

Laws and building and safety codes governing the design and use of Kawneer products, such as 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.

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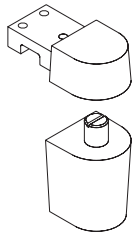
**PIVOTS/HINGES.....2, 3**  
**LOCKS/LATCHES ..... 4-7**  
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**CLOSERS ..... 20-22**  
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Metric (SI) conversion figures are included throughout these details for reference. Numbers in parentheses ( ) are millimeters unless otherwise noted.

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

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

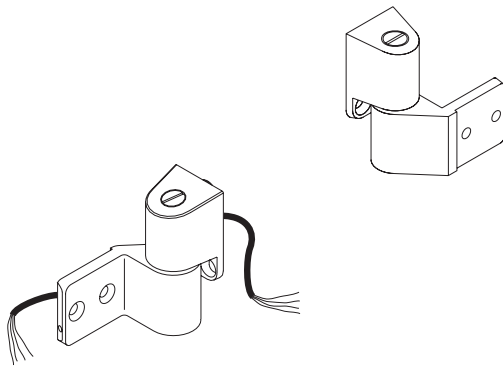
## TOP OFFSET PIVOT



**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. Pivot meets ANSI 156.4 Grade 1 certification.

**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.



OPTIONAL EL version for access control applications.

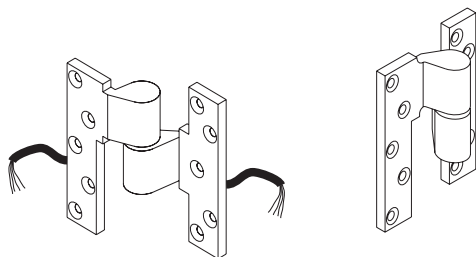
## STANDARD INTERMEDIATE PIVOT

**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 integral 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. Pivot meets ANSI 156.4 Grade 1 certification.

**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" (2,286) 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 EL version for access control applications.

## 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. Pivot meets ANSI/BHMA 156.4 Grade 1 certification.

**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" (2,286) in height.

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

## BOTTOM OFFSET PIVOT

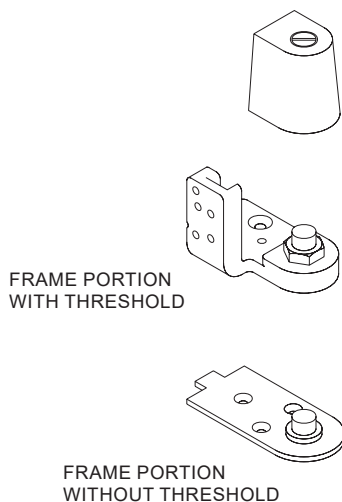
**Description: Door Portion** - is of cast aluminum. Attachment is obtained by back bolting through a plated steel reinforcing plate, the door stile extrusion and threading into the pivot block. A ball-bearing raceway accepts the pivot pin. The door portion provides vertical screw adjustment to achieve proper door, frame, and threshold clearance. Pivot meets ANSI 156.4 Grade 1 certification.

**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.

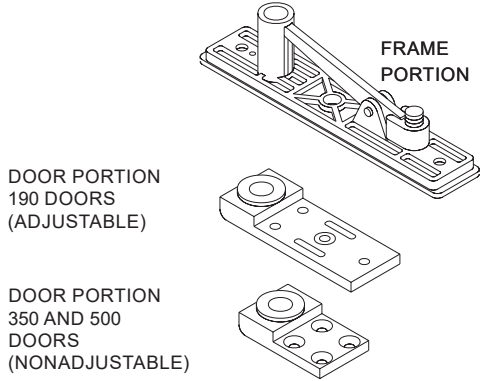
**Application:** The bottom offset pivot is used in conjunction with the top, and optional intermediate offset pivot. The frame portion is used with threshold. On interior or vestibule door not requiring threshold the floor mounted portion is used. The door portion provides vertical adjustment with both 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 for doors without threshold.



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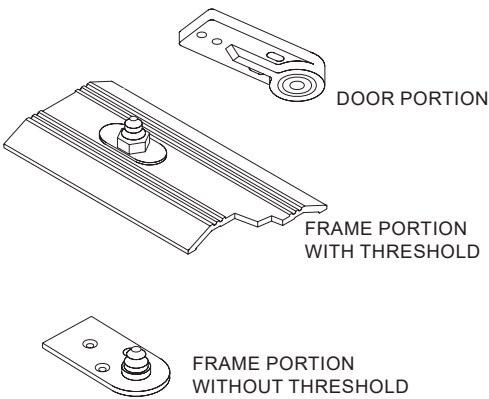


### TOP CENTER PIVOT

**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. (Door Portion) 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 nonadjustable. Dimensions 2-3/8" (60.3) long, 1-7/16" (36.5) 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.

