

Australian Standard[®]

Locksets and hardware for doors and windows

Part 1: Glossary of terms and rating system



This Australian Standard® was prepared by Committee CS-082, Locksets and Hardware. It was approved on behalf of the Council of Standards Australia on 5 February 2008. This Standard was published on 4 April 2008.

The following are represented on Committee CS-082:

- Architectural Hardware Industry Association
 - ASIS Australia Chapter
 - Australian Chamber of Commerce and Industry
 - Australian Industry Group
 - Australian Window Association
 - Certification Interests (Australia)
 - Locksmiths Guild of Australia
 - Master Locksmiths Association of Australasia
 - New South Wales Police Force
-

This Standard was issued in draft form for comment as DR 07209.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Originated as AS 4145.1—1993.
Second edition 2008.
Reissued incorporating Amendment No. 1 (December 2009).

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Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 8611 1

PREFACE

This Standard was prepared by the Standards Australia Committee CS-082, Locksets and Hardware, to supersede AS 4145.1—1993, *Locksets—Glossary of terms*.

This Standard incorporates Amendment No. 1 (December 2009). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to set out a rating system for locksets and hardware for doors and windows and to standardize the terminology and rating used in the Australian lock industry and marketplace. Terms associated with locksets for doors and windows in buildings make up the bulk of this Standard.

Where non-preferred terms have been included in this glossary, the definition is indicated by reference to the preferred term.

This revision also includes a new section on the requirements for testing and rating the various classification systems required for the suite of locksets and hardware. It is intended as a product selection system enabling the consumer to choose the appropriate locksets suitable for the required application.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard

Locksets and hardware for doors and windows

Part 1: Glossary of terms and rating system

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out the glossary of terms and the rating system required for the use of the AS 4145 suite of Standards.

NOTE: For guidance on selection on the appropriate product, refer to Appendix A.

1.2 APPLICATION

This Standard defines the locksets and hardware terms used for doors and windows and provides information on selection system (e.g., rating system, classification, etc.), marking, abbreviation and door lock functions.

NOTE: This Standard may be used for information purposes.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

AS

1428	Design for access and mobility
1428.1	Part 1: General requirements for access—New building work
1789	Electroplated zinc (electrogalvanized) coatings on ferrous articles (batch process)
1905	Components for the protection of openings in fire-resistant walls
1905.1	Part 1: Fire-resistant doorsets
2331	Methods of test for metallic and related coatings
2331.3.1	Method 3.1: Corrosion and related property test—Neutral salt spray test (NSS test)
4145	Locksets
4145.2	Part 2: Mechanical locksets for doors and windows in buildings
BCA	Building Code of Australia

1.4 DEFINITIONS

For the purpose of the AS 4145 suite of Standards, including this Standard, the definitions in Section 2 apply.

SECTION 2 GLOSSARY OF TERMS

Term	Definition
A	
Access control	The means of influencing and regulating the flow of persons through a doorway.
Active leaf	The first opening leaf of a pair of doors on which the active or locking hardware is mounted.
Adjustable back check	An inbuilt function that allows the back check intensity and position to be adjusted.
Adjustable closing force	An inbuilt function that allows the closing moment of a door closer to be adjusted over a range of power sizes.
Advanced variable back check	An inbuilt function that allows the back check position to be activated at an angle smaller than 75° of the door opening position.
Anti-friction latchbolt	A latchbolt equipped with a device for reducing friction between bolt and strike. Usually a small trigger attached to the bolt contacts the strike and exerts a lever action to depress the bolt. Generally incorporated in longer throw latchbolts.
Anti-rattle strike	A strike having an angled lip within the bolt hole, which is adjustable, to prevent movement of the door, when in a closed position.
Architectural hardware	A term used by the industry to refer to higher quality door or window fixtures used in building construction (e.g. locks, hinges, door closers, and door furniture).
Arm (of a door closer)	Door closer linkage that connects the closed door to the frame or door, depending on the mounting style.
Astragal	A ‘T’ shape moulding or extrusion applied to the meeting stiles of a pair of doors to act as a weather seal, fire door seal or a smoke seal. (An alternative to conventional rebating.) Usually applied to the active leaf and overlapping the inactive leaf.
Attack protection	Components incorporated in locks or lock cylinders, or both, which are designed to increase security against manipulation by picking, raking or drilling.
Automatic deadbolt	A bolt designed to extend fully when the door is closed and to be restrained against return by end pressure.
Automatic deadlatch	<i>See</i> deadlatch
Automatic flush bolt	A flush bolt designed to automatically extend itself when both leaves of a pair of doors are in the closed position. Usually mounted in the meeting stile of the inactive leaf and triggered by contact with the meeting stile of the active leaf.

