

ABRASIVE COAT - Hard granular material applied to provide a non-slip tactile surface for the visually impaired.

ACTIVE DOOR (OR LEAF) – The first door allowed to operate in a paired sequence. Active trim or locking mechanism is usually placed on this door leaf. In case of a Double Egress opening both leaves are always active.

AHC – Indicates that the individual so identified is a qualified Architectural Hardware Consultant and member of the Door and Hardware Institute.

ALL-SECTION KEY BLANK – The key section which enters all keyways of a multiplex system.

ANSI - American National Standards Institute

ANSI WROUGHT STRIKE BOX – A metal box mounted behind the strike to protect the strike opening from mortar or cement.

ANTI-FRICTION LATCHBOLT – A latch bolt specifically designed to reduce friction when making contact with and engaging the strike.

APPLIED TRIM – A moulding separately applied to the face of a frame for trim purposes.

ARCHITECTURAL HARDWARE – Hardware used on or in conjunction with doors, windows, movable partitions and possibly cabinets.

ARM – the part of a closer that connects the body to the door or frame.

ARMORED FRONT – Refers to the part of a mortise lock mounted in the edge of a door. It consists of two plates; one plate is usually unfinished, mounted to the lock case. The top, exposed and finished plate is attached to the first plate. When the finished plate is installed it covers the lock mounting tab and cylinder set screws, thereby protecting them from tampering.

ASTRAGAL – A moulding or member applied to the vertical meeting edge of a door leaf when doors are used in pairs or applied to the horizontal meeting edge of doors and Transom Panels or fire rated Dutch Doors. Astragals are used to close the clearance gap between door leaves providing a weather seal, reducing the passage of sound or light, retarding the spread of fire and/or smoke through the door opening or for greater security of the opening against break—in. Astragals may be provided through the Finish Hardware section if they are of the nature of they may be required by the Wood Door or Hollow Metal manufacturer to complete the necessary fire labeling or general function requirements.

MORTISE ASTRAGAL – A two piece astragal. One piece is mortised into each leaf of the meeting edges of the pair. Usually used on Aluminum Doors or Wood Doors.

OVERLAPPING OR FLAT SECURITY ASTRAGAL/BEVEL

OVERLAPPING or **FLAT SECURITY ASTRAGAL** – A one-piece astragal attached to one door only. Usually attached to the Active Leaf and overlaps the other Inactive leaf.

'Z' ASTRAGAL – An astragal that usually attaches to the Inactive Leaf and slightly overlaps the edge and face and extends from the door edge on the low Bevel side.

SPLIT ASTRAGAL – A two-piece astragal, with each piece mounted on a Door Face at the meeting edges. An adjustment method is usually provided to abut the pieces and form a proper seal.

AUTOMATIC FLUSH BOLT- A mortise bolt installed near the top and bottom of the inactiveleaf of a pair of doors that holds the inactive leaf in the closed position until the active leaf is opened.

AUXILIARY DEAD LATCH – An additional latch that automatically deadlocks the main latchbolt when the door is in the closed position. Term is usually used with mortise locks.

AUXILIARY LATCHBOLT – A supplementary latch which, when the door is closed, automatically deadlocks the latchbolt. Protects the latchbolt from forced retraction or "credit carding".

BACK CHECK – A feature in many hydraulic door closers that may be adjusted to slow the opening movement of the door, taking effect usually between 60 to 85 degrees of opening. It is intended to protect objects from forceful door openings impacts. It should always be used in conjunction with a doorstop to protect the door and door hardware. Optional advanced back check may take effect as early as 45 degrees of opening.

BACKCHECK LOCATION – The point (approximately 70°) in the opening cycle where backcheck takes effect.

BACKSET (of a lock or panic device) – The distance from the centerline of a knob or lever hub, keyhole or cylinder to the face of the lock (latchbolt face) on the edge of the door. When a beveled door is used the measurement is always taken from the high bevel side.

BEVEL (of a lock) – Term used to indicate the direction the latchbolt is inclined; regular bevel for inward opening doors and reverse bevel for doors opening outward.

BEVEL (of a lock front) – Refers to the face of the latch when it is not at 90 degrees to the lock case. This is necessary for a flush fit with the corresponding beveled door edge.

Mechanical Glossary **BEVELED EDGE/CASE (LOCKCASE)**

BEVELED EDGE – The edge of a door that is not at a 90-degree angle to the door face. The usual bevel on most doors in indicated as 1/8 inch in 2 inches (3.2mm to 50.8mm). The narrow side of the door is considered the leading edge and is in contact with the stop of the frame when the door is closed.

BHMA – Builders Hardware Manufactures Association

BICENTRIC CYLINDER- a cylinder having two independent plugs, sometimes with different keyways. Both plugs are operable from the same face of the cylinder.

BIT (of a key) – The cut(s) made in a key blanks blade that actuates the pins (tumblers) within a cylinder, allowing the cylinder to operate.

BITTING NUMBERS – The numbers that represent the depths of the cuts made in a key blank, necessary to operate a cylinder as scheduled.

BLOCKING BAR (SIDE BAR) – A spring loaded bar located within the cylinder shell extending parallel to the keyway that when activated by a key with the proper machining, allows for a shear line between the cylinder shell and plug. When the wrong blank is inserted into the cylinder the blocking bar inhibits the rotation of the cylinder plug even if the combination of the key biting is correct to operate the lock.

BLOCKOUT CYLINDER – A cylinder which allows all keys to be temporarily blocked from operating. It is set by a blockout key.

BORED LOCK – A lock or latch that is intended for installation in cylindrical holes bored into a door.