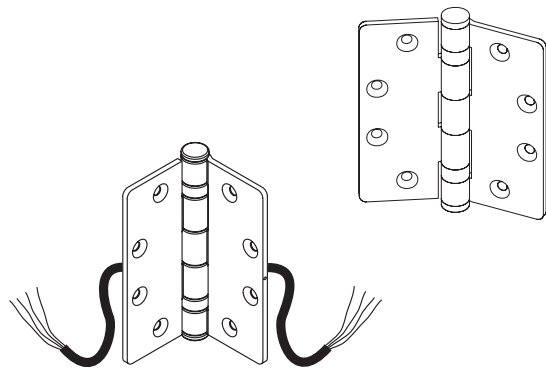


### BOTTOM CENTER PIVOT

**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.



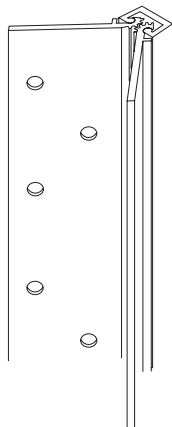
### BUTT HINGE

**Description:** Commercial quality 300 series stainless steel hinge with leaves of five knuckle two ball bearing construction. The hinge barrel is enclosed with button tips and incorporates a non-removable pin. 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 0.134 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 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" (2,286).

**Finish:** Hinges are powder painted to blend with door finish.

OPTIONAL EL version for access control applications.



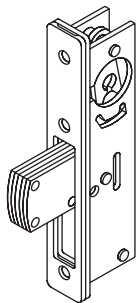
### CONTINUOUS HINGE

**Description:** Aluminum Continuous Geared Hinges provides long-lasting solutions for high-traffic and high-impact doors. The continuous geared hinge extends the full length of the door and frame. The two center gears form a rotating joint and the door weight is supported and cushioned by molded bearings evenly spaced along the entire length of the interlocking leaves.

**Application:** The continuous geared hinge is the hinge to suitable in high-traffic and high-impact areas. The hinge is surface applied to the frame and door stile. Fasteners are staggered at approximately 6" (152.4 mm) on center. Compatible with Standard Entrance, Heavy Wall®, Tuffline®, Flushline® and Insulclad® Thermal Entrances.

**Finish:** Available in #17 Clear, #29 Black, and #40 Dark Bronze anodized finishes. Painted finishes available on a custom basis.

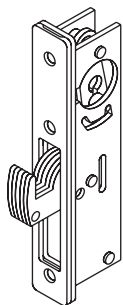
## ADAMS RITE MS-1850 DEADLOCK



**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" (28.6) 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



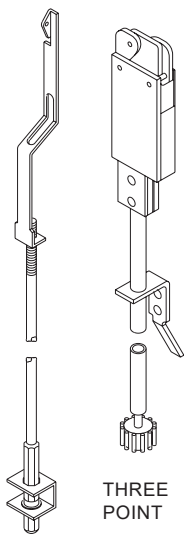
**Description:** All features and components, with the exception of the hook bolt, are the same as the MS 1850 deadlock. The hook bolt is of the same construction but has a hook shape to provide additional security against the door prying attempts.

**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 cutout in a manner that resists attempts to pry or pull apart the door stiles. On pairs of doors the proper strike cutout 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 cutout triggers engagement of the header bolt.



TWO POINT

THREE POINT

## KAWNEER CONTROLLER® LOCKING SYSTEM

**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

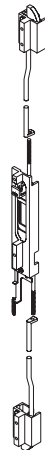
prried apart allowing access to the flush bolt release levers. Unlike flush bolts, the CONTROLLER is manually engaged with access through the M.S. lock strike cut out. It is then secured by the 1-3/8" (34.9) throw, five ply laminated steel bolt of the M.S. lock.

**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 UNLOCKING** 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.

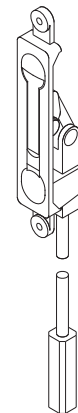


\* The following building codes, with some qualifications, prohibit the use of manual flush bolts on exits doors needed to handle the occupant load of the building.

- 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.