Term	Definition
Authorized key cutter	A business or person authorized by the lock cylinder manufacturer or agent to cut or bit that manufacturer's or agent's restricted keys.
Auxiliary bolt	An additional bolt that is activated by the strike when the door is closed, automatically deadlatching the latchbolt against end pressure.
Auxiliary spring	A secondary spring used to support lever handles from sagging.
B	
Back check	An inbuilt hydraulic buffer that cushions and checks the opening movement of the door from 75° of opening. Designed to prevent the door from being thrown open and possibly causing damage to door and frame, and door hardware.
Backset	The distance from the edge of the door to the centre line of the keyhole or central axis of the knob or lever, or whichever is closest to the edge of the door.
Ball bearing hinge	A hinge equipped with ball bearings between the hinge knuckles to reduce friction. Recommended for doors having doors closers or doors of high frequency usage.
Barrel	<i>See plug</i>
Bevel	Angle of the striking face of a latchbolt.
Bevelled faceplate	A faceplate shaped to fit the closing edge of a door which is not at 90° to the face of the door.
Bitted key	Generally means a cut key. Also applied to lever locks where the key has the blade projecting at right angles to the shank.
Bolt	The part of the lock or latch that projects to engage the strike or staple.
Bolt projection	The measurement of the distance that a bolt protrudes from the faceplate when fully extended.
Bolt throw	The measurement of the maximum travel of the bolt to the fully extended position.
Box strike	A strike in which the bolt recess is enclosed or boxed, thus covering the opening in the jamb.
Broach	A tool used to cut the keyway into the cylinder plug. A term also used for the keyway shape.
Budget lock	A lock, usually operated by a square-shaped key, offering very little security.
Butt hinge	A type of hinge designed to be morticed into the door edge and into the rebate of a doorframe.

Term	Definition
C	
Cam	A rotating lever attached to the end of the cylinder plug to activate the lock mechanism.
Cam action	A door closer equipped internally with a rotating cam that pushes against and moves forward with minimal movement a piston. The piston in turn compresses the spring causing the stored energy to close the door.
Cam lock	A cylinder assembly where the cam acts as a lock bolt.
Cap (of a lock)	The removable lid of the case; also called a cover plate.
Case (of a lock)	The housing containing the operating mechanism.
Chain bolt	A spring bolt actuated by a chain attached to the spring bolt. For application at the top of the door.
Change key	<i>See</i> servant key
Classroom lock	<i>See</i> Appendix E, Door lock functions
Closing force	The force (in newton metres) generated by the door closing device, which acts upon the door leaf during the closing operation.
Clutch	A lock mechanism that allows— (a) the lock to disengage the knob or lever to move freely without retracting the bolt; or (b) the knob or lever, if forced, to move without retracting the bolt.
Combination locking latch	A lock with various latching functions operated generally by knobs or levers on both sides except when locked by key outside or by key or turnknob inside.
Combination manipulation	Operation of the coding mechanism to open the lock by trial and error without using force.
Connecting bar	A bar connecting a plug or turnknob to a lock mechanism.
Construction cylinder	Temporary keyed cylinders installed during construction, removed and replaced with final keyed cylinders after construction is complete. This system ensures that keys used during construction cannot operate after final cylinders are installed.
Construction keying	Alternative method to a construction cylinder where the keyed cylinders are supplied with a construction key system when it is removed prior to building completion by the insertion of the owner key or by the removal of a split key plug.
Control key	A special key used to remove an interchangeable core cylinder from its lock.

