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LAWS AND BUILDING AND SAFETY CODES GOVERNING THE DESIGN AND USE OF GLAZED ENTRANCE, WINDOW, AND CURTAIN WALL PRODUCTS VARY WIDELY. KAWNEER DOES NOT CONTROL THE SELECTION OF PRODUCT CONFIGURATIONS, OPERATING HARDWARE, OR GLAZING MATERIALS, AND ASSUMES NO RESPONSIBILITY THEREFOR.

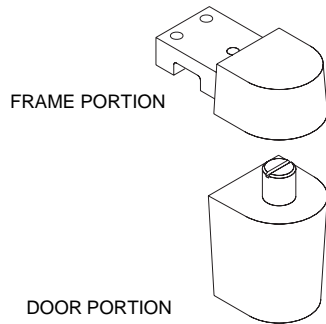
Metric (S1) conversion figures are included throughout these details for reference. Numbers in parentheses ( ) are millimeters unless otherwise noted.

The following metric (S1 ) units are found in these details:

- m – meter
- cm – centimeter
- mm – millimeter
- s – second
- Pa – pascal
- MPa – megapascal

Kawneer reserves the right to change configurations without prior notice when deemed necessary for product improvement.



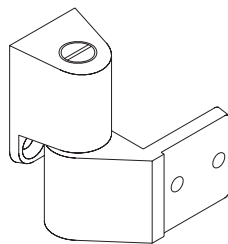


### TOP OFFSET PIVOT

**Description:** Both the door and frame portion of the pivot assembly are of cast aluminum. Press fitted into the frame portion is a heavy wall oilite bronze self-lubricating bearing. A stainless steel pivot pin in the door portion completes the assembly.

**Application:** The frame portion is mortised into the header/transom bar and is attached with screws threaded into the pivot block. The pivot attachment location takes advantage of the strength at the frame joint. The door portion has two bosses which interlock in the door extrusion, to prevent rotation. It is secured in place with two screws through a reinforcing plate which spreads the load. The spring loaded pivot pin allows easy "one man" installation.

**Finish:** Standard finish is a thermosetting polyester powder coated finish applied to match anodized finishes of #17 Clear, #40 Bronze and #29 Black. Other finishes available upon request. Contact the factory.



PATENT NO. 4,937,916

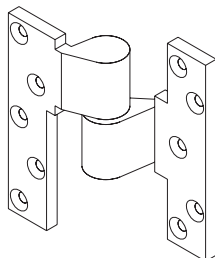
### STANDARD INTERMEDIATE PIVOT

**Description:** This aluminum die cast pivot is adjustable and load bearing with the extra benefit of being non handed. The door portion is surface applied with two screws and intragral interlocking boss which resist both rotational and thrust loads. The frame portion is mortised into the frame with just two screws for attachment. The pivot pin is stainless steel which works within a heavy wall, self lubricated oilite bearing. It is also available in electric transfer model.

**Application:** This pivot is used in conjunction with top and bottom offset pivots for additional strength and door/frame alignment. Use of this pivot is advised on doors experiencing high traffic volume or on doors exceeding 7'-6" (2286) in height.

**(not for top pivot replacement)**

**Finish:** Standard finish is a thermosetting polyester powder coated finish applied to match anodized finishes of #17 Clear, #40 Bronze and #29 Black. Other finishes available upon request. Contact the factory.

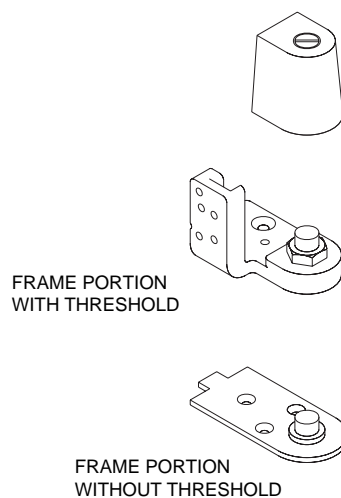


### OPTIONAL INTERMEDIATE OFFSET PIVOT

**Description:** This aluminum pivot is fully mortised into the door and frame and has a 3/4 inch (19.1) offset from the door face. The thrust bearing is corrosion resistant and self lubricating. The pivot pin is hardened Parco-lubricated steel.

**Application:** This pivot is used in conjunction with top and bottom offset pivots for additional strength and door/frame alignment. Use of this pivot is advised on doors experiencing high traffic volume or on doors exceeding 7'-6" (2286) in height.

**Finish:** A baked epoxy finish is applied to match anodized finishes of #17 Clear and #40 Bronze.



### BOTTOM OFFSET PIVOT

**Description: Door Portion** - is of cast aluminum. Attachment is obtained by back bolting through a plated steel reinforcing plate, the door stile extrusion and threading into the pivot block. A ball-bearing raceway accepts the pivot pin. The door portion provides vertical screw adjustment to achieve proper door, frame, and threshold clearance.

**Frame Portion** -(with threshold) the pivot base is of cast aluminum with a steel pivot pin. This pivot portion becomes an integral part of the door frame and securely anchors the frame and threshold to the floor.

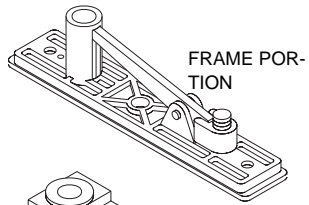
**Floor Portion** - (without threshold) the pivot plate is stainless steel with a riveted stainless pivot pin. The plate is fastened at three points directly to the floor.

**Application:** The bottom offset pivot is used in conjunction with the top, and optional intermediate offset pivot. The frame portion is used with threshold. On interior or vestibule door not requiring threshold the floor mounted portion is used. The door portion provides vertical adjustment with both pivot pieces.

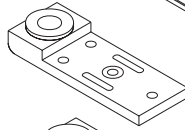
**Finish:** Standard finish is a thermosetting polyester powder coated finish applied to match anodized finishes of #17 Clear, #40 Bronze and #29 Black. Other finishes available upon request. Contact the factory. The floor portion is a clear finish to match the threshold or stainless steel door without threshold.

# HARDWARE

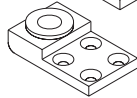
## PIVOTS/HINGES



DOOR PORTION  
190 DOORS  
(ADJUSTABLE)



DOOR PORTION  
350 AND 500 DOORS  
(NON-ADJUSTABLE)

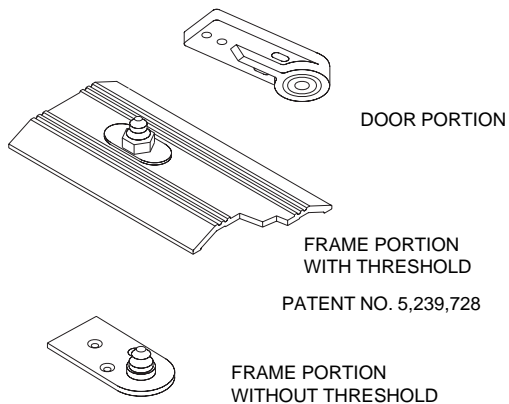


### TOP CENTER PIVOT

**Description:** (Frame Portion)- The "walking beam" frame pivot portion is cast aluminum with a hardened steel pivot pin. The pin is adjustable for additional extension through the transom bar/header. Both door pivot portions are machined aluminum with oilite bronze self-lubricating bearings. All top center hung pivot parts are concealed.