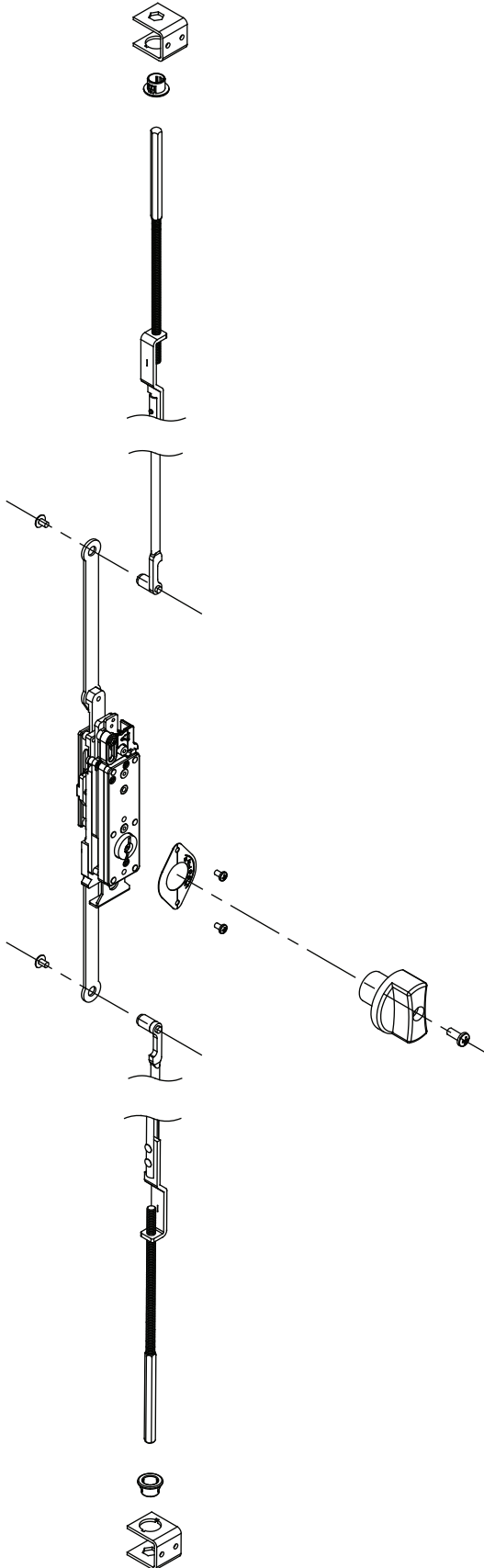


## ADAMS RITE MS 2180 TWO-POINT FLUSHBOLT

**Description:** Auto-release two-point flush bolt used in the inactive leaf of door pairs in lieu of manual flip-lever flush bolts. One turn secures the inactive leaf in position. The pivoting MS® deadlock in the active leaf secures the entire opening. The locking action of the MS® deadlock internally trips the MS 2180 mechanism so that when the MS® deadlock is retracted, the entire opening releases with a single operation. The MS 2180 series works with the MS 1850 and MS 1950 series deadbolts.

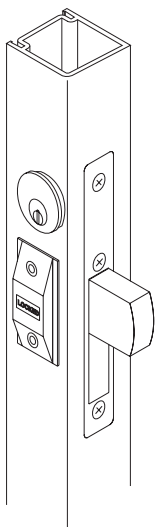
**Application:** Designed for use on pairs of doors only. The MS 2180 is not to be used as a stand-alone locking mechanism. It is suitable for medium to heavy traffic areas and available on the 350/500 IR door.

**Finish:** Clear, dark bronze and black anodized.



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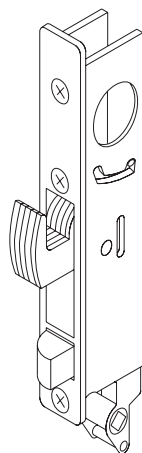
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### EXIT INDICATOR

**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.

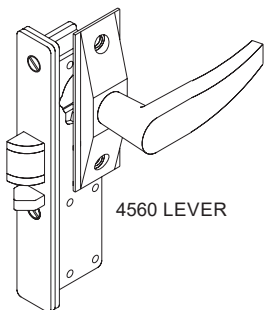
**Application:** This device is optional for use with the deadbolt (MS 1850) or hook bolt (MS 1850-050) to indicate the lock position; open or locked. In some local building safety codes, this device allows the use of a deadlock in lieu of an exit device.



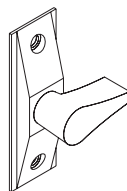
### ADAMS RITE MS+1890 DEADLOCK/LATCH COMBINATION

**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 4565 handle, 1-1/2" (38.1) long is used with the latch lock. Latch paddle 4590 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

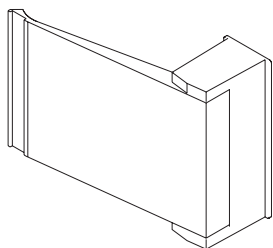
**Description:** Cylinder key operation from the exterior or lever handle interior operation retracts the spring loaded latch bolt. Deactivation or "dogging" is achieved with a reverse turn of the cylinder key. An auxiliary bolt deadlocks the latch bolt to prevent unwarranted "loiding" or caseknife entry. 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

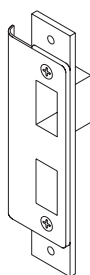
**Description:** The escutcheon is 4" (101.6) high by 1-11/32" (34.1) wide. Total width of paddle and housing is 5-7/16" (137.9). Neutral projection of the paddle from the door face is 2-5/16" (58.6).

**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.

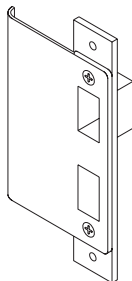


### ADAMS RITE STANDARD LATCH STRIKES

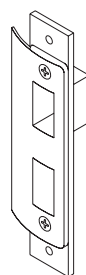
**Description/Application:** A flat strike is jamb mounted for single acting butt hung or offset pivot doors. The elongated lip strike is jamb mounted for center hung single acting doors. A pair of doors requires the radiused strike mounted on the inactive leaf stile. The strike plates are satin buffed stainless steel.