BORROWED ARM – A hardware arm mechanism that is mounted on the bottom rail of a door and is then connected to the spindle or pin of a floor closer or pivot.

BOTTOM RAIL – The horizontal rail at the bottom of a door that connects the lock stile and hinge stile. On a Stile and Rail type door this component would be visible. On a Flush type door the stile would not be a totally visible feature.

BOW (of a key) – The enlarged part of a key that is used as a turning grip.

BOX STRIKE – A strike that incorporates a covered housing to the sides and back of the strike to protect the bolt when projected into the strike.

BUILDERS HARDWARE – See Architectural Hardware.

CAM (of a cylinder) – A lobe or lever shaped rotating piece, attached to the back of the cylinder plug that engages the locking or un-locking mechanism.

CASE (LOCKCASE) – The housing of a lockset containing most of the working parts.

CASED OPENING – A frame profile that has no integral stops.

CASEMENT HINGE – A hinge used to hang a casement window. Term used to indicate a hinge made to open the window sash out far enough to allow for cleaning the outside of the glass from inside the room on an outward-swinging casement.

CCPR – Indicates that the individual, so identified is a Certified Construction Products Representative and a member of the Construction Specifications Institute.

CDC – Indicates that the individual, so identified is a Certified Door Consultant and member of the Door and Hardware Institute.

CDT – Indicates that the individual so identified, is a Construction Documents Technologist and a member of the Construction Specifications Institute.

CENTER-HUNG DOOR – A door hung on center pivots.

CENTER PANEL – The panel between the hinge and lock stile of a stile and rail door.

CENTER PIVOT – Door hanging hardware that has the pivot axis located on the centerline of the door thickness. Usually located approximately 2-3/4 inches (69.8mm) from the hinge jamb.

CENTER RAIL – Horizontal rail in a Stile and Rail type door, usually located at the lock height. It is used to separate the upper and lower glass or panel areas of the door.

CHANGE KEY – As key that operates a particular bitting change within a key system. The change key can only operate one cylinder or group of keyed alike cylinders. Change Keys are the lowest level in a master key system.

CHANGES – The different bittings or tumbler arrangements available in a series of cylinders.

CHASSIS – The housing containing most of the working parts.

CHECKING FLOOR HINGE – A device mounted in the floor that uses both top and bottom pivots to hang the door with a controlled-speed closing mechanism.

CLOSER – A hardware device that uses spring compression power and adjustable controlled hydraulics to control a door leaf at the proper speed and opening force.

CLOSER BLOCKING – Additional reinforcing added to a flush type wood door to accommodate a surface type closer.

CLOSER BRACKET – A hardware device required for certain applications where the closer body is mounted on the frame rather than the door.

CLOSER REINFORCING – Reinforcing in a hollow metal or aluminum frame head or inside a hollow metal or aluminum door to provide additional strength for attachment of a door closer. May be a sleeve or plate type in the frame but is preferred as a channel or box type in the door.

CLOSER SCREW – A valve that adjusts the flow of hydraulic fluid within the closer body to control the closing of the door.

CLOSING SPEED – The speed at which a door swings from the open position to within a few degrees of latching. See Latching Speed.

COMBINATION – A group of numbers representing the bitting numbers of a key or the tumblers in the lock cylinder.

COMPOSITE CORE CONSTRUCTION – A hollow metal door using a solid core material bonded to a metal facing. Examples include polystyrene, polyurethane and solid temperature rise cores.

COMPOSITE KEYWAY – A keyway which has been enlarged to accept more than one key section, often key sections of more than one manufacturer.

CONCEALED KEY CONTROL (CKC) – The marking of standard key symbols on a cylinder in a location which is not visible once the cylinder is installed.

CONSTRUCTION CORE – A Removable or Interchangeable core used during the construction phase of a project. It is replaced by the permanent core when construction personnel no longer needs access.

CONSTRUCTION KEYING -

Construction Master Key (CMK) – A key normally used by the builder's personnel for a temporary period during construction. It operates all cylinders designated for its use. The key is permanently voided by the owner when he accepts the building or buildings from the contractor.

Construction Break-Out Key (CBOK) - A key used by the owner to make all Construction Master Keys permanently inoperative.

CONSTRUCTION MASTER KEY SYSTEM – A key system used to operate cylinders throughout a construction project. Once voided, the key will not operate that cylinder but the permanent keys will. The change of key operation is accomplished without the manual re-keying of the cylinder.

CONTROL KEY – A key that is used to remove and install a removable or interchangeable core.

Mechanical Glossary COORDINATOR/CYLINDER PLUG

COORDINATOR – A hardware device mounted on a double opening frame, which ensures the inactive leaf is allowed to closer before the active leaf. This is necessary when certain combinations of an overlapping astragal, automatic flush bolts and panic devices are used with closers on both door leaves.

CORE – A complete unit, often with a figure 8 shape, which usually consists of the plug, shell, tumblers, springs, plug retainer and spring cover(s). It is primarily used in removable and interchangeable core cylinders and locks.

CORNER BRACKET – A special purpose closer bracket that is attached to a frame jamb and head on the hinge side. The closer attaches to the bracket in some out-swinging door applications.

CORROSION PROTECTION – Additional painted covering on all external parts to deter oxidation and corrosion.

CROSS KEYING – Keys a cylinder to two or more separate Change keys. This practice offers convenience but always reduces security due to the elimination of pins or addition of multiples of Shear Lines available in the cylinders pin chambers.

CONTROLLED CROSS KEYING – When two or more Change Keys under the <u>same</u> Master Key are to operate one cylinder.

UNCONTROLLED CROSS KEYING – When two or more Change Keys under <u>different</u> Master Keys are to operate one cylinder.