**Application:** This pivot assembly is used in conjunction with center hung doors with floor closers. The adjustable portion for the 190 Narrow Stile Door provides for a one time only adjustment. Dimension 3" (76.2) long, 1-7/16" (36.5) wide, and 1/2" (12.7) at its thickest point. The 350 Medium Stile and 500 Wide Stile door pivot portion is non-adjustable. Dimensions 2-3/8" (60.3) long, 1-7/16" (35.5) wide and 1/2" (12.7) at its thickest point.

**Finish:** The frame portion is natural cast aluminum with dress plate to match color of frame. The machined door portion is mill finish.

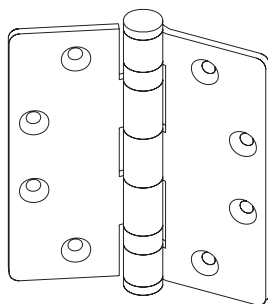


### BOTTOM CENTER PIVOT

**Description:** The low profile center pivot for use with a threshold has an adjustable stainless steel pivot pin that is mounted and locked into the threshold. The center pivot for use without a threshold has a stainless steel pivot pin press fit into a stainless steel plate. The door portion is comprised of a roller bearing press fit into a cast aluminum pivot block.

**Application:** Both pivot portions, with or without threshold, are used on doors with concealed overhead closer control. On entrances with thresholds the pivot is anchored securely into the threshold. The frame portion is adjustable for proper door and frame clearance. The frame portion for use on doors without threshold is fastened directly to the floor. When no threshold is used, height adjustment is obtained by shimming the pivot block. The door pivot block is securely mounted to the bottom rail web.

**Finish:** Mill finish is standard for all bottom center pivot parts.

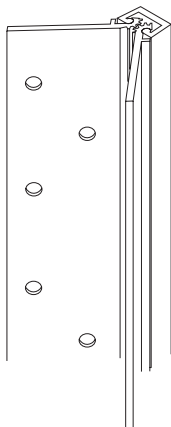


### BUTT HINGE

**Description:** Commercial quality steel or brass hinge with leaves of five knuckle-two ball bearing construction. The hinge barrel is enclosed with button tips and incorporates a non-rising removable pin. Butt hinges with optional non-removable pin are available. The hinge is a radius corner, standard template butt of 4-1/2" x 4" (114.3 x 101.6). The hinge leaf thickness is .134 inches (3.4). It is also available in electric transfer model.

**Application:** The butt hinge is fully mortised into the door hinge stile and frame hinge jamb. Reinforcing plates are used in both the frame jamb and hinge stile for secure screw anchorage. Butt hinges for corrosive coastal environments also available. The use of an intermediate butt (1-1/2 pair per leaf) is suggested for doors in high traffic areas or for doors over 7'-6" (2286).

**Finish:** On clear anodized doors the hinge finish is U.S. 26D dull chrome. On Permanodic bronze or black doors the hinge has a dark oxidized finish.



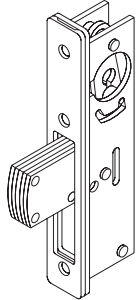
### CONTINUOUS HINGE

**Description:** Quality continuous "geared" hinge incorporating lubricated bearings between the knuckles.

**Application:** The continuous hinge is surface applied to both the door stile and door frame. Screws are staggered and are approximately 6" (152.4) on center. Continuous hinges are suitable for all entrance configurations.

**Finish:** Available in #14 Clear, #29 Black and #40 Bronze anodized finishes. Painted finishes are available on a custom basis.

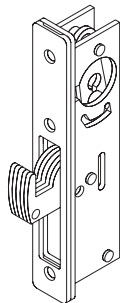
### ADAMS RITE MS-1850 DEADLOCK



**Description:** This deadlock incorporates an aluminum faceplate and five ply laminated steel bolt with 1-3/8" (34.9) standard throw. For special conditions, a 13/16" (20.5) throw is available. All vulnerable lock parts are designed to resist sawing attempts. The lock accepts any standard 1-5/32" (29.4) mortised cylinder or thumbturn (with MS cam). Backset (center line of face plate to center line of cylinder) is 1-1/8" on all doors.

**Application:** Standard lock used in the active leaf of a pair of doors or on a single door. It may be converted to two point or three point locking.

### ADAMS RITE MS-1850-050



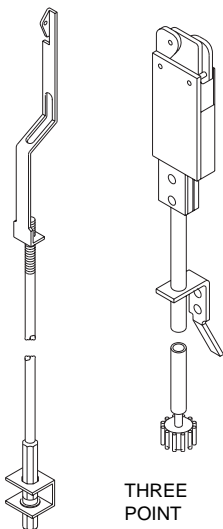
**Description:** All features and components, with the exception of the hook bolt, are the same as the MS 1850 deadlock. The hook bolt is of the same construction but has a hook shape to provide additional security against the door prying attempts.

**Application:** This hook bolt lock is an optional lock recommended for extra security on pairs of doors. When the hook bolt is thrown it engages the inactive leaf strike cut-out in a manner that resists attempts to pry or pull apart the door stiles. On pairs of doors the proper strike cut-out is provided when the hook bolt lock is specified.

### 2 AND 3 POINT LOCKS

**Two Point:** In addition to the deadbolt lock point of the MS 1850, additional security is obtained for pairs of doors with the use of a threshold bolt. The normal turn of the cylinder key simultaneously drops a hardened steel hexbolt into the threshold and provides the second lock point.

**Three Point:** The third locking point is obtained by adding a header bolt to the above described MS lock and threshold bolt. The header bolt is placed in the top stile of the inactive leaf. The throw of the MS bolt in the inactive leaf strike cut-out triggers engagement of the header bolt.



TWO POINT

THREE POINT

### KAWNEER CONTROLLER® LOCKING SYSTEM

US PATENT NO. 4,283,882  
CANADIAN PATENT NO. 1,144,581

**TOTAL CONTROL** of paired entrances is now possible. The CONTROLLER provides uncompromised egress thru both door leaves with one stage unlocking, but offers the convenience of two stage locking.

**LIFE SAFETY** is an important consideration in the selection of entrance door hardware. If an entrance with flush bolts has not been completely unlocked, life safety considerations could be compromised in an emergency situation. This is one reason why manual flush bolts are prohibited by building codes\*.

**SECURITY** of the entrance is enhanced by three point locking using the CONTROLLER

mechanism in conjunction with the Adams Rite maximum security lock. Flush bolt locking jeopardizes security, as the door leaves can be pried apart allowing access to the flush bolt release levers. Unlike flush bolts, the CONTROLLER is manually engaged with access through the M.S. lock strike cut out. It is then secured by the 1-3/8" (34.9) throw, five ply laminated steel bolt of the M.S. lock.