LONG LIP



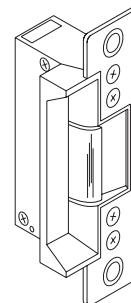
FLAT



RADIUSED

### ADAMS RITE 7130 ELECTRIC STRIKE

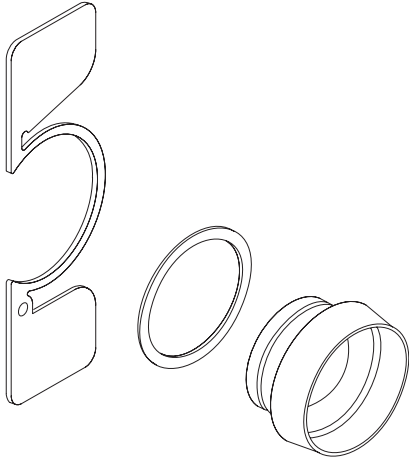
**Description/Application:** The 7130 Series electric strike is designed for use with the 4510 latch lock to allow remote traffic/door control. It operates on 24V AC or 12V DC and is UL listed. For proper operation the anticipated duty, intermittent (std.) or continuous, should be specified. May be jamb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



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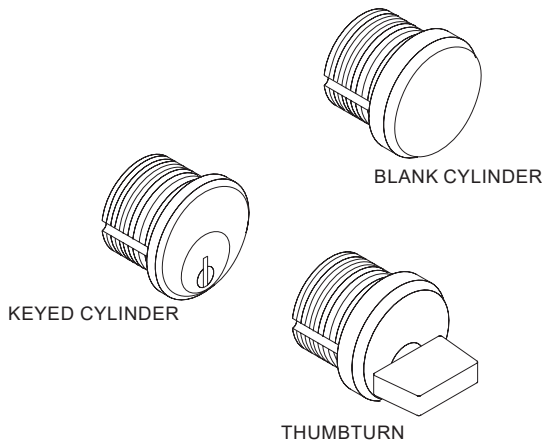


### CYLINDER GUARD

**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.

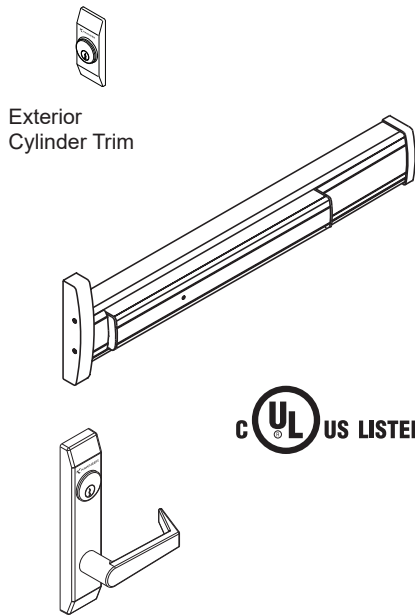
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### KAWNEER LOCK CYLINDERS

**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.



## KAWNEER 1686 CONCEALED ROD EXIT DEVICE

**Description:** The Kawneer 1686 Concealed Rod exit device is an exclusive to Kawneer customers. This exit device is UL Listed, is Hurricane Impact tested and Florida Product Approved. This device has the feature of rod adjustment without panel removal. Depression of the touchbar on the interior retracts the concealed rods from the transom bar and the threshold, allowing egress from the building. Upon closing, the top rod is released and frees the bottom rod to engage the threshold. The door is now relocked. A quick single point "dogging" feature in the housing deactivates the device and permits unrestricted traffic flow. Vertical rods and latch mechanisms are concealed in the vertical door stile. A 1-5/32" diameter mortised 5-pin cylinder with trim is required.

**Application:** Designed for use on single or pairs of doors. It is suited for medium and high traffic areas. Available on 190, 350, and 500 Standard Entrances, 350/500 IR, 350/500 Heavy Wall®, 350/500 Heavy Wall® IR Entrances, and AA® 250/425 Thermal Entrances.

**Dimensions:** Center line of touchbar to bottom of door 40" (1,016); height 3-3/16" (81); Projection 2-3/4" (70); Projection when dogged 1-13/16" (46).

**Finish:** Clear and dark bronze.

### Options:

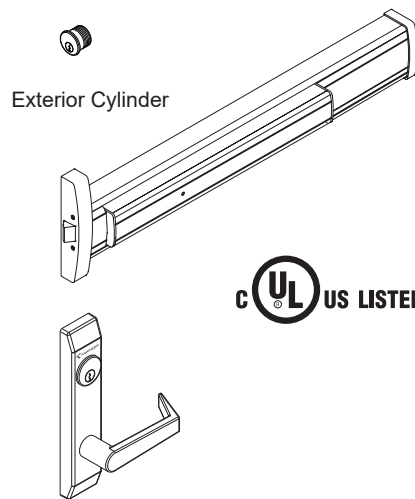
1686 Standard Concealed Rod Exit Device:

- Mechanical hex key and Cylinder dogging available.

1686 MEL version:

- Mechanical Hex Key dogging and electrical dogging available.
- Cylinder dogging is not available.

Exterior lever trim handle available for both options.



## KAWNEER 1786 RIM EXIT DEVICE

**Description:** The Kawneer 1786 Rim exit device is an exclusive to Kawneer customers. This exit device is UL Listed. This device has the same basic features as the concealed vertical rod device above. Its difference is in the latching mechanism. A 5/8" 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 permits egress from the building.

