



Association of Building
Hardware Manufacturers

Best practice guide

Hardware for sliding
doors and folding doors
to
BS EN 1527

in association with



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• **ABHM BEST PRACTICE GUIDES**

This publication is one of a series of guides addressing the major issues that should be considered when specifying, ordering or using the products it describes. It aims to provide the reader with a concise document summarising the relevant sections from the new European product standard. The reader will then be in a position to seek further specialist advice where necessary and recognise **GENUINE** conformity to the new standards.

• **BS EN 1527: Hardware for sliding doors and folding doors**

This standard covers most of the main types of sliding and sliding/folding applications, giving details of product performance criteria, test apparatus, testing methods, door mass, durability, fire and corrosion resistance.

The published standard details the test criteria and includes illustrations clarifying the test methods and the points made.

A complete edition of this standard can be obtained by post from BSI Customer Services, BSI Standards, 389 Chiswick High Road, London W4 4AL.

• **SCOPE**

This standard specifies requirements for the principal components for most sliding and sliding/folding doors but excludes the doors and panels themselves.

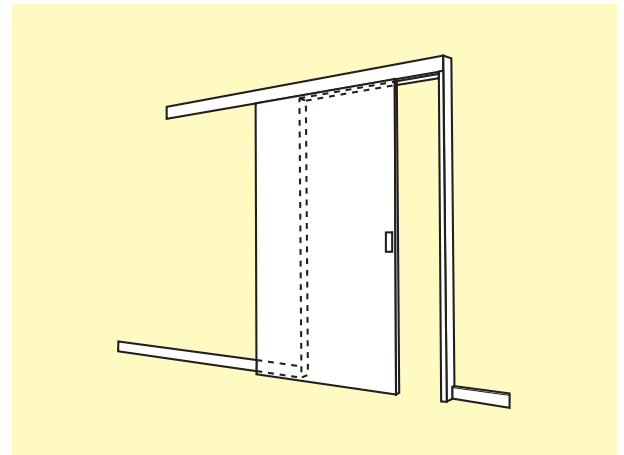
Products included within the standard are:

- Straight sliding systems
 - top hung
 - bottom rolling (panels over 100 kg)

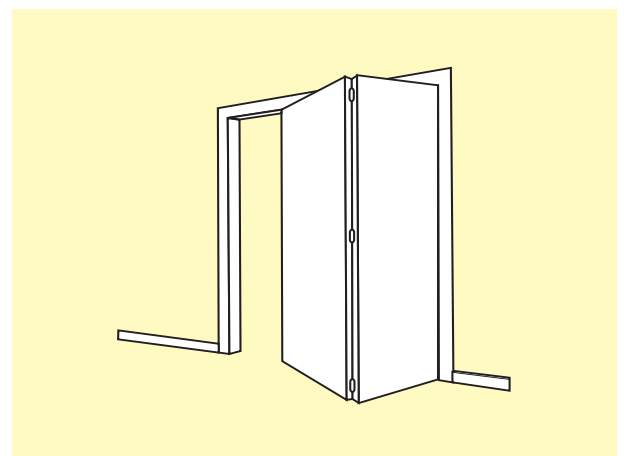
Sliding/folding doors

Multi-panel folding doors

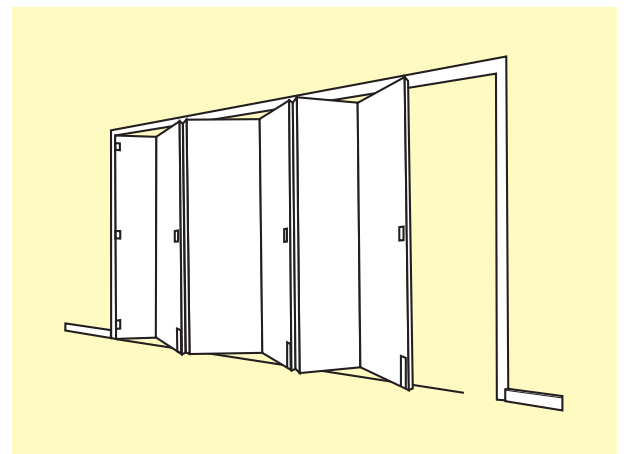
The standard does not cover bottom-rolling systems where the door weight is less than 100 kg and certain types of folding systems.



Straight sliding door.



Sliding/folding door.



Multi-panel folding door.

• CLASSIFICATION

This standard classifies sliding door gear using a 9 digit coding system although not all the digits apply to the product. It is intended that a similar classification system will apply to all building hardware product standards so that, where relevant, complementary items can be specified to a common level of category of use, durability, corrosion resistance, etc. Each digit relates to a particular feature of the product measured against the standard's performance requirements.

Digit 1	Digit 2	Digit 3	Digit 4	Digit 5	Digit 6	Digit 7	Digit 8	Digit 9
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Digit 1 - Category of use

No grade identified for these products.

Digit 2 - Durability

Durability is measured by the number of openings (cycles) performed by the gear under standard test conditions. All parts must remain in serviceable condition throughout the test and no adjustment is allowed. Fittings are required to pass the Initial Friction Test (Digit 9) both before and after the durability test. The six grades are:

- grade 1: 2 500 cycles
- grade 2: 5 000 cycles
- grade 3: 10 000 cycles
- grade 4: 25 000 cycles
- grade 5: 50 000 cycles
- grade 6: 100 000 cycles

Digit 3 - Door weight

Four grades are identified:

- grade 1: up to 50 kg
- grade 2: from 51 kg to 100 kg
- grade 3: from 101 kg to 330 kg
- grade 4: over 330 kg

Digit 4 - Fire resistance

Two grades of fire resistance are identified:

- grade 0: not approved for use on fire door assemblies
- grade 1: suitable for use on fire door assemblies

Digit 5 - Safety

No requirements

Digit 6 - Corrosion resistance

Five possible grades are identified, classified in accordance with BS EN 1670.