**TWO STAGE LOCKING** provides ease of operation not commonly found with standard three point locks. The CONTROLLER allows easy alignment of the inactive door leaf, followed by normal engagement of the M.S. lock.

**ONE STAGE LOCKING** is done with the turn of a key which retracts the M.S. lock bolt. The CONTROLLER mechanism is then free and will allow both door leaves to swing open.

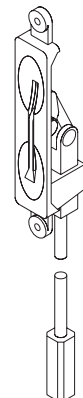
**APPLICATION:** On paired entrances where exit devices are not required and manual flush bolts are prohibited by building codes\*.

**FORCED ENTRY** for stringent Dade County forced entry requirements specify CONTROLLER FE which include reinforced rods.

\* The following building codes, with some qualifications, prohibit the use of manual flush bolts on exits doors needed to handle the occupant load of the building.  
Uniform Building code- International Conference of Building Officials (ICBO)  
Standard Building Code- Southern Building Code Congress International, Inc. (SBCCI)  
Basic Building Code- Building Officials and Code Administrators, Inc. (BOCA).

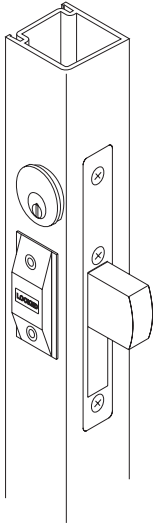
### KAWNEER FLUSH BOLT

**Description:** A standard pair of doors includes top and bottom flush bolts in the inactive leaf. The flush bolts provide two inactive leaf "lock" points in addition to the active leaf which locks into the inactive leaf. They are flush mounted in the nose of the door stile and are finished to match.



# HARDWARE

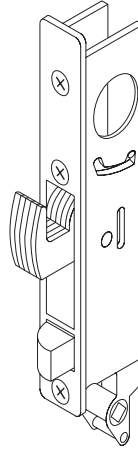
## LOCKS/LATCHES



### EXIT INDICATOR

**Description:** The zinc alloy indicator escutcheon is 1-3/8" (34.9) x 2-5/8" (66.7) and 3/8" (9.5) projection from the door face. It is finished with silver epoxy and clear enamel. The sign has black lettering on an aluminum background.

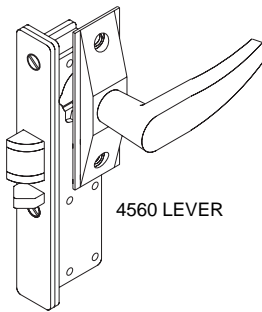
**Application:** This device is optional for use with the deadbolt (MS 1850) or hook bolt (MS 1850-050) to indicate the lock position; open or locked. In some local building safety codes, this device allows the use of a deadlock in lieu of a panic exit device.



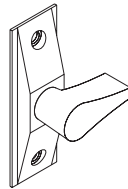
### ADAMS RITE MS+1890 DEADLOCK/LATCH COMBINATION

**Description:** The lock features two lock points in one lock housing. The upper hookbolt portion is activated or thrown with the turn of a cylinder key. The lower latchlock portion is spring lever or paddle actuated. The hookbolt is designed to resist sawing or prying attempts. A standard cylinder diameter of 1-5/32" (29.4) and MS Cam are required for the hookbolt. The standard 4560 handle (3-1/8" (88.9) length) are used with the latch lock. Latch paddle 4590 and 4565 lever handle as described below may also be used with the latch lock.

**Application:** Provides deadlock security after hours and selective traffic control during or just after business hours. Both lock points can be retracted for free traffic flow. Retracting the hookbolt and activating the latch lock will permit exit-only traffic. The device is applicable to single or pairs of doors.



4560 LEVER



4565 LEVER

### ADAMS RITE 4510 DEAD LATCH

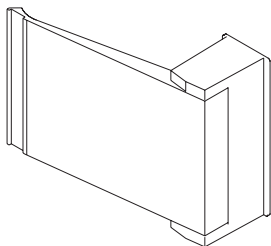
**Description:** Cylinder key operation from the exterior or lever handle interior operation retracts the spring loaded latch bolt. Deactivation or "dogging" is achieved with a reverse turn of the cylinder key. An auxiliary bolt deadlocks the latch bolt to prevent unwarranted "loiding" or caseknife entry. Lever handle 4560, 3-1/2" (88.9) is standard. An optional 4565, 1-1/2" (38.1) handle or 4590 latch paddle may be used. Backset is 1-1/8" for all doors.

**Application:** This device offers flexibility of traffic control during and after business hours. The device can be "dogged" or retracted for free traffic flow during business hours or locked on the exterior after hours. When locked, egress from the building is accomplished by depressing the lever handle. The latch lock does not provide the security of deadbolt type locks because of the shorter throw.

### ADAMS RITE 4590 LATCH PADDLE DEVICE

**Description:** The escutcheon is 4" (101.6) high by 1-11/32" (34.1) wide. Total width of paddle and housing is 5-7/16" (137.9). Neutral projection of the paddle from the door face is 2-5/16" (58.6).

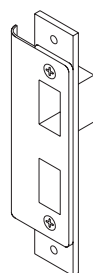
**Application:** Designed for use with the 4510 latch or MS+1890 lock/latch. A latched entrance can be opened by pushing or pulling the paddle in the direction of the door swing.



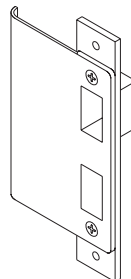
### ADAMS RITE STANDARD LATCH STRIKES

**Description/Application:** A flat strike is jamb mounted for single acting butt hung or offset pivot doors.

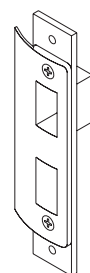
The elongated lip strike is jamb mounted for center hung single acting doors. A pair of doors requires the radiused strike mounted on the inactive leaf stile. The strike plates are satin buffed stainless steel.



LONG LIP



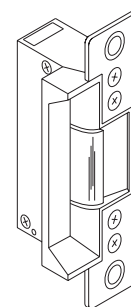
FLAT



RADIUSED

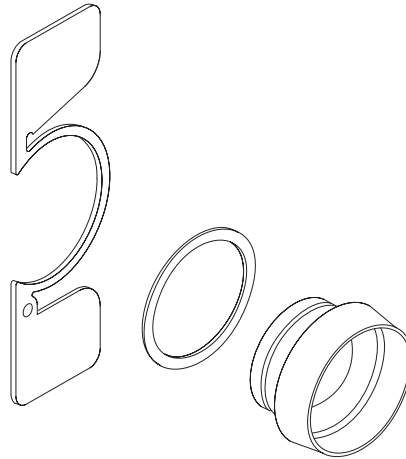
### ADAMS RITE 7130 ELECTRIC STRIKE

**Description/Application:** The 7130 Series electric strike is designed for use with the 4510 latch lock to allow remote traffic/door control. It operates on 24V AC or 12V DC and is UL listed. For proper operation the anticipated duty, intermittent (std.) or continuous, should be specified. May be jamb mounted for single door or mounted in inactive leaf for pair of doors.