CURVED LIP STRIKE – A strike with the lip curved to conform to the detail of the door frame.

CUT-OUT – A preparation on a door or frame for hardware and/or accessories.

CYLINDER (of a lock) – The cylindrical-shaped assembly containing the tumbler mechanism, usually consisting of a cylinder shell, cylinder plug and combinating pins with other miscellaneous parts, which can be operated by the correct key(s).

CYLINDER CAM – The metal plate attached or activated by the cylinder rotation which actuates the locking mechanism.

CYLINDER COLLAR – A spacing or trim type ring or plate installed under the head of a cylinder.

CYLINDER LOCK – A lock in which the locking mechanism is controlled by a cylinder.

CYLINDER PLUG – the round part of a cylinder that contains the keyway. It is rotated within the cylinder shell and has the cam, tailpiece or other actuating device attached to its end.

CYLINDER SET SCREW – A setscrew that prevents an installed cylinder from being rotated or removed.

CYLINDRICAL (locks/latches) – A term describing bored locks that have a cylindrical body or case that connects with separate latch bolt cases.

CYLINDRICAL LOCK PREPARATION – Also known as a government 161 or 160 preparation, or ANSI- A115.2 or A115.3 preparation. The preparation consists of a cylindrical hold through the door face and a cut out and a mortise and/or tap plate in the door edge to receive the latchbolt. The face may also require an additional set of varying holes through the door for Thru-Bolted trim used with many lever designs. Hollow metal doors must have internal reinforcing added during manufacture to support the lock prep.

DEADBOLT (of a lock) – A bolt having no bevel or spring action; operated by turning a thumbpiece, lever or key.

DEADLOCK – A lock that has a deadbolt only.

DEADLOCKING LATCHBOLT – A plunger type bolt parallel to the latchbolt of a lock that is held in a depressed position when the door is closed and the main latchbolt is retained by the strike on the frame. It prevents the bolt from being forced back toward the lock if pressure is applied during attempted forced entry. Term used primarily in conjunction with cylindrical locks (See also AUXILLARY DEAD LATCH).

DELAYED ACTION – Slows door closing speed between maximum opening and approximately 70°. Often specified to meet barrier-free codes which require delayed closing.

DIODES – A device that allows current to flow n one direction and not in the other direction.

DISPOSABLE CONSTRUCTION CORE – Is used with removable core keying, where non-essential locking doors are used within a construction project. Locks are supplied with disposable plastic cores.

DOGGING DEVICE (exit device) – A part of the exit device that when activated will hold the crossbar or push rail in the fully depressed position at all times, thereby holding the latchbolt of the exit device in retraction. This allows for free operation and access of the door from both sides. Mechanical dogging such as this is usually achieved by means of an allen type screw to activate the hold-down mechanism. Cylinder dogging replaces the allen key (*DOGGING KEY*) with a keyed hardware cylinder. Labeled doors are only able to be dogged by electrical means and not with a positive mechanical device.

DOGGING KEY – A key or tool used to dog an exit device.

Mechanical Glossary
DOOR OPENING/DUTCH DOOR

DOOR OPENING – the opening dimension of a doorway, measured between jamb rabbets and from the floor to the frame header rabbet. *CLEAR OPENING* is measured after deducting for frame stop projections and any portion of the door(s), when open, left protruding into the opening.

DOOR PROTECTION PLATES – Protective material applied to the face of the door and generally made of brass, bronze, aluminum, stainless steel or laminated plastic.

DOOR STOP – A device to stop the swing of a door.

DOUBLE ACTING DOOR – A door that swings in either direction. Prepared for pivots or spring hinges that allow the door to swing approximately 90 degrees. Hung from a Cased Opening Frame.

DOUBLE EGRESS FRAME – A special profile frame prepared to mount two (2) single acting doors swinging in opposite directions (both doors have the same hand). If a labeled opening both doors must have a fire rated vertical rod device. Operable trim is never necessary on the ingress side of either door.

DOUBLE LEVER ARM – A two part arm connected at the elbow that is part of a door closer providing superior leverage and the geometry provides greater mechanical strength.

DOUBLE-THROW BOLT – A lock bolt that can be projected (thrown) beyond its initial position into a fully extended one.

DRILL RESISTANCE – Arranging a cylinder plug and housing to resist drilling.

DRIVER PINS – The upper set of keying pins in a pin tumbler cylinder. The drivers are under constant spring tension toward the cylinder plug and are pushed upwards when raised by the insertion of a key into the cylinder.

DROP ESCUTCHEON – A lock escutcheon that has a pivoted plate that "drops down" and covers the keyhole.

DUMMY CYLINDER – A decorative hardware trim that simulates an actual cylinder but has no operable parts.

DUMMY TRIM – Lock trim only without the lock; used primarily on the inactive leaf of a pair of doors or on a door for a pull type function where no locking or latching is required. Trim may be specified as ½ dummy trim for one side only mounting or full dummy trim to mount on both sides of the door leaf.

DUST PROOF STRIKE – A floor mounted strike sometimes used with flush bolts and exit devices, which has a spring-loaded plunger or cap that fills the strike hole when the bolt or latch is not engaged.

DUTCH DOOR – A door divided horizontally so that the lower part can be shut while the upper part remains open.

ELECTRIC STRIKE – A hardware device, which when activated from a remote location, releases the locking mechanism latchbolt and allows a door to open.

ENGINEER'S KEY – A selective master key which is used by various maintenance personnel to gain access through many doors under different Master and Grand Master Keys. The key can be set to operate any lock in a master key system, and typically fits building entrances, corridors, and mechanical spaces.