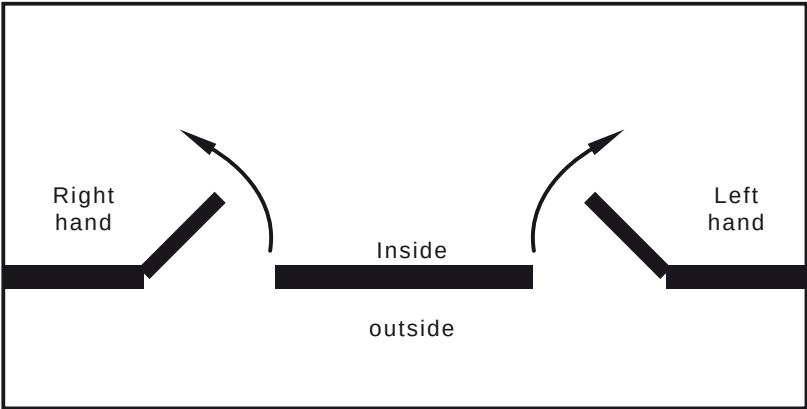
Term	Definition
Controlled door closing device	Any manually operated hydraulic door-closing mechanism where the energy for closing is generated by the user upon opening of the door, stored and, when released, returns the door to the closed position, in a controlled manner. The term includes all arms, brackets, shoes, top and floor pivots and other parts supplied with the device and necessary for its installation and operation.
Continuous hinge (piano hinge)	A hinge designed to be the same length as the moving part to which it is applied.
Co-ordinator	A device used on a pair of doors to ensure that the inactive leaf is permitted to close before the active leaf. Necessary on doors fitted with closing devices that are rebated or fitted with an astragal.
Curtain	A security device used in lever locks to partially close the keyhole when the key or any other implement is inserted and turned.
Cylinder	The assembly incorporating the key-operated mechanism.
Cylinder core	<i>See</i> plug
Cylinder lock	A lock having a mechanism operated by a cylinder.
Cylinder ring	<i>See</i> escutcheon
Cylinder rose	<i>See</i> escutcheon
Cylindrical lockset	A lock with a cylindrical housing that has a separate latchbolt.
D	
Deadbolt	A bolt that is not actuated by a spring. When locked the bolt cannot be returned by end pressure.
Deadlatch	A lock containing a deadlatch bolt.
Deadlatch bolt	A spring-actuated latchbolt, usually bevelled, which often operates in conjunction with an auxiliary bolt that automatically locks the latchbolt to restrain it against return by end pressure.
Deadlock	A lock incorporating a deadbolt.
Deadlocking latchbolt	A latchbolt that, when the door is closed, can be locked against return by end pressure by the operation of a key or turnknob. NOTE: Because the door cannot be closed after locking the latchbolt, this type of lock is not acceptable for fire doorsets.
Deadlocking latch	A lock incorporating a deadlocking latchbolt.
Delayed closing	An inbuilt function that allows the door closing action to be delayed for an adjustable period of time before resuming controlled closing.
Detainer	<i>See</i> tumbler

Term	Definition
Differs	The variation between locks of similar design, which allow each lock to be operated only by its own key.
Direct key coding	A code marked on a key or lock which, with no reference to another series of codes, discloses the key cuts for creating a workable key.
Disc	<i>See</i> tumbler
Dogging device	<i>See</i> holdback
Door close power size	A measure of the closing moment exerted by the door closer on the door leaf.
Door furniture	Knobs, levers, handles, roses, plates or escutcheons used in conjunction with locks and latches.
Door and window hardware	A broad term used to group all the items that are fitted or related to doors, e.g., hinges, locks, padlocks, door closers, pull handles, bolts, stops, and tracks.
Door jamb	That which a door functions within to which the strike plate is fixed.
Door stay (see Friction stay)	A door travel limiting device designed to stop door movement at a given point.
Door stop	1 A device to stop the swing or movement of a door at a certain point. 2 An architectural term defining the part of a doorframe against which the door closes.
Double-action door closer	A door closer that allows operation of the door in both directions.
Double-bitted key	A key having bittings or cuts on two sides to actuate the tumblers of the lock.
Double-hung sash	Two windows that can move up and down individually to form a whole window.
Double-throw bolt	A lock bolt that can be extended in stages to increase the bolt projection.
Double-throw bolt	<i>See</i> top pin
Drop plate	A mounting plate designed to permit the installation of a door closer where door top rail dimensions limit the use of standard installation templating.
Dummy trim	A non-operating door trim that is installed for appearance or as a pull handle only.
Dust-proof strike	A strike with a spring plunger that completely fills the bolt hole when the bolt is not projected. Usually floor mounted to accept barrel bolts or flush bolts.