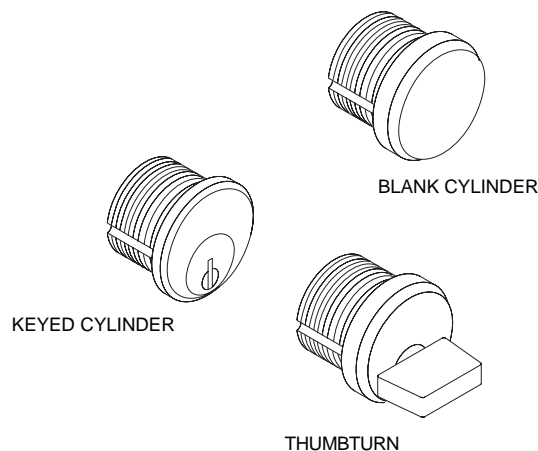
### CYLINDER GUARD

**Description/Application:** The cylinder guard is a collar designed to protect the vulnerable soft cylinder. Its hardened steel material and tapered shape offers poor grip for prying or twisting attempts. The guard is held in place with a hardened steel retainer plate for additional security. For use with the Adams Rite MS 1850, 1850-050, +1890, or 4510 locks and latches.



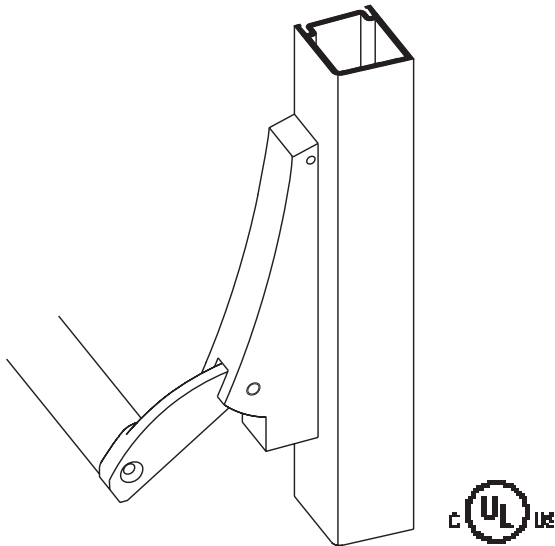
### KAWNEER LOCK CYLINDERS

**Description:** Kawneer standard cylinders are 5 pin- mortised with a diameter of 1-5/32" (29.4). As shown in the illustration, the cylinders are key operated , thumbturn operated or blank. Keyed alike cylinders are available to meet various keying schemes. The cylinder scalps and thumbturns are finished to match the door.



# HARDWARE

## EXIT DEVICES



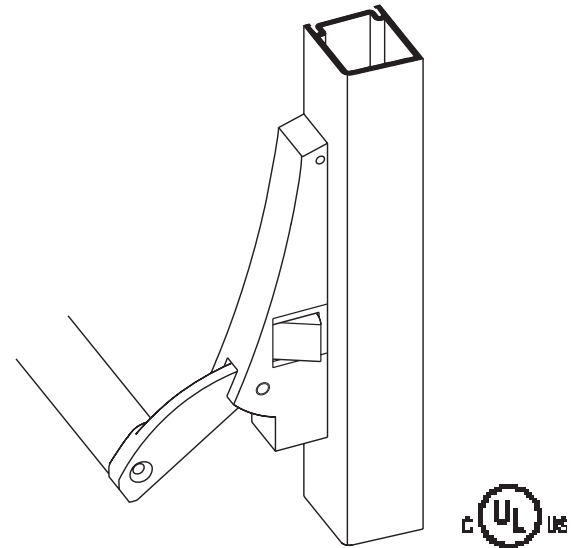
### DOR-O-MATIC 1990 CONCEALED ROD

**Description:** Vertical lock rods and top latch mechanism are concealed in the door stile. Depression of the "crash" bar retracts the bottom rod from the threshold and releases the top latch from the transom bar/header mounted barrel strike. This action permits egress from the building. Upon closing, the top latch re-engages the strike securely and frees the bottom bolt to engage the threshold. The door is then locked from the exterior. The panic device can be de-activated or "dogged" with the cylinder key or Allen screw in the active housing. Housings are cast aluminum with an extruded aluminum crash bar. A rim cylinder diameter of 1-5/32" (29.4) is required.

**Dimensions:** Cross Bar Height (from doorbottom) is 37" (939.8). Cross Bar Projection - Neutral 4-1/4" (108); Depressed 2-3/8" (60.3).

**Applications:** The concealed vertical rod device eliminates the removable mullion obstruction on a pair of doors. The activated device locks the entrance on the exterior, yet permits egress from the building without the use of a key.

**Finish:** #17 Clear, #40 Bronze, #29 Black. Crash bar is anodized. Housings are painted to match.



### DOR-O-MATIC 2090 RIM TYPE

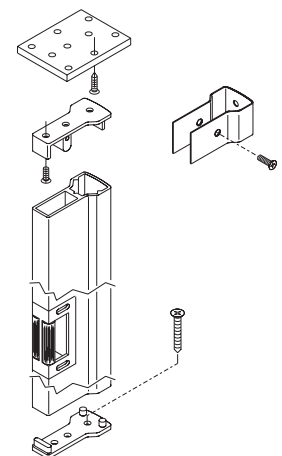
**Description:** A latch bolt in the rim of the active housing engaging an adjustable roller strike provides the locking action. Depression of the crash bar "unlocks" the device and permits egress. The bolt re-engages the strike and locks when the door closes. On single doors the adjustable strike is mounted on the frame lock jamb. The adjustable strike is an integral part of a removable mullion which is required for pairs of doors. The panic device can be de-activated or "dogged" with the cylinder key or Allen key. Keyed alike cylinders are optional. A standard rim type cylinder of 1-5/32" (29.4) diameter is required.

**Dimensions:** Same as concealed rod device shown on this page.

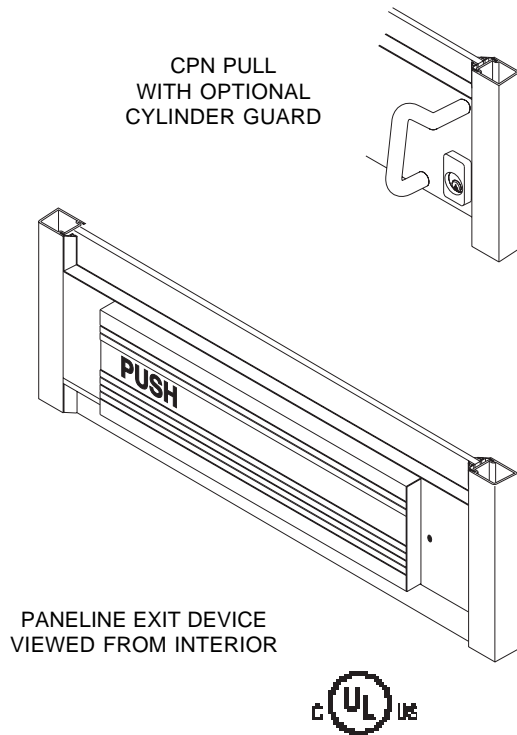
**Applications:** Depressing the crash bar permits egress from the building without the use of a key. Upon closing, the door is relocked and secure on the exterior. The illustrated removable mullion is required on a pair of doors. The use of optional mullion stabilizers are recommended. U.L. Listed- (Standard applications only).