ESCUTCHEON (of a lock) – A Trim plate usually for a mortise lock, which covers door face cut-outs and incorporates the function holes for spindles, cylinders etc.

EXIT DEVICE – (See FIRE EXIT HARDWARE)

EXIT DEVICE (PANIC HARDWARE) – A door locking device with a pushbar or crossbar which, when pressed, allows instant exit (egress).

EXTREME TEMPERATURE FLUID – Special hydraulic fluid which allows full valve function without readjustment when temperature varies by 50°-70° F.

FACE (of door) – The area of a door you see when the door is in a closed position. When door is in the closed position the face is also the surface parallel to the surface of the wall.

FACE (of a lock) – The exposed surface of a lock that shows in the doors edge after the lock has been installed.

FINISH HARDWARE – Hardware that has a finished appearance and functional purpose, used in the creation of door openings as required to achieve security, life safety, fire safety and decorative purpose. Usually specified in section 08710 of a project manual (Also called: *BUILDERS HARDWARE* and *ARCHITECTECTURAL HARDWARE*).

FIRE EXIT HARDWARE (PANIC DEVICE) — A door locking or latching mechanism that is designed to always be operable from the inside or *EGRESS* side of the door by applying pressure on a *PUSH BAR* or *CROSS BAR*. Fire rated/labeled *PANIC DEVICES* have been tested, certified and approved for use on fire rated doors. A *PANIC DEVICE* can differ in function of the latching features and may be "Rated for Panic" only and not be suitable for use on a fire rated, labeled door opening.

RIM TYPE – Has the locking mechanism and latch located on the inside or push side of the door.

MORTISE TYPE – Has the locking mechanism mortised into the edge of the door. The latch projects from the door edge much the same way as a mortise lock.

Mechanical Glossary VERTICAL ROD TYPE/HOLD OPEN

VERTICAL ROD TYPE – May be either surface or concealed (referring to the exposure of the top and bottom rods). The latching mechanisms are attached to the ends of rods extending to the top and bottom of the door leaf and are connected to the active case of the device located on the inside face of the door, much like the Rim Type device. When the bar is pushed or depressed the rods are retraced thereby allowing the door to open.

FLEX HEAD CYLINDER – A cylinder with built-in adjustment for minor variations in door and trim thickness.

FLOOR CLOSER – A door closing device that mounts below the door leaf, usually recessed into the floor, which regulates the door with many the same features as a surface type door closer.

FRONT (of a Lock) – The plate surrounding and through which the latch/locking bolts of a lock project.

FUSIBLE LINK – A device consisting of pieces of metal held together by a low-melting point solder and when exposed to high temperature releases a hold-open function.

GRAND MASTER KEY – The key that operates two or more separate groups of cylinders, each cylinder being capable of operation by a different *MASTERKEY*.

GRAND MASTER KEY STYSTEM (LEVEL 3 SYSTEM) – A key system that has three levels of keying.

GREAT GRAND MASTER KEY – A key which operates two or more separate groups of cylinders, each cylinder being operated by a different *GRAND MASTER KEY*.

HAND – The term used to designate the direction that a door swings in an opening. Term applies to both the door and frame. *EGRESS* and the secure side of the opening are considered when determining the hand.

HANDED – A term which is used to indicate that the hardware or other component of the door opening must be used with the appropriate designated hand.

HIGH SECURITY CYLINDER – A cylinder which provides extra resistance to picking and unauthorized duplication of keys.

HINGE SIDE – the side of a door that is in view when looking at the hinge knuckles on the door and frame. Also called the "Wide Side" because it is always slightly wider (on a beveled door) than the "Low Bevel" or "Stop Side".

HOLD-OPEN – Maintains door at a particular degree of opening. A mechanical hold-open may not be used on labeled fire doors, which must be self-closing.

HOLD-BACK FEATURE – A hardware mechanism used to hold the latchbolt of a lock in the retracted position.

HOLDER – A hardware device used to hold a door leaf open at a required position. It may be either mechanical or in the case of a labeled door it must be electro-mechanical.

HOLLOW METAL – The term used to reference doors, panels, frame and partitions that are fabricated from cold formed steel sheet and coil. These doors and frames are internally reinforced and insulated, but are in a sense "hollow", thereby the term *HOLLOW METAL*. The minimum gage of steel considered to be classified as Hollow Metal Door is 20 Ga. The C.S.I. Broadscope location for this product is usually found in Section #08110.

HUB – The part of a lock through which the spindle passes. When the spindle is rotated the hubs (if unlocked), actuate the locking mechanism.

INACTIVE DOOR (or INACTIVE DOOR LEAF) – The leaf of a pair of doors that usually does not contain a lock but is secured by surface bolts, flush bolts or other securing means. This door frequently contains the strike or keeper in which the active door latches.

INDICATOR BUTTON – A part of the lock trim incorporated into a Hotel locking function which indicates on the outside of the door that the Deadbolt or inside Shut-out feature is being projected and that the room is occupied.

INTERCHANGEABLE CORE CYLINDER – A cylinder that can be removed from the lock by use of a *CONTROL KEY*, and is Interchangeable with other cores within the system.

JAMB – The vertical member that forms the side of a frame.

KEEPER – (See *STRIKE*)

KEY BITTING ARRAY – A matrix (graphic) display of all possible bittings for change keys and master keys as related to the top master key.

KEY CHANGES – The total possible number of different keys available for a given type of tumbler mechanism. In master key work, the number of different Change Keys available in a given master key system.

KEY CONTROL – Any method or procedure which limits unauthorized acquisition of a key and/or controls distribution of authorized keys. A systematic organization of keys and key records.

