



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 16035:2023

Hardware performance sheet (HPS) - Identification and summary of test evidence to facilitate the inter- changeability of building hardware for

Leistungsbeschreibung für Baubeschläge
- Identifizierung und Zusammenfassung
der Prüfnachweise zur Unterstützung der
Austauschbarkeit von Baubeschlägen für

Fiche de performance de la quincaillerie
(HPS) - Identification et récapitulatif des
essais justificatifs visant à faciliter
l'interchangeabilité de la quincaillerie de



National Foreword

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English Version

**Hardware performance sheet (HPS) - Identification and
summary of test evidence to facilitate the inter-
changeability of building hardware for application to fire
resisting and/or smoke control doorsets and/or openable
windows**

Quincaillerie de bâtiment - Fiche de performance de la
quincaillerie (HPS) - Identification et récapitulatif des
essais justificatifs visant à faciliter l'interchangeabilité
de la quincaillerie de bâtiment destinée à être installée
sur des blocs-portes et fenêtres ouvrantes résistant au
feu et pare-fumées

Leistungsbeschreibung für Baubeschläge -
Identifizierung und Zusammenfassung der
Prüfnachweise zur Unterstützung der
Austauschbarkeit von Baubeschlägen für die
Anwendung an feuerwiderstandsfähigen und/oder
rauchdichten Toren, Türen und/oder zu öffnenden
Fenstern

This European Standard was approved by CEN on 22 October 2023.

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.

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Contents

Page

European foreword.....	3
Introduction	4
1 Scope	5
2 Normative references.....	5
3 Terms and definitions	6
4 General principles of the Hardware Performance Sheet (HPS)	6
5 Data to be provided	7
5.1 General.....	7
5.2 Required data — Building hardware	7
Table 1 — Building hardware	7
5.3 Required data — test evidence used.....	8
Table 2 — Test evidence used.....	8
5.4 Performance level(s) related to the evidence fire resistance.....	10
Table 3 — Performance level(s) fire resistance.....	10
5.5 Performance level(s) related to the evidence smoke control.....	11
Table 4 — Performance level(s) smoke control.....	11
5.6 Performance level(s) related to the durability of self-closing.....	12
Table 5 — Performance level(s) for durability of self-closing.....	12
Annex A (informative) Structure and scheme of an HPS.....	13
Figure A.1 — HPS Structure	13
Bibliography.....	14

European foreword

This document (EN 16035:2023) has been prepared by Technical Committee CEN/TC 33 “Doors, windows, shutters, building hardware and curtain walling”, 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 May 2024, and conflicting national standards shall be withdrawn at the latest by May 2024.

This document supersedes EN 16035:2012.

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

In comparison with the previous edition, the following significant technical modifications have been made:

Modified clauses, paragraphs, annexes, tables or figures:

- The structure has been redesigned;
- Additional requirements added for information on thermal separation, insulation, intumescent layer, related EXAP standards and rules;

New normative reference:

- The EN 17020 series for durability of self-closing EXAP standards are now available;

Deleted normative references:

- EN 1154: this standard is no longer referred to;
- EN 14600: this standard has been withdrawn.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

The Hardware Performance Sheet (HPS) is intended to facilitate the interaction between the available data from completed tests and the data required for the interchangeability.

For this purpose, this document defines the required data, which can be provided in a standardized data format for the interchangeability according to the respective Extended Application rule (EXAP) from the EN 15269 series or EN 17020 series of standards.

This document is primarily addressed to the creators of an HPS.

An HPS might be used, but not only by the creators of an EXAP Report.

This document is designed to enable an HPS to replace a short test report for building hardware in the future.

1 Scope

This document summarizes relevant results and classifications from tests of the fire resistance, smoke control and related durability performances of building hardware in the format of a hardware performance sheet (HPS). This document provides guidance and requirements on the minimum data required as a basis for the preparation of EXAP reports for the interchangeability of building hardware on fire-retardant and/or smoke-tight doors and openable windows.

This document identifies the performance characteristics and the requirements for building hardware which can be found in the appropriate product standards.

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 edition of the referenced document (including any amendments) applies.

EN 1191, *Windows and doors - Resistance to repeated opening and closing - Test method*

EN 1363-1, *Fire resistance tests - Part 1: General requirements*

EN 1634-1:2014+A1:2018, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware - Part 1: Fire resistance test for door and shutter assemblies and openable windows*

EN 1634-2, *Fire resistance and smoke control tests for door, shutter and openable window assemblies and elements of building hardware - Part 2: Fire resistance characterisation test for elements of building hardware*

EN 1634-3, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware - Part 3: Smoke control test for door and shutter assemblies*

EN 12604, *Industrial, commercial and garage doors and gates - Mechanical aspects - Requirements and test methods*

EN 13501-2, *Fire classification of construction products and building elements - Part 2: Classification using data from fire resistance and/or smoke control tests, excluding ventilation services*

EN 15269 (all parts), *Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies including their elements of building hardware*

EN 16034, *Pedestrian doorsets, industrial, commercial, garage doors and openable windows - Product standard, performance characteristics - Fire resisting and/or smoke control characteristics*

EN 17020 (all parts), *Extended application of test results on durability of self-closing for fire resistance and/or smoke control doorsets and openable windows*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1191, EN 1363-1, EN 1634-1, EN 1634-3, EN 15725, EN 12519, EN 12433-1, EN 12433-2, EN ISO 13943 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

doorset

pedestrian doorset, industrial, commercial and/or garage doorset, rolling shutter and/or operable fabric curtain including any frame or guide, door leaf or leaves, rolling or folding curtain, etc.,

Note 1 to entry: Including any side panel(s), vision panel(s), flush over panel(s), transom panel(s) and/or glazing together with any building hardware and any seals (whether provided for the purpose of fire resistance or smoke control or for other purposes such as draught or acoustics).

Note 2 to entry: Fulfilling the provisions of this document is under the responsibility of one identified manufacturer.

3.2

element

generic term for doorsets and openable windows

3.3

interchangeability

possibility, under the responsibility of the competent subject, to use elements of building hardware which differ from those tested in the original doorset or openable window without compromising its performance characteristics

3.4

openable window

window with one or more moveable elements including any fixed or removable side or overpanel(s), perimeter frame and relevant elements of building hardware

3.5

product line

range of products made of the same material and the same function, where one or more specific members are representative for the whole family

4 General principles of the Hardware Performance Sheet (HPS)

An HPS provides fundamental information to enable a notified body to evaluate the interchangeability of building hardware in context of the application of the EXAP standards EN 15269 (all parts) and EN 17020 (all parts).

An HPS lists all applicable test evidence used and performance levels for an item of building hardware by one or more tests.

All identified and stated performance characteristics and levels items of building hardware, doorsets and openable windows in an HPS should comply with the appropriate product or classification standard.