**Finish:** #17 Clear, #40 Bronze, #29 Black. Crash bar is anodized. Housings are painted to match.

### REMOVABLE MULLION RM70 FOR DOR-O-MATIC 2090 PANIC EXIT DEVICE MEETS ANSI GRADE 1 REQUIREMENTS







**KAWNEER PANELINE® CR-90  
CONCEALED ROD DEVICE**

**Design:** All mechanical elements of the Paneline device are concealed in the cross rail. A push in the direction of egress on any part of the push panel will release the door with an unlocking stroke of approximately 1" (25.4). In the "dogged open" position, the panel is recessed into the cross rail. The "push" inlay strip and style CPN pull are standard. Optional cylinder guard is available.

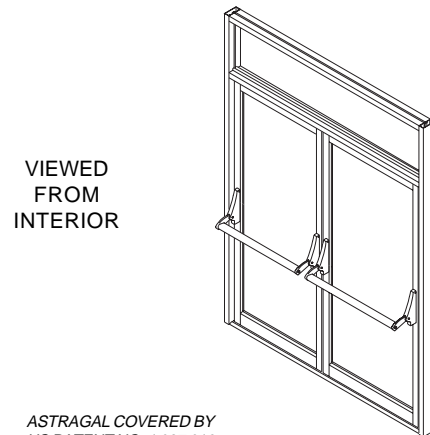
**Description:** The actuating mechanism consists of the aluminum push panel supported on two spring loaded and balanced toggle assemblies coupled together and connected to a rotary lever which engages the latch rods at the lock stile. The entire assembly mounted on a separate chassis is installed in a cross rail as a unit then welded in place to the door stiles. The dogging lock is operated with standard hex key. Latch mechanisms and vertical lock rods same as described for standard 1990 device on Page 6.

**Dimensions:** Push panel size 23-9/16" (454.02) by 8-1/4" (181.01).

Height from bottom of door to bottom of cross rail 36-1/8" (917.5).  
Projections - neutral 1-3/32" (27.8), depressed 1/8" (3.2). See Section A1 for complete rail dimensions and details.

**Application:** Used with 190, 350 and 500, 350 & 500 Tuffline®, 350 Heavy Wall and Flushline® entrances in singles or pairs. Functions are the same as described for standard 1990 device on Page 6. May also be used with Panic Guard® entrances. (Not available with Entara®, Entara®.XD, or Insulclad® 260, 360 and 560 Entrances)

**Finish:** The cross rail is finished to match the door. The push panel is available in Kawneer's anodized finishes. Inlay strip for the push panel is black with clear letters on clear doors; light bronze with black letters on dark bronze or black doors. Style CPN pull is anodized in #14, #29, or #40 finish.



**KAWNEER PANIC GUARD® ENTRANCES  
CONCEALED ROD DEVICE  
(FOR PAIRS OF DOORS)**

**Design:** This special purpose exit device overcomes the security problem prevalent in conventional pairs of concealed rod panic doors which can be opened from the outside by using a hooked wire to depress the crash bar. Panic Guard closes the gap between a pair of doors with a continuous 1/2" (12.7) throw retractable astragal extending the full height of the doors, yet retains independent emergency operation of either door of the pair. Style CO-9 pull with cylinder guard is standard.

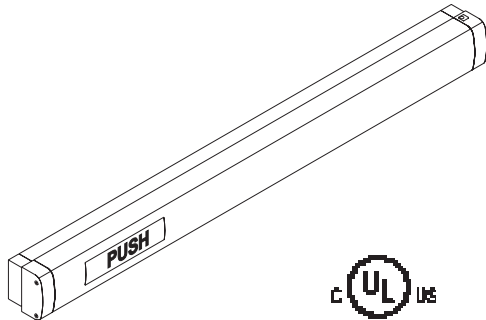
**Description:** The Panic Guard astragal is a continuous 1-3/4" x 1" (44.5 x 25.4) aluminum extrusion supported by three hardened steel pins in the hardened alloy steel guide brackets within the inactive door leaf. Depressing the touchbar (or push panel with Paneline) moves the astragal up and into the door stile. The movement simultaneously releases the top and bottom latches. The active leaf contains a standard Dor-O-Matic 1990 concealed rod exit device with the addition of a hardened steel latch assembly to engage the inactive leaf.

**Application:** Used on pairs of doors requiring emergency exit provisions without a center mullion. Available with 190, 350 and 500, 350 & 500 Tuffline, 350 Heavy Wall and Entara-XD entrances. Optionally available with Paneline in lieu of 1990 operation on 190, 350 and 500 doors.

**Finish:** Exposed aluminum parts are anodized to match the door. Panic housing will be painted #17, #40 or #29 to match doors.

# HARDWARE

## EXIT DEVICES



### DOR-O-MATIC 1490 CONCEALED VERTICAL ROD

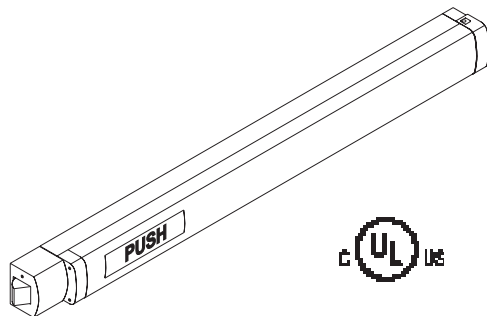
**Description:** This low profile "push bar" exit device allows egress from a building without the use of a key. With the entrance door locked and secure on the exterior, depressing the touch bar on the interior unlocks the door for egress. Upon closing, the door is relocked. A quick single point "dogging" feature in the housing, de-activates the device and permits unrestricted traffic flow. Vertical rods and latch mechanisms are concealed in the vertical door stile. Meets ANSI Grade I requirements.

**Application:** This device is designed for use on single and pairs of doors. It is suited to areas of high and abusive traffic. U.L. listed (standard applications only).

**Dimensions:** Center line of touch bar from bottom of door = 40-9/16" (1030.3); Height 3" (76.2); Projection 2-3/4" (69.9).

**Finish:** Clear, dark bronze and black aluminum. Bronze or stainless steel clad.

**OPTIONAL:** EL version for access control applications.



### DOR-O-MATIC 1590 RIM EXIT DEVICE

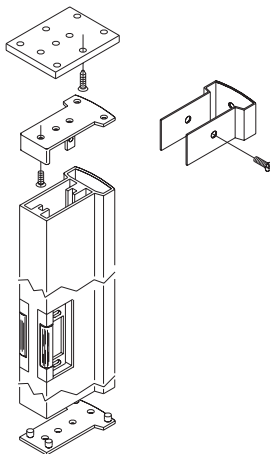
**Description:** This device has the same basic features as the concealed vertical rod device above. Its difference is in the latching mechanism. A 3/4" throw latch bolt in the rim of the housing engages an aluminum jamb or removable mullion mounted strike. Depression of the "push bar" retracts the latch bolt and permits egress from the building.

