise emission from appliances and equipment used in water supply installations —

Part 4: Mounting and operating conditions for special appliances

*Acoustique — Mesurage en laboratoire du bruit émis par les robinetteries et
les équipements hydrauliques utilisés dans les installations de distribution
d'eau —*

*Partie 4: Conditions de montage et de fonctionnement des équipements
spéciaux*



Contents

	Page
Foreword	
0 Introduction	iv
1 Scope	1
2 Normative references	1
3 Mounting and operating conditions	1
3.1 Connection of appliances	1
3.2 Float-operated valves	1
3.3 Flushing valves	2
3.4 Water Heating Appliances	2
3.5 Mixing valves for instantaneous heaters of the closed type	4
3.6 Mixing valves for overflow (open outlet) type water heaters	4
3.7 Fittings for the connection of household equipment	5
3.8 Outlet fittings	5
4 Test report	5
Annex A (normative) Low-noise flow resistances with calibrated flow rate	6
Annex B (normative) Adaptors for the connection of low-noise flow resistances with calibrated flow rate	13
Annex C (normative) Adaptors for the connection of outlet fittings	15
Annex D (normative) Arrangement for testing shower handsets	17
Annex E (informative) Summary of water heater types and test configurations	Inside back cover
Figure 1 — Example of device for connecting outlet fittings to the horizontal test pipe	5
Figure A.1 — Tubular type flow resistance with calibrated flow rate	6
Figure A.2 — Arrangement of the tubes for resistances R25 and R33	7
Figure A.3 — Arrangements of the tubes for resistances R42 and R50	7
Figure A.4 — Arrangement of the tubes for resistance R63	8
Figure A.5 — Strainer type flow resistance with internal thread M22 × 1 – 6H	8
Figure A.6 — Strainer type flow resistance with external thread M24 × 1 – 6g	9
Figure A.7 — Strainer type flow resistance with external thread M28 × 1 – 6g	10
Figure A.8 — Restrictor details for flow resistances in Figure A.5 and Figure A.6	11
Figure A.9 — Restrictor details for flow resistance in Figure A.7	12
Figure B.1 — Adaptor with external thread (A1) for the connection of low-noise flow resistances with calibrated flow rate	13
Figure B.2 — Adaptor with internal thread (A2) for the connection of low-noise flow resistances with calibrated flow rate	14
Figure C.1 — Adaptor with external thread (A3) for the connection of outlet fittings	15
Figure C.2 — Adaptor with internal thread (A4) for the connection of outlet fittings	16
Figure D.1 — Connecting hose for testing shower handsets	17
Figure D.2 — Hose union nut	17
Figure D.3 — Hose tail	18

	Page
Table 1 — Internal dimensions of standard test cisterns	1
Table 2 — Flow pressures for testing flushing valves	2
Table A.1 — Particulars of tubular type flow resistances	6
Table A.2 — Particulars of strainer type flow resistances	7
Table A.3 — Details of holes in restrictor in Figure A.8	11
Table A.4 — Details of holes in restrictor in Figure A.9	12
Table B.1 — Dimensions of adaptors with external thread (A1)	13
Table B.2 — Dimensions of adaptors with internal thread (A2)	14
Table C.1 — Dimensions of adaptors with external thread (A3)	15
Table C.2 — Dimensions of adaptors with internal thread (A4)	16
Table D.1 — Detail specification of hose assembly components	18

Descriptors: Acoustics, water supply, equipment, sanitary appliances, noise (sound), airborne sound, tests, acoustic tests, laboratory tests, testing conditions, acoustic measurements.