



BSI Standards Publication

Fume cupboards

Part 8: Fume cupboards for work with radioactive materials

National foreword

This British Standard is the UK implementation of [EN 14175-8:2022](#).

The UK participation in its preparation was entrusted to Technical Committee LBI/1/1, Laboratory furniture and fittings.

A list of organizations represented on this committee can be obtained on request to its committee manager.

BSI, as a member of CEN, is obliged to publish EN 14175-8 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval.

BS EN 14175-8 is additional to [BS EN 14175-3:2019](#) and [BS EN 14175-6:2006](#), which are still applicable. It should be noted that BS EN 14175-8 on its own does not facilitate all test procedures as defined in [BS EN 14175-3:2019](#) due to modified injector arrangement and shielding specified. It is therefore recommended that, in carrying out tests in compliance with BS EN 14175-8, that any necessary deviations from the standard test procedures in [EN 14175-3:2019](#) or [EN 14175-6:2006](#) are noted on the test report. For example, deviations may include changes to injector positions and sampling probes where these may clash with the specified dummy shields when carrying out inner plane containment tests. Any results discounted due to the inability to obtain useful readings should also be noted in the test report.

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Published by BSI Standards Limited 2022

ISBN 978 0 539 14595 3

ICS 13.280; 71.040.10

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2022.

Amendments/corrigenda issued since publication

Date	Text affected

English Version

Fume cupboards - Part 8: Fume cupboards for work with radioactive materials

Sorbonnes - Partie 8 : Sorbonnes
pour matières radioactives

Abzüge - Teil 8: Abzüge für Arbeiten
mit radioaktiven Substanzen

This European Standard was approved by CEN on 29 May 2022.

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Contents

Page

European foreword	iii
Introduction.....	iv
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Dimensions	7
5 Basic safety and performance objectives	7
6 Materials	8
6.1 General requirements	8
6.2 Protective barrier	8
6.3 Sash	8
7 Safety requirements	9
7.1 General requirements	9
7.2 Construction	9
7.2.1 General	9
7.2.2 Workspace	9
7.2.3 Work surface	10
7.2.4 Base	10
7.2.5 Side walls	11
7.2.6 Protective barrier	11
7.2.7 Sash	11
7.2.8 Abatement system	12
8 Test methods	12
8.1 Type testing and onsite testing	12
8.2 Exhaust/extract air abatement system	14
8.3 Variable air volume control	14
9 Type test performance requirements	14
10 Services	14
10.1 General	14
10.2 Drainage	15
10.3 Liquids/water/cooling water	15
10.4 Electric sockets	15
11 User manual	15
12 Marking and labelling	15
13 Declaration of conformity	16
Bibliography	17

European foreword

This document ([EN 14175-8:2022](#)) 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 January 2023, and conflicting national standards shall be withdrawn at the latest by January 2023.

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Introduction

Before using radioactive materials, a safety (risk) assessment is performed with reference to legislation and advice from radiation protection experts.

The maximum amount of activity allowed for every activity with radioactive material is evaluated in accordance to the three principles of radiological protection, namely justification, optimization, and the application of dose limits, clarifying how they apply to radiation sources delivering exposure and to individuals receiving exposure. Shielding or abatement system when appropriate are also evaluated.

There are three kinds of dose in radiological protection. Absorbed dose is a measurable, physical quantity, while equivalent dose and effective dose are specifically for radiological protection purposes. Dose is used in this document as defined in IAEA Glossary 2018.

Attention is drawn to the publication IAEA SAFETY STANDARDS SERIES, Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards General Safety Requirements Part 3 (No. GSR Part 3).