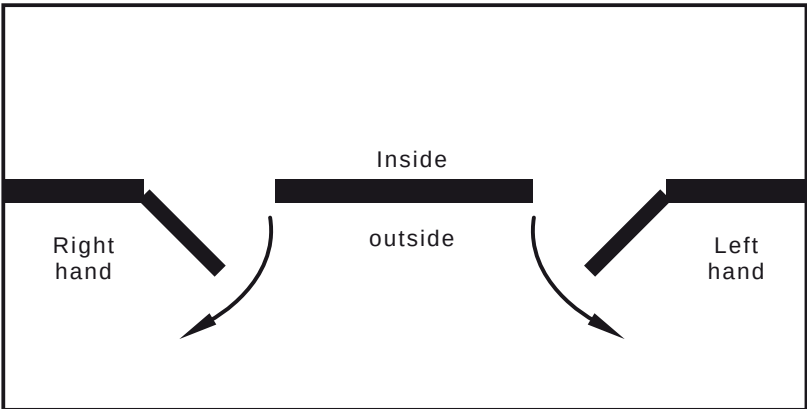
Term	Definition
E	
Effective differ	Difference between key mechanisms of similar design, achieved only by the movable retainers, which allows each key mechanism to be operated only by its own key. The number of effective differs is equal to the number of theoretical differs after deduction of the undesirables, suppressed by the manufacturer due to technical constraints.
Efficiency	A ratio of the opening force applied to the door by the use and the force available for closing the door, expressed as a percentage.
Electric lock	A lock incorporating a solenoid to enable the door to be released by remote control.
Electric strike	An electrical device that replaces a regular lock strike to enable a door to be released or locked by remote control.
Emergency key	A key supplied with locksets such as used for hotels/motels. These locksets have a feature which, when applied, prevents entry by normal service keys, master keys or grand master keys. At all times, entry can be gained by the emergency key that suits those groups of locks.
Emergency exit device	A door-locking device designed to grant instant egress by pressing on a cross bar that releases the locking latch.
Entrance set	<i>See</i> entrance lock in Appendix E
Escutcheon	A plate, either protective or ornamental, containing openings for any or all of the controlling members of the lock such as knob, lever, handle, cylinder or keyhole.
Extension link	A device that can be linked to a cylindrical lock latchbolt to increase the backset.
F	
Faceplate (also known as fore-end)	A front plate through which the bolt projects. It can either be fixed or removable.
Fail safe (also known as 'Power to lock')	The operation of electronic locking devices. The device is unsecured until power is applied. Interruption to the power supply will release the locking function.
Fail secure (also known as 'power to unlock')	The operation of electronic locking devices. The device is normally secure until power is applied to release the locking mechanism.
Floor-concealed door closer— floor spring	A door closer mounted within the floor also acting as pivot for the swinging of the door leaf.
Follower	<i>See</i> hub
Fore-end	<i>See</i> faceplate

Term	Definition
Fixed pin	A term used to indicate that the pin holding the two hinge leaves together is fixed in place and can only be removed with appropriate tools.
Frame	That part of a window assembly surrounding the sashes or fixed glazing. It is an assembly manufactured from timber, metal, glass, or other durable material or combinations of materials, such as glass fins and structural sealant forming part of the assembly of a glazed panel and supporting the full length of all the edges of the glass. NOTE: Butt-jointed glass panels that are not in the same plane can satisfy the requirements for frames.
Friction-free bolt	A bolt wherein the bolt head is fully engaged in the strike and no side pressure is applied to the bolt head by the strike when the bolt is withdrawn.
Friction-loaded bolt	A bolt wherein the bolt head is fully extended into the strike and is in contact with a side face of the strike bolthole and unusual pressure is applied by the strike. This is sometimes found in a warped door situation, due to the influence of direct sunlight on the door, including a friction load on the bolt head, increasing the force required to withdraw it.
Flush bolt	A door bolt designed so that, when installed, it is flush with the face or edge of the door.
Foot bolt	A door bolt applied at the bottom of the door and arranged for foot operation to engage or disengage the bolt. Generally the bolt is held up by a spring when unbolted.
Friction stay (see door stay)	A door travel limiting device designed to hold a door at any degree of opening by friction control incorporated in the arm and track.
Furniture	<i>See door furniture</i>
G	
Gating	The opening in lever tumblers that permits actuation of the bolt.
Grand master key (GMK)	A key, within a system, that operates all locks in a number of separate groups that have their own master keys.
Great grand master key (GGMK)	The same as GMK but usually consisting of more than one GMK group, which are then controlled by one GGMK key.
Guest key	A hotel/motel room key that is used by a guest, usually keyed to differ under a master key group.