- grade 0: no defined corrosion resistance
- grade 1: low resistance
- grade 2: moderate resistance
- grade 3: high resistance
- grade 4: very high resistance

Grade 0 also applies to products for which a defined corrosion resistance is not relevant and to those that have not been tested.

Digit 7 - Security

No requirements

Digit 8 - Category of door

Three types of door are covered by the standard:

- grade 1: straight sliding door
- grade 2: sliding/folding door
- grade 3: multi-panel folding door

Digit 9 - Initial friction

This is the measurement of the amount of force required to start the movement of the door. The grade allocated is variable depending upon the weight of the door.

Weight	0-50 kg	51-100 kg	101-330 kg	Over 330 kg
Grade 1	50 N	80 N	100 N	5%*
Grade 2	40 N	60 N	5%*	4%*
Grade 3	30 N	40 N	4%*	3%*

* % of door weight

• CLASSIFICATION EXAMPLE

The following marking denotes a straight sliding door with a weight between 51 kg and 100 kg with no category of use, durability tested to 10 000 cycles, no fire resistance, no safety requirements, no defined corrosion resistance, no security requirement and having initial friction equal to or less than 60 N.

-	3	2	0	-	0	-	1	2
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• MARKING

Hangers manufactured to this standard should be marked with the following:

- a) The manufacturer's name or trade mark
- b) Product identification

The identification should, where possible, be shown on the product. Alternatively, it should be on the packaging. The classification illustrated above may also be included.

Additional important considerations

In addition to ensuring that products satisfy the requirements of this standard, other factors should be taken into consideration when selecting sliding door gear. These not only include sourcing products from a reputable manufacturer, but also quality assurance, support services and unequivocal conformity to the standard as detailed below:

• QUALITY ASSURANCE

The internationally recognised standard for quality assurance, BS EN ISO 9000 provides confidence that the products are being manufactured to a consistent quality level. All ABHM members operate recognised BS EN ISO 9000 Quality Assurance Schemes.



Companies displaying this symbol are registered under the BSI Registered Firm Scheme.

• CONFORMITY

Conformity to the standard must be clearly and unequivocally stated. Such phrases as “tested to", “designed to conform to.....”, “approved to”, are not sufficient. To avoid misleading or confusing claims it is recommended that one of the following phrases is used when stating conformity:

- This product has been successfully type-tested for conformity to all the requirements of BS EN 1527. Test reports and/or certificates are available upon request.
- This product has been successfully type-tested for conformity to all the requirements of BS EN 1527 including the additional requirements for fire door use. Test reports and/or certificates are available upon request.
- This product has been successfully type-tested for conformity to all the requirements of BS EN 1527 including the additional requirements for fire door use. Regular audit testing is undertaken. Test reports and/or certificates are available upon request.

• SUPPORT SERVICE

The correct selection and installation of sliding door gear is essential to ensure that it is able to operate efficiently within the performance level described in this standard. Specialist advice is available from the following ABHM members in support of their products from specification stage, through supply to effective operation on site.

PC Henderson Limited

Tel: 0191 377 0701

Fax: 0191 377 1309

<http://www.pchenderson.com>

e-mail: sales@pchenderson.com

Hillaldam Coburn Limited

Tel: 0181 336 1515

FreeFax: 0800 616623

<http://www.coburn.co.uk/>

e-mail: sales@hillaldam.co.uk

ABHM PROFILE

Formed in 1897 to represent the interests of brassfounders, the ABHM and its members has been instrumental in the industry's advancement over the last 100 years.

Innovations in material and manufacturing technologies combined with changes in the building industry throughout the world have demanded new skills and knowledge from the designer and manufacturer of the products themselves as well as from specifiers, stockists and installers in the various sectors of the building industry.

The Association and its members have consistently risen to this challenge, creating products which meet the needs of a changing world and developing performance standards

alongside national and international organisations, such as BSI and CEN, which enable the industry to select and compare hardware with confidence.

The advances made throughout the industry are reflected in the Association's structure, the diversity of its membership and its wide range of activities. The ABHM represents the United Kingdom's leading manufacturers of builders' hardware, architectural ironmongery and door and window fittings, and provides the technical expertise essential for the formulation of performance standards at home and abroad.

All members are listed in a Product Guide which includes an easy to use matrix of products and services available.

British Hardware Federation

BHF represents some 3,500 ironmongery, hardware and DIY shops in the United Kingdom. In addition, it embraces the Independent Builders Merchants Service, a specialist division of the Federation.

Builders Merchants' Federation

The Builders Merchants' Federation represents the majority of bona fide merchants in the UK. Its members have a combined turnover of £6 billion a year. Members range from large nationals to small independents.

Guild of Architectural Ironmongers

Founded in 1961, the Guild represents 95% of bona fide distributors within the UK and the majority of manufacturers of architectural ironmongery. The Guild serves to further all aspects of architectural ironmongery by promoting the interchange of information to encourage better product design and high professional standards of ironmongery scheduling and specification.

Master Locksmiths Association

The MLA is recognised by the Home Office, Police and The British Standards Institution as being the authoritative body for locksmithing. It was formed to promote the membership to Central and Local Governments, Industry, Commerce and the Public.



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