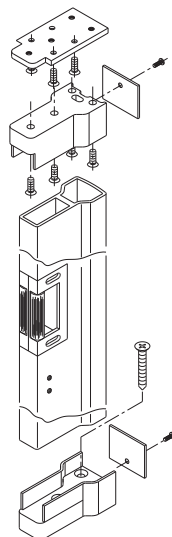
**Application:** Designed for use on single or pairs of doors. It is suited for medium and high traffic areas. Available on 190, 350, and 500 Standard Entrances, and 350/500 Heavy Wall® Entrances, and AA® 250/425 Thermal Entrances.

**Dimensions:** Center line of touchbar to bottom of door 40" (1,016); height 3-3/16" (81); Projection 2-3/4" (70); Projection when dogged 1-13/16" (46).

**Finish:** Clear and dark bronze.

### Optional:

- 1786 MEL version for access control applications.  
(Mechanical Hex Key and Cylinder dogging not available)
- Cylinder dogging in lieu of hex key dogging.
- Exterior lever trim handle.



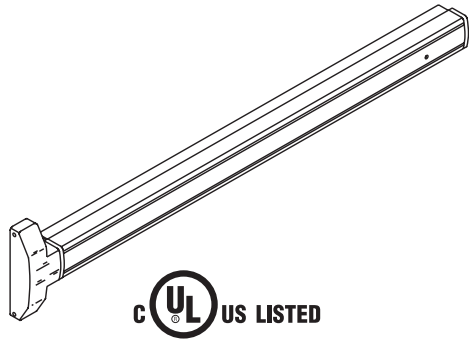
## RM86 REMOVABLE MULLION

**Description:** This removable mullion is used with Kawneer 1786 Rim Exit Device.

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

**Finish:** #17 Clear and #40 Bronze anodized.





### FALCON 1690/HH1690 CONCEALED ROD EXIT DEVICE

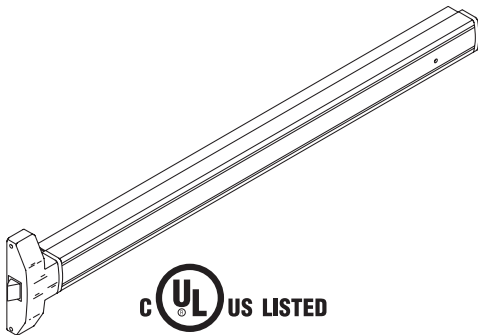
**Description:** This exit device allows egress from a building without the use of a key. Depression of the Touchbar on the interior retracts the concealed bottom rod from the threshold and releases the top latch from the transom bar mounted barrel strike. This allows egress from the building. Upon closing, the top latch reengages 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, deactivates 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" (1,031.9); 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:** MEL version for access control applications.



### FALCON 1790 RIM EXIT DEVICE

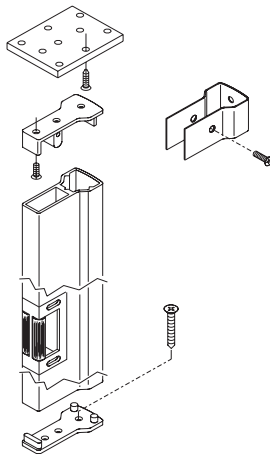
**Description:** This exit device has the same basic features as the concealed vertical rod device above. Its difference is in the latch mechanism. A 3/4" throw latch bolt in the rim of the housing engages an aluminum jamb or removable mullion mounted strike. Depression of the Touchbar on the interior 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 (1,049.3)  
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:** MEL version for access control applications.



### RM170 REMOVABLE MULLION

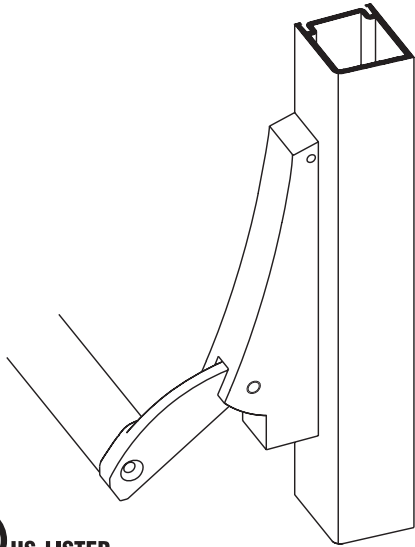
**Description:** This removable mullion is used with Falcon 1790 Rim Exit Device. It meets ANSI Grade 1 requirements.

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

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

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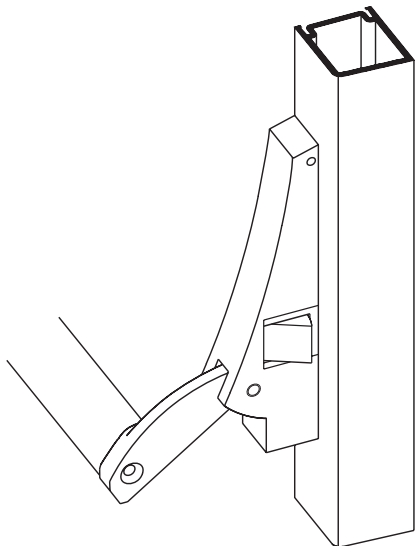
### FALCON 1990 CONCEALED ROD

**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 reengages the strike securely and frees the bottom bolt to engage the threshold. The door is then locked from the exterior. The exit device can be deactivated 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 door bottom) 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.