**Application:** Designed for use on single or pairs of doors. Single doors require an aluminum lock jamb mounted strike. A removable mullion with intragral mortised strikes is required on pairs of doors. U.L. listed (standard applications only).

**Dimensions:** Center line of touch bar from bottom of door = 40-9/16" (1030.3); Height 3" (76.2); Projection 2-3/4" (69.9).

**Finish:** Clear, dark bronze and black aluminum. Bronze or stainless steel clad.

**OPTIONAL:** EL version for access control applications.

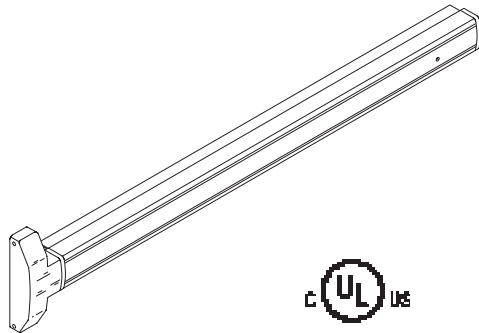


### DOR-O-MATIC RM150 REVOLVABLE MULLION

**Description:** This removable mullion is used with DOR-O-MATIC 1590 Rim Exit Device.

**Application:** Designed for use with pairs of doors.

**Finish:** #17 Clear, #29 Black and #40 Bronze anodized .



### DOR-O-MATIC 1690 CONCEALED VERTICAL ROD

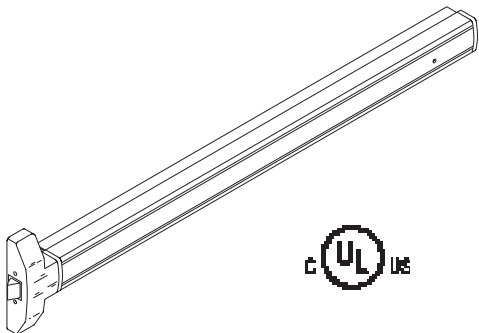
**Description:** This Touchbar exit device allows egress from a building without the use of a key and is the standard exit device for Kawneer entrances. Depression of the Touchbar on the interior retracts the concealed bottom rod from the threshold and releases the top latch from the transom bar mounted barrel strike. This allows egress from the building. Upon closing, the top latch re-engages the strike and frees the bottom rod to engage the threshold. The door is now relocked. A quick single point "dogging" feature in the housing, de-activates the device and permits unrestricted traffic flow. Vertical rods and latch mechanisms are concealed in the vertical door stile. Cover plates and end caps are cast aluminum. A rim cylinder diameter of 1-5/32" is required.

**Application:** This device is designed for use on single and pairs of doors. It is suited for medium and high traffic areas.

**Dimensions:** Center line of pushbar to bottom of door 40-5/8" (1031.9); Height 2-1/2" (63.5); Projection 3-1/8" (79.4); Projection when dogged 2-3/8" (60.3).

**Finish:** Clear, dark bronze and black aluminum. Cover plate and end caps are painted black.

**OPTIONAL:** EL version for access control applications.



### DOR-O-MATIC 1790 RIM EXIT DEVICE

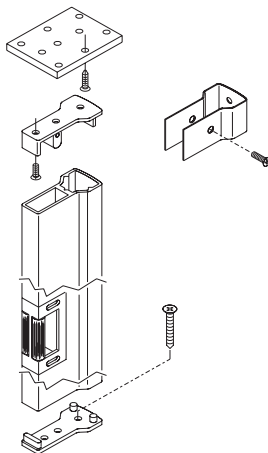
**Description:** This Touchbar exit device has the same basic features as the concealed vertical rod device above. Its difference is in the latch mechanism. A 3/4" throw latch bolt in the rim of the housing engages an aluminum jamb or removable mullion mounted strike. Depression of the Touchbar on the interior retracts the latch bolt and allows egress from the building.

**Application:** Designed for use on single or pairs of doors. Single doors require an aluminum lock jamb mounted strike. A removable mullion with integral mortised strikes is required on pairs of doors.

**Dimensions:** Center line of pushbar to bottom of door 41-5/16; (1049.3) Height 2-1/2" (63.5); Projection 3-1/8" (79.4); Projection when dogged 2-3/8" (60.3).

**Finish:** Clear, dark bronze and black aluminum. Cover plate and end caps are painted black.

**OPTIONAL:** EL version for access control applications.

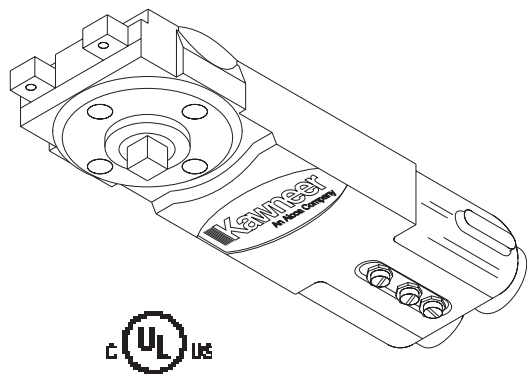


### DOR-O-MATIC RM170 REVOLVABLE MULLION

**Description:** This removable mullion is used with DOR-O-MATIC 1790 Rim Exit Device. It meets ANSI Grade 1 requirements.

**Application:** Designed for use with pairs of doors.

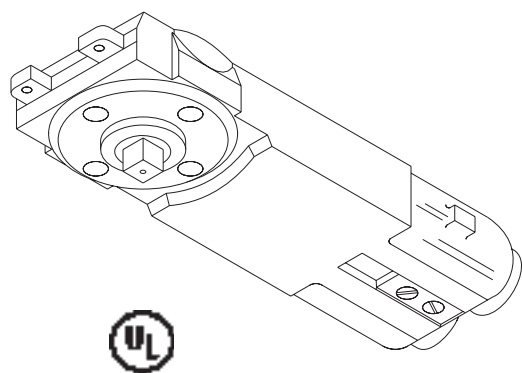
**Finish:** #17 Clear, #29 Black and #40 Bronze anodized .



### KAWNEER HUSKY® II CONCEALED OVERHEAD/DOUBLE ACTING

**Description:** Closer incorporates full hydraulic and spring power control and is equipped with an adjustable hydraulic backcheck. The HUSKY II will consist of a steel cam, rollers and springs along with heavy-duty ball bearings at the spindle, all housed in a compact reinforced wall cast iron body. The closer meets ANSI 156.4 Grade 1 certification and comes with a 5-year warranty. Closing and latching speeds are separately adjustable with easy access. Husky II allows 120 degree opening and is available with no hold open or with 90 or 105 degree hold open. A minimum 1-3/4" x 4" (44.5 x 101.6) transom bar or header is required to accept this closer.