KEY SECTION – the cross-sectional shape or configuration applied lengthwise to a key blade that may restrict its insertion into the lock mechanism through the keyway. Each key section is assigned a designation or code by the manufacturer. A key section is usually shown as a cross section viewed from the bow towards the tip of the key.

KEYED ALIKE (KA) – A group of locks all operated by the same Change Key. (Not to be confused with master keying)

KEYED DIFFERENT (KD) – A group of locks each operated by a different Change Key.

KEY SIDE – Is the side of a door that is usually keyed. In the case of a non-keyed function or one where both sides are keyed, it is the outside of an interior door.

KEYING SCHEMATIC – A chart that visually shows the levels and layout of a key system.

KEY SECTION – The cross-section of a key blade as viewed from bow to tip.

KEY SYMBOL – A symbol/designation that is used for a key combination using the standard key coding system.

KEYING – A term used in the hardware industry which refers to the arrangement of the locks and keys in a building or buildings into groups in order to limit the areas to which various personnel will be given access.

KEYING SCHEDULE – A detailed specification of a keying system listing how all of the cylinders are to be keyed.

KEYWAY – The broach or aperture in a cylinder plug that is formed to match that of the key blank section being used.

KNOB – A round handle on a door, generally used to actuate a lock or latch but may be used simply as a pull or dummy trim.

LABELED - Equipment or materials to which has been attached a label, symbol or other identifying mark concerned with the product evaluation and by whose labeling the manufacturer indicates compliance with appropriate standards of performance.

LABELED DOOR – A door that conforms to all of the requirements and procedures of the required labeling authority and has attached the proper identification label. Ratings for labels include: Fire Resistance, Temperature Rise, Sound Transmission and Bullet resistance.

LABELED FRAME – A frame that conforms to all of the requirements and procedures of the required labeling authority and is embossed with or has attached the proper identification label. Ratings for labels include: Fire Resistance, Sound Transmission and Bullet Resistance.

LATCHBOLT – A spring-loaded beveled bolt that projects into a strike, holding the door in a closed position.

LATCHING SPEED – The speed of the door during the last few degrees of closing. Allows latching and prevents slamming.

Mechanical Glossary LEAD LINED/MASTER RING CYLINDER

LEAD LINED (Lead Wrapped) - Pertains to a lockset, door or frame that has a lining or covering of lead to prevent the passage of radiation. Generally used in hospital applications.

LEAF (of door) – An individual door. (e.g.- two leaves would be a pair of doors)

LEVELS OF KEYING – The divisions of a master key system into hierarchies of access.

** see page 19 for matrix

LEVER HANDLE – A flat or bar-like grip that is used to actuate a locking or latching mechanism or simply as a decorative pull.

LIP OF A STRIKE – The part of a lock strike that projects from the frame face and which that latchbolt rides. The measured lip of strike is very important when applied trim is used on the frame, creating a deeper reveal for a door opening.

LISTED – Equipment or materials which is included in a published list concerned with the product evaluation and whose listing states that either the equipment or materials meets appropriate designated standards or has been tested and found suitable for a specified purpose.

LOCK CASE – The box type shell containing the lock mechanism. Term usually used in conjunction with a mortise lock.

LOCK STILE (of a door) – the stile of a door to which the lock or latching devices are applied. (Terminology is usually applied to wood doors)

MACS – Maximum adjacent cut specification used in pinning cylinders.

MAIN ARM – The part of a double lever arm that connects directly to the pinion of the closer.

MANUAL FLUSH BOLT – A mortise bolt installed near the top and bottom of the inactive leaf of a pair of doors in which the bolts are manually extended or retracted into or out of the header or sill by means of a lever.

MASTER KEY – A key that operates all of the master keyed cylinders in a group, with each cylinder usually having its own change key.

MASTER KEYED – A group of cylinders combinated in such a way that all may be operated by their own change key and a MASTER KEY.

MASTER KEYED SYSTEM – (LEVER 2 SYSTEM) – A key system that has two or more levels of keying.

MASTER KEYING – Preparation of a cylinder to operate with keys of different levels of access.

MASTER RING CYLINDER – A cylinder which offers a wider range of keying.

MEETING STILE – The vertical edge of a door, when used in a pair, that is adjacent to the other door of the same pair.

MOGUL CYLINDER – A very large pin tumbler cylinder whose pins, springs, key, etc. are also proportionally increased in size. It is typically used in prison locks.

MORTISE LOCK – A lock that is designed to install into a mortised pocked in the door edge, rather than being applied to the doors surface. The lock trim then bolts into or through the lock case and door face.

MORTISE PREPARATION – reinforcing, blocking, drilling and/or tapping for hardware that requires such a preparation in a door or frame.

MOUNTING – The method by which the closer is attached to the door and frame.

M.O.V. – Metal oxide varistors – a device used at the load to reduce electronic kickback and electrical noise.

MULLION – A fixed or removable vertical member that divides a door opening and provides a latch surface for a pair of rim exit devices.

MULTIMETERS – A tool used to determine voltage, amerage, and resistance in a circuit.

MULTI-POINT HOLD OPEN – Infinite hold-open points from zero up to a maximum degree of the opening.

MULTI-SECTION KEY BLANK – A key section which enters more than one, but not all keyways in a multiplex key system.

MULTIPLE BACKCHECK LOCATION VALVE – Unique valve which can change where backcheck occurs.

MULTIPLEX KEY SYSTEM – A series of different key sections which may be used to expand a master key system by repeating bittings on additional key sections. The keys of one key section will not enter the keyway of another key section.

NARROW STILE DOOR – Usually a door having a stile less than 2-3/4" wide, commonly seen on aluminum or glass front applications.

NON-SIZED CLOSER – A closer whose spring tube design allows full adjustment of the spring power size from 1 through 6.