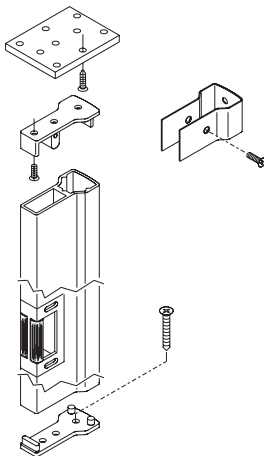
### FALCON 2090 RIM TYPE

**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 reengages 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 exit device can be deactivated 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.



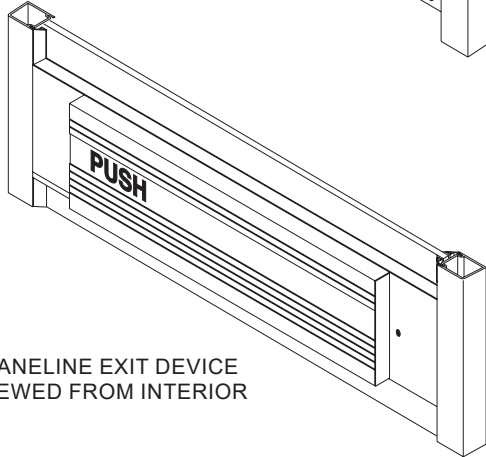
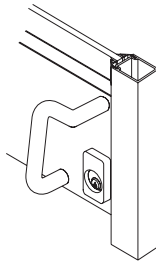
### RM70 REMOVABLE MULLION

**Description:** This removable mullion is used with Falcon 2090 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.

CPN PULL  
WITH OPTIONAL  
CYLINDER GUARD



PANELINE EXIT DEVICE  
VIEWED FROM INTERIOR



### KAWNEER PANELINE® 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 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 assembly is mounted on a separate chassis and 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 exit device.

**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 1-3/8" (34.9), Depressed 17/32" (13.5). See standard door section for complete rail dimensions and details.

**Application:** Used with 190, 350, 500 Standard Entrances, 350/500 Tuffline®, 350/500 IR, 350/500 Heavy Wall®, and Flushline® Entrances in singles or pairs. Functions are the same as described for standard 1990 exit device. May also be used on 350/500 IR Entrance and 350/500 Heavy Wall® IR Entrance.

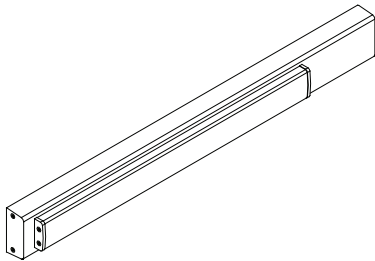
**Finish:** The cross rail is finished to match the door. The push panel is available in Kawneer's anodized finishes. Inlay strip for the push panel is black with clear letters on clear doors; light bronze with black letters on dark bronze or black doors. CPN pull is anodized in #14, #29, or #40 finish.

**Optional:** MEL version for access control applications.

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### ADAMS RITE G86 CONCEALED VERTICAL ROD



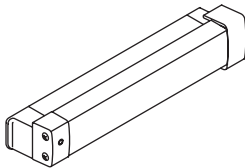
**Description:** This low profile "push bar" exit device is UL listed, ANSI Grade 1 and Hurricane Impact tested. The G86 device is engineered for use on narrow, medium and wide stile doors. It's non-handed design makes it an affordable and flexible solution. The top latching assembly features a hardened steel projection bolt with built-in trigger that automatically relocks the door when closed. Exterior operation by standard mortise cylinder with escutcheon pad.

**Application:** Designed for use on single or pairs of doors. It is suitable for medium to heavy traffic areas and available on the 350/500 IR Entrances.

**Dimensions:** Center line of touchbar to bottom of door 41-11/16" (1,058.9); height 3-3/4" (95.3); projection 2-1/2" (63.5).

**Finish:** Clear, dark bronze, and black anodized.

### ADAMS RITE 8400 MORTISE DEVICE

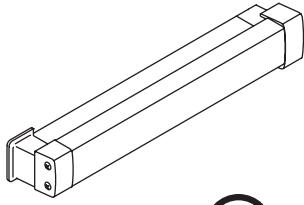


**Description:** This exit device is UL listed and ANSI Grade 1. The 8400 is designed to use the Adams Rite 4900 series deadlatch. The device offers exterior unlatching and dogging by cylinder key, or dogging on the interior by hex key on the touchbar.

**Application:** Designed for use on single and pairs of doors. It is suitable for medium to heavy traffic areas and available on standard 190, 350, 500 Standard Entrances, Insulclad® Thermal Entrances, and AA® 250/425 Thermal Entrances.

**Dimensions:** Center line of touchbar to bottom of door 40-13/16" (1,036.6); height 2-7/16"; (61.9) projection 2-5/8" (66.7); projection when dogged 1-5/8" (41.3).

