

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Surface cleaning appliances –
Part 6: Wet hard floor cleaning appliances for household or similar use –
Methods for measuring the performance**

**Appareils de nettoyage des sols –
Partie 6: Appareils de nettoyage des sols durs et mouillés à usage domestique
ou analogue – Méthodes de mesure de l'aptitude à la fonction**



THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2018 IEC, Geneva, Switzerland

Copyright © 2018 ASTM International

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing being secured. Requests for permission to reproduce should be addressed to either IEC at the address below or IEC's member National Committee in the country of the requester or from ASTM.

IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland
Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

ASTM Headquarters
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
United States of America
<mailto:mkhooper@astm.org>
www.astm.org

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About ASTM

Over 12 000 ASTM standards operate globally. Defined and set by ASTM, they improve the lives of millions every day. Combined with ASTM innovative business services, they enhance performance and help everyone have confidence in the things they buy and use.

About IEC/ASTM publications

The technical content of IEC/ASTM publications is kept under constant review by the IEC and ASTM. Please make sure that you have the latest edition, a corrigendum or an amendment might have been published.

IEC Catalogue - webstore.iec.ch/catalogue

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

IEC publications search - webstore.iec.ch/advsearchform

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing 21 000 terms and definitions in English and French, with equivalent terms in 16 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

6700 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: sales@iec.ch.



IEC/ASTM 62885-6

Edition 1.0 2018-09

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Surface cleaning appliances –
Part 6: Wet hard floor cleaning appliances for household or similar use –
Methods for measuring the performance**

**Appareils de nettoyage des sols –
Partie 6: Appareils de nettoyage des sols durs et mouillés à usage domestique
ou analogue – Méthodes de mesure de l'aptitude à la fonction**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 97.080

ISBN 978-2-8322-5951-1

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	6
4 General conditions for testing	8
4.1 Atmospheric conditions	8
4.2 Test equipment and materials.....	8
4.3 Voltage and frequency.....	8
4.4 Running-in of wet hard floor cleaners.....	9
4.5 Equipment of the wet hard floor cleaner.....	9
4.6 Operation of the wet hard floor cleaner	9
4.7 Conditioning prior to each test.....	10
4.7.1 General	10
4.7.2 Preparations specific to steam cleaners.....	10
4.7.3 Preparations for other wet hard floor cleaners.....	10
4.8 Mechanical operator.....	10
4.9 Number of samples	10
5 Wet hard floor cleaning tests.....	11
5.1 Cleaning efficiency of hard flat floors – Purpose.....	11
5.1.1 General	11
5.1.2 Apparatus	11
5.1.3 Materials.....	12
5.1.4 Sampling and test trials.....	13
5.1.5 Method	13
5.2 Dirt pickup test (<i>under development</i>)	19
5.3 Grout cleaning (<i>future development</i>).....	19
5.4 Soil removal along walls (<i>future development</i>)	19
5.5 Pad loading test for steam cleaners (<i>future development</i>)	19
5.6 Air data (<i>future development</i>)	19
6 Miscellaneous tests.....	19
6.1 General.....	19
6.2 Motion resistance (<i>future development</i>)	19
6.3 Cleaning under furniture (<i>future development</i>)	19
6.4 Radius of operation	19
6.4.1 Purpose.....	19
6.4.2 Conditions for measurement.....	19
6.4.3 Determination of radius of operation	19
6.5 Impact resistance for floor cleaning heads	20
6.5.1 Purpose.....	20
6.5.2 Test equipment.....	20
6.5.3 Determination of impact resistance.....	20
6.6 Mass.....	20
6.7 Weight in hand.....	20
6.8 Specific cleaning time	21
6.9 Dimensions	21

6.10	Noise level (<i>future development</i>)	21
6.11	Energy consumption (<i>future development</i>)	21
6.12	Operational life-time test (<i>future development</i>)	21
6.13	Rated input power	21
7	Test material and equipment	22
7.1	General	22
7.2	Material for tests	22
7.2.1	Test surfaces	22
7.2.2	Test soils	22
7.2.3	Demineralized water	23
7.3	Equipment for tests	23
7.3.1	Mechanical operator	23
7.3.2	Tile floor cleaning fixture	25
7.3.3	Adjustable pipette	25
7.3.4	Stain application template (type A)	25
7.3.5	Device for impact test	26
8	Instructions for use	27
	Annex A (informative) Information on materials	28
	Annex B (informative) Information at the point of sale	29
	Bibliography	30
	Figure 1 – Photo of spoon and spatula	11
	Figure 2 – Electronic scale for weighing of tiles	12
	Figure 3 – Tile drying rack for preparing and drying soil stains	12
	Figure 4 – Marking of tile	13
	Figure 5 – Soiling with coffee	14
	Figure 6 – Application of pasty	15
	Figure 7 – Removal of excess soil	16
	Figure 8 – Cleaning stroke starting position	17
	Figure 9 – End position after first stroke	18
	Figure 10 – Example of zigzag cleaning pattern	21
	Figure 11 – Mechanical operator for the determining cleaning efficiency	24
	Figure 12 – Tile floor cleaning fixture with guides and stroke pacing device	25
	Figure 13 – Adjustable pipette: 100 to 1000 µl range for applying liquid stains	25
	Figure 14 – Stain application template (type A)	26
	Figure 15 – Drum for impact test	27
	Table 1 – Example of results	19
	Table 2 – Distance between holes	26

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SURFACE CLEANING APPLIANCES –

**Part 6: Wet hard floor cleaning appliances for household or similar use –
Methods for measuring the performance**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, accept IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC/ASTM 62885-6 has been prepared by a Joint Working Group of subcommittee 59F: Surface cleaning appliances, of IEC technical committee 59: Performance of household and similar electrical appliances and ASTM Committee F11: Vacuum cleaners.

It is published as a dual logo standard.

The text of this International Standard is based on the following documents:

CDV	Report on voting
59F/329/CDV	59F/343/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all the parts in the IEC 62885 series, under the general title *Surface cleaning appliances*, can be found on the IEC website.

In this standard, the following print types are used:

- terms defined in Clause 3: **bold type**.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

SURFACE CLEANING APPLIANCES –

Part 6: Wet hard floor cleaning appliances for household or similar use – Methods for measuring the performance

1 Scope

This part of IEC 62885 is applicable for measurements of the performance of **wet hard floor cleaning appliances** for household use in or under conditions similar to those in household use. In the case of appliances with combined functionality, this document only addresses the wet cleaning functionality.

The purpose of this document is to specify essential performance characteristics of **wet hard floor cleaning appliances** that are of interest to users and to describe methods for measuring these characteristics.

NOTE This document is not intended for cordless and robotic wet hard floor cleaning appliances.

For safety requirements, reference is made to IEC 60335-1, IEC 60335-2-2, IEC 60335-2-10, and IEC 60335-2-54.

A recommendation on information for the consumer at the point of sale is given in Annex B.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest test edition of the referenced document (including any amendments) applies.

IEC 60335-1, *Household and similar electrical appliances – Safety – Part 1: General requirements*

IEC 60335-2-2, *Household and similar electrical appliances – Safety – Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances*

IEC 60335-2-10, *Household and similar electrical appliances – Safety – Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines*

IEC 60335-2-54, *Household and similar electrical appliances – Safety – Part 2-54: Particular requirements for surface-cleaning appliances for household use employing liquids or steam*

IEC 60688, *Electrical measuring transducers for converting A.C. and D.C. electrical quantities to analogue or digital signals*

IEC 60734:2012, *Household electrical appliances – Performance – Water for testing*

3 Terms and definitions

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