NON-FERROUS – Pertaining to parts which do not contain iron. Ideal for use in corrosive environments.

OPEN BACK STRIKE – For use with a pair of doors. The back of the strike is cut away, permitting the inactive door to be opened independently.

OPENING FORCE/QUICK-INSTALL™ MOUNTING BRACKET

OPENING FORCE – Force required to open a door against the closers spring power.

PANIC DEVICE – (See FIRE EXIT HARDWARE)

PARALLEL ARM – A push side mounted system where the arm is parallel to the door when in the closed position.

PICK – To manipulate tumblers in a keyed lock mechanism through the keyway, without obvious damage, by means other than the specifically designed key.

PIN TUMBLERS (Cylinder) – Are small pins within a lock cylinder which move up and down, forced toward the cylinder plug by springs and raised to their proper alignment to achieve a *Shear Line* by a key being inserted into the cylinder which has the correct combination of bitting cuts.

PIVOTS – A hinging device used to install (hang) a door leaf. The pivot uses a fixed pin and a single joint pin receiver, both attached to their respective door leaf and frame jamb usually by a means of lateral fastening.

PLASTER GUARD – (See MORTAR GUARD)

PLUG (of a lock cylinder) – The round part containing the keyway and rotated by the key to transmit motion to the bolt or other locking mechanism.

PLUG ONLY TO SHOW (CONCEALED SHELL) – A cylinder whose head is cut back to fit under "plug only to show" escutcheon trim for enhanced security and appearance; also called concealed shell.

POCKET DOOR – A door carried on an overhead track that slides into a pocket inside a wall.

POCKET HINGE – A heavy, cast hinge designed to swing a door into a pocket at a right angel with the face of the opening. It is used where swing clear hinges are aesthetically unacceptable and the full width of corridor is required. They may also be used where the door leaf is shared by two (2) frame openings, as in locked-open corridors in detention facilities.

POWER SUPPLY – Filtered and regulated. A device that supplies electrical current to an access control system. The current is filtered of "Electrical Noise" and regulates output.

PRESSURE RELIEF BACKCHECK INTENSITY VALVE – A valve that reduces internal pressure when the closer is subjected to forceful opening. Helps extend closer life.

QUICK-INSTALL™ MOUNTING BRACKET – Unique bracket which simplifies installation and minimizes installer fatigue.

RABBET – The portion of a door frame into which the door fits. Also, the abutting edges of a pair of doors, so shaped as to provide an overlap. One half of the edge projects beyond the other half, usually $\frac{1}{2}$.

RAIL – Usually refers to the horizontal members in a wood door, located at the top and bottom edges. Combined with the stiles they form a perimeter frame for the door core.

REGULAR ARM – A pullside mounted system where the arm is at a right angle to the door when in the closed position.

REMOVABLE CORE CYLINDER – A cylinder core that can be removed from a lock by use of a *CONTROL KEY* and installed in another lock of the same manufacturer and type.

REMOVABLE MULLION – A mullion separating door openings within a frame opening. It can be removed temporarily to allow for movement of items through the opening that would not pass through a single door leaf side.

RESTRICTED – Of or pertaining to a keyway and corresponding key blank whose sale and/or distribution is limited by the lock manufacturer in order to reduce unauthorized key proliferation.

REVEAL (of a door) – The distance measured on the hinge or pivot side of the opening, from the face of a door to the face of the frame, when the door is in a closed position.

REVERSIBLE – Pertains to a product that may be changed in the field to accommodate any hand of the door.

ROSE – A hardware lock or latch trim plate attached to the door face under the lever, knob or turnpiece.

ROTATING CONSTANT METHOD – A method used to progress key bittings in a master key system, wherin at least one cut in each key is identical to the corresponding cut in the top master key. The identical cut(s) is moved to different locations in a logical sequence until each possible planned position has been used.

SECONDARY ARM – That part of a double lever arm that connects to the shoe of the arm.

SECTIONAL TRIM – Lock trim with two sections; a lever or knob with a rose which is not joined by an external plate to the cylinder above.

SELF-LATCHING FLUSH BOLT – A mortise bolt installed near the top and bottom of the inactive leaf of a pair of doors which automatically projects into the header and sill when the active leaf is closed but must be manually released from the header and sill when the active leaf is open.

Mechanical Glossary SEX NUTS AND BOLTS/SPLIT ASTRAGAL

SEX NUTS AND BOLTS (SNBs) – Through bolts required for all non-steel-reinforced fire doors, and recommended for non-reinforced wood and mineral core doors.

SHEAR LINE – The line in a cylinder at which the tumblers will position themselves when the correct key is inserted allowing the cylinder plug to rotate within the shell.

SHIM KIT – Pieces of metal that permit mounting of an exit device on a door that has a surface projecting vision light (glass bead) moulding.

SHOE – The part of the secondary arm which attaches to the frame face, soffit or door.

SIDE BAR (BLOCKING BAR) – A spring loaded bar located within the cylinder shell extending parallel to the keyway that when activated by a key with the proper machining, allows for a shear line between the cylinder shell and plug. When the wrong blank is inserted into the cylinder the blocking bar inhibits the rotation of the cylinder plug even if the combination of the key biting is correct to operate the lock.

SIDELIGHT FRAME – A door frame prepared for the application of glazing material alongside the door opening.

SIMPLEX KEY SECTION – A single independent key section which cannot be expanded into a multiple key section system.

SINGLE ACTING DOOR – A door prepared for a spring hinge or pivot type hardware and is only capable of swinging in one direction.

SINGLE STEP PROGRESSION - A progression using a one increment difference between bittings of a given position when pinning cylinders.