**Finish:** Clear, dark bronze, and black anodized.



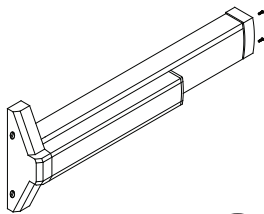
### ADAMS RITE 8600 CONCEALED VERTICAL ROD

**Description:** This “push bar” exit device is UL listed and ANSI Grade 1. The 8600 device is engineered for use on narrow, medium and wide stile doors. It’s non-handed design makes it an affordable and flexible solution. The top latching mechanism utilizes a rotating top bolt which deadlatches around the header strike, interlocking the door to the frame. The device offers exterior unlatching and dogging by mortise cylinder key, or dogging on the interior by hex key on the touchbar.

**Application:** Designed for use on single or pairs of doors. It is suitable for medium to heavy traffic areas and available on standard 190, 350, 500 Standard Entrances, Insulclad® Thermal Entrances, and AA® 250/425 Thermal Entrances.

**Dimensions:** Center line of touchbar to bottom of door 41-11/16" (1,058.9); height 2-7/16" (61.9); projection 2-5/8" (66.7); projection when dogged 1-5/8" (41.3).

**Finish:** Clear, dark bronze, and black anodized.



### CALIBRE 9100 SERIES CONCEALED VERTICAL ROD

**Description:** This low profile “push bar” exit device is UL listed, ANSI Grade 2 and Hurricane Impact tested for security and busy traffic conditions. Requiring a 2" mounting surface this device is versatile and can be used on narrow, medium and wide stile doors. The device is field reversible, and the harden steel top and bottom rod bolts offer secure tamper-proof locking. The device offers exterior unlatching and dogging by mortise cylinder key, or dogging on the interior by hex key on the touchbar.

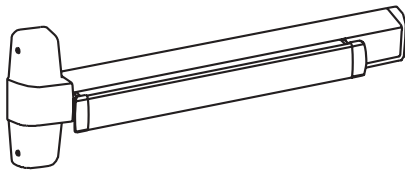
**Application:** Designed for use on single or pairs of doors. It is suitable for medium traffic areas and available on the 350/500 IR door.

**Dimensions:** Center line of touchbar from bottom of door 38-5/32" (969.2); height 3-1/4" (82.6); projection 2-19/32" (65.9).

**Finish:** Clear and dark bronze aluminum.



Exterior Cylinder



### VON DUPRIN 9947/HH-KAW-9947 CONCEALED ROD EXIT DEVICE

**Description:** This exit device is UL Listed, is Hurricane Impact tested and Florida Product Approved. This device is non-handed and has a grooved case. Depression of the touchbar on the interior releases the top and bottom latches, allowing egress from the building. The vertical rods and latch mechanisms are concealed in the vertical door stiles. Top and bottom strikes are required. A “Dogging” feature in the housing de-activates the device and permits unrestricted traffic flow.

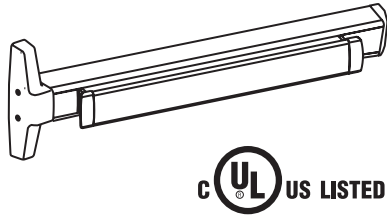
**Application:** Designed for use on single or pairs of doors. It is suitable for medium and high traffic areas. The 9947 is available on 350T/500T Insulpour® Thermal Entrances, 360/560 Insulclad® Thermal Entrances, and AA®425 Thermal Entrances. The HH-KAW-9947 is utilized for impact rated applications and is available on the 350/500 IR Entrances, 350/500 Heavy Wall® IR Entrances, 350T/500T Insulpour® Thermal Entrances, and AA®425 Thermal Entrances.

**Dimensions:** Center line of touchbar to bottom of door 38-15/16" (989); height 2-1/4" (57.2); projection 3-13/16" (96.8); projection when dogged 3-1/16" (77.8).

**Finish:** Clear, dark bronze and black aluminum.

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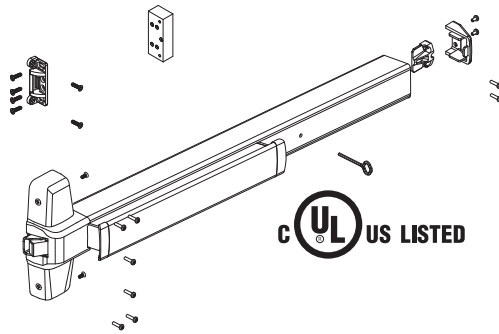
### VON DUPRIN 3347A CONCEALED VERTICAL ROD

**Description:** This exit device is UL listed and ANSI Grade 1. Depression of the touchbar on the interior releases the top and bottom latches, allowing egress from the building. The vertical rods and latch mechanisms are concealed in the vertical door stiles.

**Application:** Designed for use on single and pairs of doors. It is suitable for medium to heavy traffic areas and available on pairs of 250T/350T/500T Insulpour® Thermal Entrances.

**Dimensions:** Center line of touchbar to bottom of door 39-1/8" (993.8); height 2-1/4" (57.2); projection 3-13/16" (96.8); projection when dogged 3-1/16" (77.8).