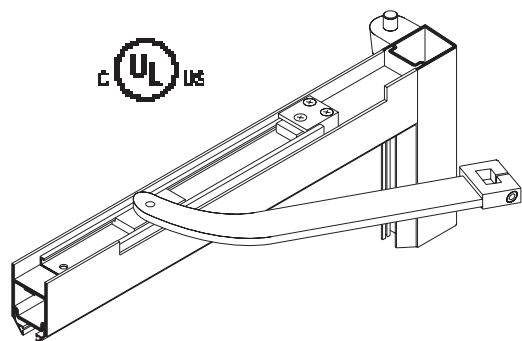
**Application:** Concealment of the closer maintains smooth unbroken lines of the door and frame. The closer is used with center-hung exterior or interior double acting doors. The doors may be modified to single acting by applying a surface stop on the frame header or transom bar. The closer is compatible with all Kawneer doors as well as most of the framing systems. The HUSKY II comes with side load or end load arms and is suitable for areas of medium to high traffic volume. For single acting offset hung doors using the HUSKY II concealed closer, refer to the SAM II description below.



### INTERNATIONAL® CONCEALED OVERHEAD/DOUBLE ACTING DOORS

**Description:** Closer incorporates full hydraulic and spring power control. The closer will consist of a steel cam, rollers and springs housed in a compact cast iron body. The closer comes with a 5-year warranty. Closing and latching speeds are separately adjustable with easy access. The closer is available with no hold open or 105-degree hold open. A minimum 1-3/4" x 4" (44.5 x 101.6) transom bar or header is required to accept this closer.

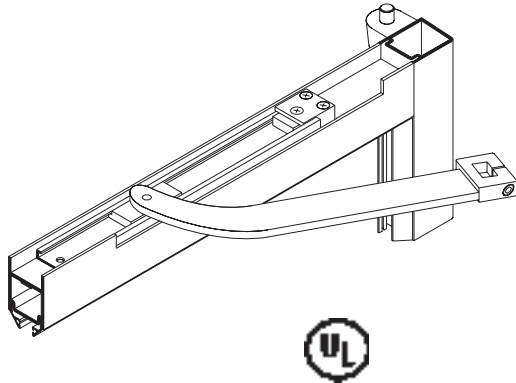
**Application:** The closer is used with center-hung exterior or interior double acting doors. The doors may be modified to single acting by applying a surface stop on the frame header or transom bar. The closer is compatible with most Kawneer doors as well as most of the framing systems. Side loading or end loading top arms are available. The closer is suitable for areas of medium to high traffic volume. For single acting offset hung doors using the International concealed closer, refer to the following SA-INT description.



### KAWNEER SAM® II CONCEALED OVERHEAD/SINGLE ACTING MANUAL

**Description:** This application of the concealed HUSKY II closer offers the same aesthetic and functional advantages of the double acting HUSKY II described above along with the superior weathering of an offset hung door and the over-swing control provided by a built-in door stop. The door, hung on either butt hinges, continuous hinge or offset pivots, makes continuous contact with Sealair® weatherstripping at top and side jambs. Door control is achieved through the concealed top arm which is attached to the closer shaft and connected to a guide shoe sliding in a stainless steel track concealed in the top rail of the door. An aluminum block with a rubber cushion mounted in the guide track provides a shock-absorbing stop at approximately 108 degrees.

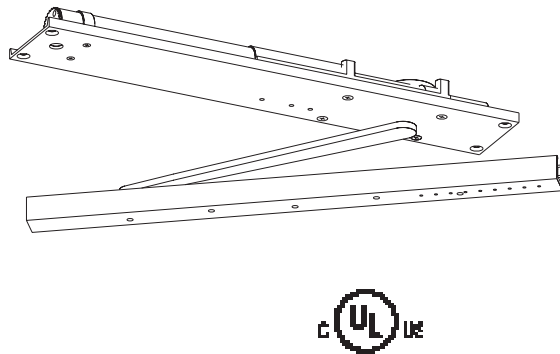
**Application:** SAM II is adaptable to most Kawneer entrance doors. This door control system is suited for areas of medium and high traffic volume. Closers are available with either 100 degrees hold-open or without hold-open.



### INTERNATIONAL® SA-INT CONCEALED OVERHEAD/SINGLE ACTING

**Description:** This application of the concealed International closer offers the same aesthetic and functional advantages of the double acting International described on Page 10 except in an offset hung application. The door can be hung on either butt hinges, continuous hinges, or offset pivots.

**Application:** SA-INT is adaptable to most Kawneer entrance doors. This control system is suited for areas of medium to high traffic volume. Closers are available with no hold open or 100-degree hold-open only.

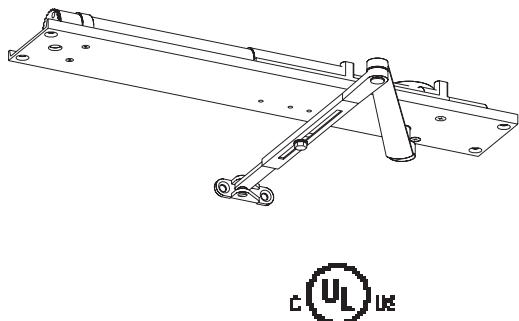


### LCN 2030 CONCEALED OVERHEAD/SINGLE ACTING

**Description:** A closer incorporating hydraulic spring control with rack and pinion operation. All controls of closing, latching speed, and back check are adjustable. Concealed arm and track mounted in door top rail provide the door to closer connection.

**Application:** For butt hung, offset pivot and center pivoted doors. Designed for concealment in transom bars or headers with a minimum dimension of 1-3/4" x 4" (44.5 x 101.6) An Auxiliary Stop is recommended where a door cannot swing 180°. Optional track bumper assembly assists backcheck in cushioning the opening swing of the door. It is not intended to replace an auxiliary stop.

The closer is adaptable to medium and high traffic volume and special applications. Field adjustable hold open degrees are located in the track.

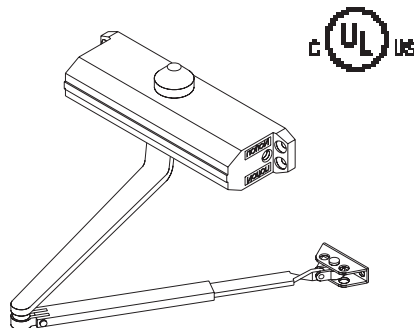


### LCN 5030 CONCEALED OVERHEAD/SINGLE ACTING

**Description:** Full hydraulic and spring power control with rack and pinion operation. Adjustable control of closing, latching speed and hydraulic back check cushion are separate. An exposed double lever arm is the door and closer link. Optional arms with 90 degree or 180 degree hold open and fusible link are available.

**Application:** This closer is for use with butt hung, center pivot or offset pivot doors. Door on butts will open 180 degree trim permitting. An Auxiliary Stop is recommended at hold-open point or where the door cannot swing 180 degrees. A minimum transom bar/header dimension of 1-3/4" x 4-1/2" (44.5 x 114.3) is required. The closer is adaptable to special applications and areas of medium to high traffic volume.