SIZED CLOSER – A closer whose spring design allows for a fixed spring power size 1 through 6.

SMOKE DETECTOR – A device that detects visible or invisible particles of combustion.

SOFFIT – the portion of a frame located between the stops on a double rabbeted frame and between the stop and the larger face on a single rabbeted frame. It is the only part of a door frame that varies according to jamb depth.

SPINDLE – The bar or tube that connects the lever or knob on one side of the door through and actuating the hub(s) of the lock or latch to the trim on the other side of the door.

SPLIT ASTRAGAL – An astragal that is split through the middle on a pair of doors, allowing both doors to operate independently.

SPRING HINGE – A closing device in the form of a hinge with a built-in spring used to hang and close the door.

SPRING POWER – A measurement for closing force or the ability to overcome draft, air pressure, weight or other resistance to door closing.

STAR PUNCH – An eight-sided socket hole in the closer arm, permitting spindle pre-loading. Provides full functioning of backcheck and delayed action valves, and additional closing force, on parallel arm mountings.

STILE AND RAIL DOOR – A method of building doors that precedes the modern Full-Flush door type. In this door type the rails and stiles are tubular in shape with the corners mitered and welded to form the doors perimeter.

STRIKE – A metal plate that is prepared to receive a bolt or latch when the bolt or latch is projected and the door is in a closed position. Sometimes called the Keeper in older terminology.

"SURETY" KEY SECTIONS (MULTIPLEX KEY SYSTEM) – Used to expand a master key system by repeating the same or similar key bittings on different key sections. Keys of one section will not enter locks with a different section, yet there is a Master Key section which is milled so that it will enter some or all of the different keyways in the system.

SWING – A supplemental word used in conjunction with the hand of a door.

TAIL PIECE – The connecting link attached to the end of a rim cylinder which transmits the rotary motion of the key through the door, into the locking mechanism.

TEMPLATE – A pattern or layout schedule of the exact positions and sizes that provides a door and/or frame manufacturer the necessary information with which to prepare for finish hardware, door lites and louvers.

THRESHOLD – A strip fastened to the floor beneath a door. It serves as a stop, prevents heat loss, and provides a strike location for latching the bottom rod of a vertical rod exit device.

THROW (of a deadbolt or latchbolt) – The measurement from the tip of the bolt to the latch faceplate when the bolt is extended to its maximum projection.

THROW-OFF LATCHBOLT – A cylindrical lock latchbolt which automatically unlocks the outside trim as the door closes, to prevent accidental lockout.

THUMBPIECE – A small pivoted lever type actuator projecting outward from the door face which operates the exit device or lock.

THUMBTURN – Device mounted on the inside of a door to throw the deadbolt.

TOGGLE – Mechanism designed to allow the user to lock or unlock the outside trim without a key.

Mechanical Glossary
TRANSON FRAME/ZERO BITED

TRANSOM FRAME – A door frame prepared for a panel or glazing material above the door opening that has a horizontal member also called a transom bar which separates the transom opening from the door. Can also be provided without a transom bar when a matching panel above the door is desired.

TRIM – A knob, lever, pull or thumbpiece used on the outside of an exit device door to control access to an area.

TUBULAR LOCK – A type of bored lock or latch.

TURN PIECE – A small lever or "T" shaped lock trim with a spindle attached which is used to operate the deadbolt on a mortise lock.

TWO STEP PROGRESSION – A progression using a two increment difference between bittings of a given position when pinning cylinders.

UNIVERSAL MOUNTING – The ability of a closer to accommodate either hand for regular, top jamb or (using a bracket) parallel arm mounting.

VISUAL KEY CONTROL (VKC) – A system of stamping all keys and the plug face of all lock cylinders with standard key symbols for identification purposes. Regular Yale key change numbers are not stamped on the keys. Other key and cylinder stamping arrangements are available, but are not considered Visual Key Control.

ZERO BITTED – Of or pertaining to a cylinder which is or is to be combinated to keys cut to the manufacturer's reference number "0" bitting.

LEVELS OF KEYING

TWO LEVEL SYSTEM

	IWO LEVEL SYSTEM			
Level of			Key	
Keying	Key Name	abb.	Symbol	
Level II	Master Key	MK	AA	
Level I	Change Key	CK	1AA, 2AA, etc.	
	THREE LEVEL SYSTE	ΙM		
Level of			Key	
Keying	Key Name	abb.	Symbol	
Level III	Grand Master Key	GMK	А	
Level II	Master Key	MK	AA, AB, etc.	
Level I	Change Key	CK	AA1, AA2, etc.	
	FOUR LEVEL SYSTE	M		
Level of			Key	
Keying	Key Name	abb.	Symbol	
Level IV	Great Grand Master Key	GGMK	GGMK	
Level III	Grand Master Key	GMK	A, B, etc.	
Level II	Master Key	MK	AA, AB, etc.	
Level I	Change Key	CK	AA1, AA2, etc.	
	FIVE LEVEL SYSTEM	И		
Level of			Key	
Keying	Key Name	abb.	Symbol	
Level V	Great Great Grand Master Key	GGMK	GGMK	
Level IV	Great Grand Master Key	GGMK	A, B, etc.	
Level III	Grand Master Key	GMK	AA, BB, etc.	
Level II	Master Key	MK	AAA, AAB, etc.	
Level I	Change Key	CK	AAA1, AAA2,	
etc.				
	SIX LEVEL SYSTEM	1		
Level of			Key	
Keying	Key Name	abb.	Symbol	
Level VI	Coast Coast Coast Master	GGGMK	CCCMV	
_0.0.	Great Great Grand Master	GGGIVIK	GGGMK	
2010. 11	Key	GGGIVIK	GGGIVIK	
Level V		GGMK	A, B, etc.	
	Key			
Level V	Key Great Grand Master Key	GGMK	A, B, etc.	
Level V Level IV	Key Great Grand Master Key Grand Master Key	GGMK GMK	A, B, etc. AA, AB, etc.	
Level V Level IV Level III	Key Great Grand Master Key Grand Master Key Master Key	GGMK GMK MK	A, B, etc. AA, AB, etc. AAA, AAB, etc.	
Level V Level IV Level III Level II	Key Great Grand Master Key Grand Master Key Master Key	GGMK GMK MK	A, B, etc. AA, AB, etc. AAA, AAB, etc.	
Level V Level IV Level III Level II etc.	Key Great Grand Master Key Grand Master Key Master Key Sub-Master Key	GGMK GMK MK SMK	A, B, etc. AA, AB, etc. AAA, AAB, etc. AAAA, AAAB,	

