

Hardware for Sliding Doors & Folding Doors

A Best Practice Guide to **BS EN 1527:2013**





dhf Best Practice Guide: Hardware for Sliding Doors and Folding Doors

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dhf Best Practice Guides

This publication is one in 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 which includes a summary of relevant sections from the new Technical product standard. The reader will then be in a position to seek further specialist advice where necessary and recognise GENUINE conformity to the new standard.

NOTE: Unless stated otherwise, references in this document to EN 1527 refer to BS EN 1527:2013. Information in this guide is correct at time of publication and intended for guidance only. Information may since have changed and readers should consult the appropriate standards and authorities to confirm its veracity.

BS EN 1527: Hardware for sliding doors and folding doors

The purpose of this Best Practice Guide to Technical Specification DHF TS 010:2016 is to provide a classification for Electromagnetic Locking Devices, as no current product standard is available and to give specifiers guidance of the performance of these types of products, including internal face fixed, internal mortice, internal shear magnets and external magnets.

Extracts from BS EN 1527 are reproduced with the permission of the British Standards Institution under licence number 2003/SK0014. BSI publications can be obtained from:

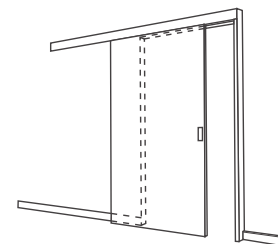
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Scope

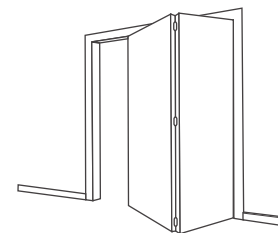
This standard specifies requirements for the principal components for most sliding and sliding/folding doors but excludes the doors and panels themselves.

Products included within the standard are:

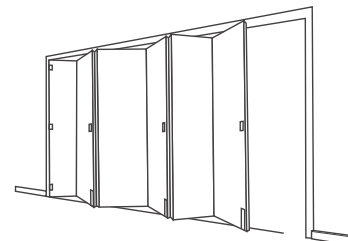
- Straight sliding systems
 - top hung
 - bottom rolling (panels over 100 kg)
- Sliding/folding doors
- Multi-panel folding doors



Straight sliding door.



Sliding/folding door.

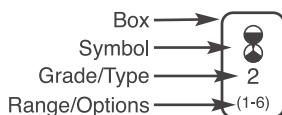


Multi-panel folding door.

Classification

BS EN 1527 classifies sliding door gear by using a 9 digit coding system. A similar classification applies to all building hardware product standards so that complementary items of hardware can be specified to, for instance, a common level of corrosion resistance, category of use, etc. Each digit refers to a particular feature of the product measured against the standard's performance requirements.

dhf recommends the use of graphic icons to enhance clarity of information and has devised a system to facilitate assimilation of the various product classifications. Each feature within the product classification is represented by an icon comprising four elements; Symbol, Grade/Type, Range/Options and Box:-



The icon above is for a product which meets Grade 2 in the Durability classification, where EN 1527 stipulates a range of four possible grades from 1 to 6.

Full details on the dhf graphic icons system is available upon request.

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.

Six grades of durability are identified for door fittings:

- Grade 1: 5,000 test cycles
- Grade 2: 10,000 test cycles
- Grade 3: 25,000 test cycles
- Grade 4: 50,000 test cycles
- Grade 5: 75,000 test cycles
- Grade 6: 100,000 test 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 fire/smoke resistant door assemblies subject to satisfactory assessment of the contribution of the hardware for sliding doors and folding doors to the fire resistance of the specified fire/smoke door assemblies. Such assessment is beyond the scope of this European standard (see EN 1634-1).



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



Digit 7 **Security**

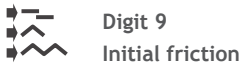
No requirements



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



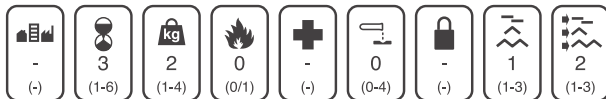
This is the measurement of the amount of force required to start the movement of the door. The grade allocated is variable depending upon the weight of the door.

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

EXAMPLE

The following marking denotes hardware suitable for use on 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.



Marking

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

- Manufacturer's name or trademark or other means of positive identification
- 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.

CE Marking

BS EN 1527 has not been designated as a harmonised product standard under the Construction Products Directive, and therefore CE Marking of hardware for sliding doors and folding doors is NOT permitted.

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.



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

Support Service

The correct installation of locks, latches and locking plates is essential to ensure that they are able to operate efficiently within the performance levels described in this standard. Specialist advice is available from **dhf** members in support of their products from specification stages through supply to effective operation on site.

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.
- 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.

dhf

dhf (Door and Hardware Federation) was created by a merger between the Association of Building Hardware Manufacturers (ABHM) and the Door and Shutter Manufacturers Association (DSMA), both of which had established excellent reputations in their respective industries, particularly in the area of technical expertise and the development of performance standards in national and international arenas.

dhf has built on these reputations by exploiting the synergies that exist between the two associations and combining their technical and financial resources to provide a unified, authoritative voice for the entire industry.

dhf and its members have consistently risen to the challenges posed by an ever-changing market, 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 products with confidence.

dhf now represents all the key players in the following sectors: locks and building hardware, doorsets, industrial doors and shutters, domestic garage doors and automated gates/traffic barriers.

With the ultimate aim of maintaining and raising quality standards throughout the industry, all dhf members must meet minimum standards of competence and customer service. They all operate within a Code of Conduct governing standards of workmanship, quality assurance, training, safety, business integrity and CE marking compliance.

Guild of Architectural Ironmongers

Founded in 1961, the GAI represents the majority of Architectural Ironmongers in the UK. The GAI serves to further all aspects of architectural ironmongery by promoting the interchange of information to encourage better products design and high professional standards of ironmongery scheduling and specification. GAI has also expanded its offering to include overseas clients, who are increasingly taking advantage of its comprehensive education programme.



Master Locksmiths Association

The MLA is the leading trade association for the locksmithing industry. It is recognised as the authoritative body by the police, government, insurers and other such groups. MLA licenced companies can provide customers with peace of mind regarding the security of their property. Its members undergo strict vetting and regular inspections.







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