### NORTON 1605 BC

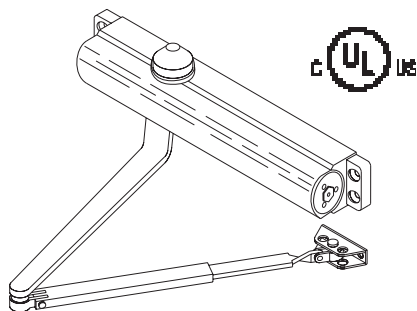


**Description:** The 1605 BC is the standard closer offering in Kawneer's entrance package program. The compact closer design blends well with narrow aluminum door and frame sightlines. This versatile and rugged surface closer features hydraulic spring power controlled rack and pinion operation. The closer is non-handed, with separate adjustment for sweep and latch ranges are standard, an adjustment screw controls the back-check. The adjustable power shoe allows total closer power adjustment of 15%. Drop plates, corner brackets, and hold open arms are optional accessories.

**Application:** Closer mounting options are: Door mount- (in-swing doors) the closer is mounted to the top door rail with the arm attached to the frame; Top jamb -(out-swing doors) the closer is mounted to the transom bar/header. Parallel arm -(out-swing doors) the closer is mounted to the top door rail with the arm and soffit plate attached to the transom bar/header. Parallel arm mounting folds the closer arm parallel to the transom bar/header and minimizes the arm projection. The closer is suitable to areas of medium traffic volume.

**Finish:** Painted to match #17 finish or #40 finish.

### NORTON 8101BF

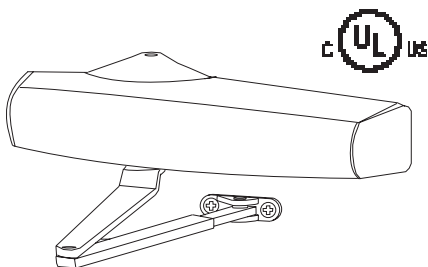


**Description:** A versatile, compact surface closer featuring spring and hydraulic powered rack and pinion operation. The closer incorporates field adjustable spring power and adjustable backcheck cushioning. The power can be adjusted by 50% by rotating the nut on the end of the closer to achieve an effective closer range of a size 2 through 6. The closer is non-handed with individual adjustable sweep speed and latch speed controls.

**Application:** See 1605 BC above.

**Finish:** Painted to match #17 finish or #40 finish.

### LCN QUEST 1370

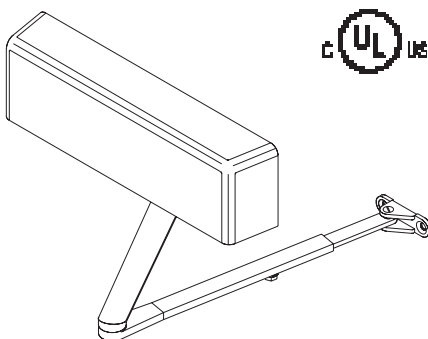


**Description:** A stylish closer incorporating spring and hydraulic powered rack and pinion operation with a spring power that is adjustable over a various range of power requirements. An adjustable back check cushion is also standard. Adapter plates, hold open arms, and other accessories are available.

**Application:** See 1605 BC above.

**Finish:** Painted to match #17 finish or #40 finish.

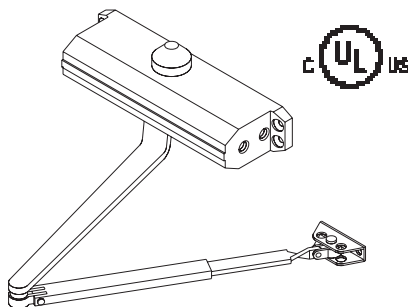
### LCN 4041 SUPER SMOOTHIE



**Description:** A versatile closer incorporating spring and hydraulic powered rack and pinion operation. The closer spring power is field adjustable over a wide range for various power requirements. An adjustable back check cushions the opening swing prior to 90 degrees in all applications. Adapter plates, hold open arms, and other accessories are available.

**Application:** The closer is designed for exposed surface mounting in the following ways: Door mount- to the top door rail, transom bar/header mount (an 18 G adapter plate is required for narrow 1-3/4" (44.5) frames), or Door mount- with optional parallel arm. When mounted on the top door rail, the rail must have a minimum height dimension of 5-13/16" (147.6) or drop plate 4040-18PA is required. Also in this application 4040-62PA shoe must be used. The closer is adaptable to special applications and medium and heavy traffic volume.

### DOR-O-MATIC SC 60




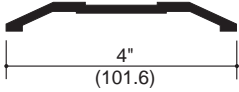
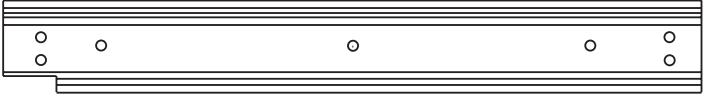
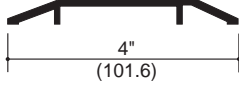

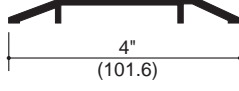
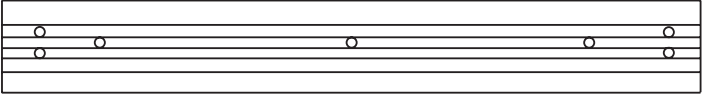
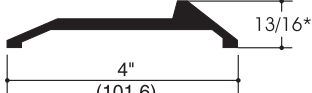
**Description:** This economical and adjustable spring surface closer features hydraulic spring power controlled rack and pinion operation. The closer is non-handed, with separate adjustments for sweep, latch and back check. The adjustable power shoe allows total closer power adjustment of 15%. Drop plates, corner brackets, and hold open arms are optional accessories.

**Application:** See 1605 BC above.

**Finish:** Painted to match #17 finish or #40 finish.

### KAWNEER THRESHOLDS

**Description/Application:** Kawneer thresholds are factory fabricated and prepared for the appropriate hinging and locking hardware. They are extruded-mill finish aluminum and are engineered for maximum strength as an integral part of the door and frame. Threshold height from the finished floor is 1/2" (12.7mm) except as noted.

	<p><b>CENTER HUNG</b> For Concealed Overhead Closer</p> 
	<p><b>OFFSET PIVOT</b> For Overhead Closer</p> 
	<p><b>BUTT HUNG</b> For Overhead Closer</p> 
	<p><b>PANIC GUARD</b> For Offset Pivot and Butt Hung Doors</p> 

\* On units that require ADA compliance the standard 1/2" high, offset pivot/butt hung threshold with bottom sweep will be supplied.

### KAWNEER STANDARD ARCHITECTS CLASSIC HARDWARE

**Description:** Contemporary styled 1" (25.4) round bent bar is the basis for this hardware line. A 90 degree offset pull is available in two centerline dimensions: 9" (228.6) and 12" (304.8).

**Application:** For use with single or double acting doors. A CP-II double bend push bar and a pull handle for single acting doors. Two CP push bars or two pull handles mounted back to back for double acting doors. Secure attachment is obtained by through the door mounting.

**Finish:** Aluminum handles are available in:

- #14 Clear anodize
- #29 Black anodize
- #40 Dark Bronze anodize
- #44 Bronze - US10B oil rubbed
- #45 Stainless Steel - US32 polished
- #46 Stainless Steel - US32D dull
- #47 Bright Brass (PVD) - US3