AC – Alternating Current

Alternating Current – Electrical current that reverses direction (positive to negative, negative to positive) in a circuit at regular intervals. Example: normal household circuit.

Ampere – Describes the amount of energy that is flowing in a circuit at any one instant

AMPS – See Ampere

BBF -- Big Blue Flash. Usually what happens when a product is supplied too much voltage. Kills product and sometimes hurts people.

Capacitor – A device used for storing an electrical charge.

Circuit – The path through which electrical energy flows in a loop connecting all components.

Conductor – Material with the ability to carry electric current. Example: an electric wire.

Contacts – Electrically conductive points, or set of points, used to make or break an electric current.

Contact Ratings – Load rating of a switch. Ratings are at a maximum voltage or current.

Continuous Duty – Refers to a solenoid or other device that can operate continuously with no off period.

Continuous Output – The normal rating available from a power supply.

Current – Energy flowing through a circuit. Current is either alternative current (AC) or direct current (DC).

DC – See Direct Current.

Direct Current - Electric current that flows in one direction. Example: battery power.

End of Line Resistor – Installed at the termination point of a monitoring circuit. It is used to determine if the wiring runs continuous and has not been cut.

Fail-Safe – Lock or locking device that remains unlocked on loss of power.

Fail-Secure – Lock or locking device that remains locked on loss of power. Also known as Non-Fail Safe.

Inhibit - A signal used to temporarily prevent an alarm. Example: during the authorized use of an opening.

Input – (1) A signal to start an electrical circuit; (2) Incoming power.

In-Rush (Amps) – The current that a device requires momentarily during its initial power up.

Labeled – Refers to hardware that may be used on a Fire Rated Opening.

LED (Light Emitting Diode) – A solid state device, or diode, that gives off virtually heatless colored light when electric current is passed through.

Listed (UL) – Products which have been tested by Underwriters Laboratory for a specific purpose. There are several different types of listings: panic hardware, fire exit hardware auxiliary locks for fire doors, releasing device, burglary resistant, electric door strike for use with fire exit hardware, etc.

Load – A device which uses or consumes electrical power. Example: Electric Strike.

Line Drop -- A voltage loss occurring between two points in a circuit. Such loss is due to resistance or, usually, too small conductor.

Maintained Contact – Switches which will remain in the same position until being manually moved to another position. Similar to a light switch.

Milli Amp – One thousandth (1/1000) of an Ampere.

Momentary Contact – Switch contacts that remain in one position only while being acted upon. Similar to a door bell push button.

Mortar Box – Used to protect the area and/or wiring behind electrical components. Located in the same frame.

Noise – Unwanted signals picked up in an electric circuit.

OHMS – The measure of resistance of an electrical device to the flow of electricity.

OHMS Law – Relationship of voltage, current and resistance in a circuit, $E = I \times R$. (where E is voltage, I is current, and R is resistance).

Rectifier – Device that converts AC power to DC. Eliminates the "Buzz" normally associated with AC Operation.

Regulated – A power supply that provides a constant output regardless of input voltage variations.

Request To Exit – A request to exit switch utilized with an access control system. The request to exit switch is located on the exit side of a controlled door.

Residual Magnetism – The quantity or amount of magnetic holding force that an electro magnet retains after the power has been removed.

Resistance – The opposition to the flow of an electrical current measured in OHMS.

Seated (Amps) – The current that a device consumes during normal operation. See in-rush.

Secure Position – Monitoring signal switch shown in the secure position in drawings and schematics. This not only will allow the installer to determine the correct terminals to connect, but will also allow Engineers to follow the diagrams for an understanding of operation.

Secured Side – Refers to the area or side of an opening that is locked, requires a key, card, etc. to enter.

Shunt – Same as Inhibit.

Signaling Switch – Used to actuate monitoring horns or lights in an alarm circuit.

Silent Operation – Use of components which eliminates the "buzz" normally associated with AC operation. See Rectifier.

SO – See silent operation.

Solenoid – An electromechanical device that operates the lock bolt when electricity is applied, a mechanical motion is obtained that moves the bolt.

Switch – Device that makes or breaks connections in an electrical circuit.

Transformer – Converts one AC (Alternating current) voltage to another AC voltage.

Transient Suppression – Circuitry inside a solenoid or electro magnet to prevent large electrical spikes being generated back into power supplies, card readers, and other equipment when the device is turned ff. Transients can damage or destroy these items.

Trim Locking – Refers to the control of the lockable side of the door (usually the outside).

UL – See listed, Labeled.

Volt – A unit of Electromotive Force.

Voltage – The term used to designate electrical pressure that exist between two points and is capable of producing a flow of current when a closed circuit is connected between the two points.

Watt – The common measurement of electrical power.



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