Term	Definition
H	
Hand	The direction of door travel (swing or sliding) and the locking/security side of a door, e.g., right hand (opening out), left hand (opening out). Handing of door hardware is generally determined by standing on the outside/access side of the door and indicating on which side of the door leaf the hardware is to be installed. Left hand (LH) or right hand (RH) opening in or opening out (see Figures 2.1 and 2.2). NOTE: This is not applicable to security door and frame installations.

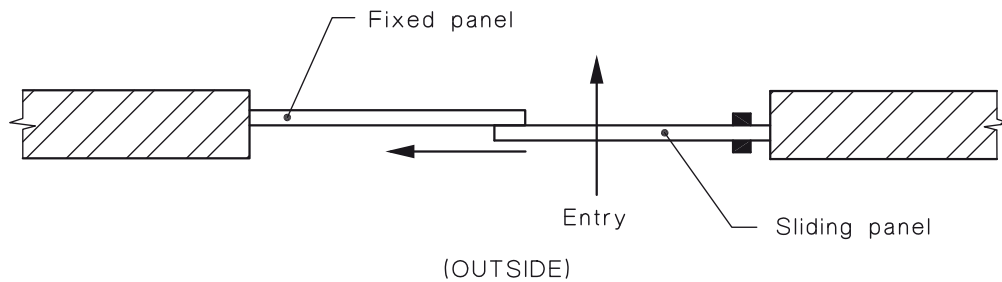


(a) Door opening in

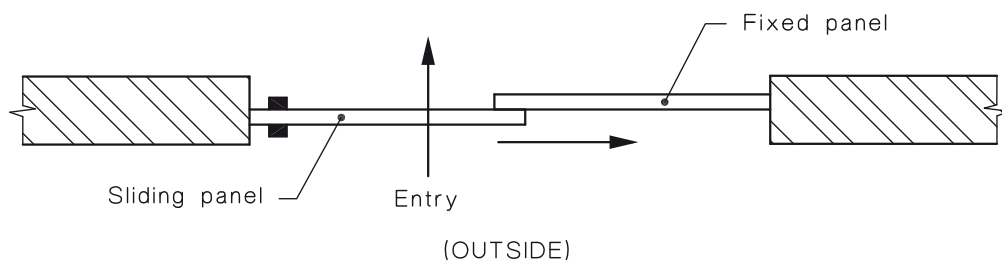


(b) Door opening out

FIGURE 2.1 HANDING—SWING DOORS



(a) Right hand lock sliding door



(b) Left hand lock sliding door

FIGURE 2.2 HANDING—SLIDING DOORS

Term	Definition
Handed	A product designed or assembled for use only on right-hand doors, or only on left-hand doors, but not both.
Hasp	A fastening device consisting of a loop and a slotted hinge plate, normally secured with a padlock.
Hinge	Two plates joined together by a pin enclosed in a knuckle, and attached to a door and its frame, supporting the door and allowing it to swing or move.
Hinge knuckle	The point of the hinge where the two leaves are joined.
Hinge stile	The stile of the door to which the hinges are applied, as distinguished for the lock stile.
Holdback	A snib, button or other device that can hold the bolt in the retracted position.
Hold-open	A function that allows a door fitted with a door closer to remain open at either a preset or chosen angle until manually released.
Hook bolt	A lock bolt that hooks onto the strike. Usually applied to sliding doors.
Hotel/motel lock	A deadlatching lockset function for hotels and motels to provide a privacy feature to protect the property and privacy of guests and functions, which may be overridden by management for emergency purposes.