**Finish:** Clear, dark bronze, and black anodized.



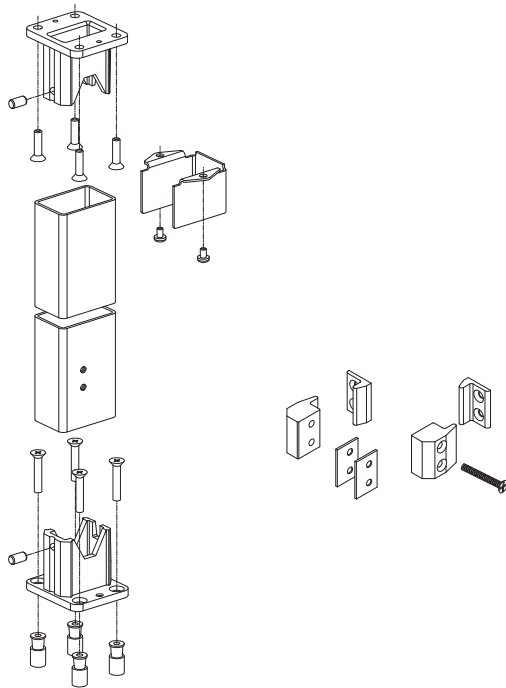
### VON DUPRIN 99XP RIM EXIT DEVICE

**Description:** This exit device is UL listed, ANSI Grade 1 and is Hurricane Impact tested and Florida Product Approved. This device is non-handed. 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 and pairs of doors. It is suitable for medium to heavy traffic areas and available on 500 IR Entrances.

**Dimensions:** Center line of touchbar to bottom of door 39-1/8" (993.8); height 2-1/4" (57.2); projection 3-13/16" (96.8); projection when dogged 3-1/16" (77.8).

**Finish:** Clear, dark bronze, and black anodized.



### VON DUPRIN 9954 REMOVABLE MULLION

**Description:** This removable mullion is used with Von Duprin 99 Rim Exit Device. It meets ANSI Grade 1 requirements.

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

**Finish:** Clear and dark bronze anodized.

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## JACKSON 2086 CONCEALED ROD EXIT DEVICE

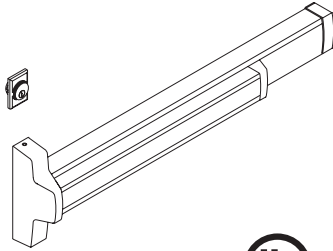
**Description:** This exit device is UL Listed, ANSI Grade 1 and is Hurricane Impact tested and Florida Product Approved. This device has the feature of rod adjustment without panel removal. Depression of the touchbar on the interior retracts the concealed rods from the transom bar and the threshold, allowing egress from the building. Upon closing, the top rod is released and frees the bottom rod to engage the threshold. The door is now relocked. A quick single point "dogging" feature in the housing deactivates the device and permits unrestricted traffic flow. Vertical rods and latch mechanisms are concealed in the vertical door stile. A 1-5/32" diameter mortised 5-pin cylinder with trim is required.

**Application:** Designed for use on single or pairs of doors. It is suited for medium and high traffic areas. Available on 350/500 IR Entrances and 350/500 Heavy Wall® IR Entrances.

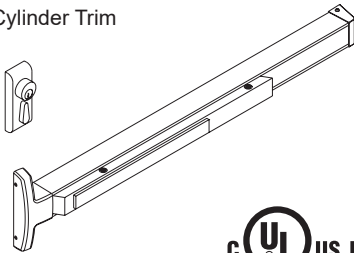
**Dimensions:** Center line of touchbar to bottom of door 38-3/16" (970); height 2-7/8" (73); projection 3" (76); projection when dogged 1-3/4" (45).

**Finish:** Clear, dark bronze, and black aluminum.

Exterior  
Cylinder Trim



Exterior  
Cylinder Trim



## SARGENT 8400 CONCEALED ROD EXIT DEVICE

**Description:** This exit device is UL Listed, ANSI Grade 1 and is Hurricane Impact tested and Florida Product Approved. Depression of the touchbar on the interior retracts the concealed rods from the transom bar and the threshold, allowing egress from the building. Upon closing, the top rod is released and frees the bottom rod to engage the threshold. The door is now relocked. Standard hex key "dogging" included. The 160 trim with cylinder is required.

**Application:** Designed for use on single or pairs of doors. It is suited for medium and high traffic areas. Available on 350/500 IR Entrances and 350/500 Heavy Wall® IR Entrances.

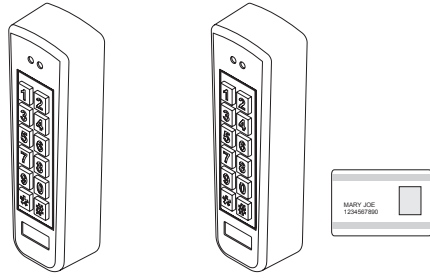
**Dimensions:** Center line of touchbar to bottom of door 40-5/16" (1,020); height 2-5/8" (67); Projection 3" (76); Projection when dogged 2-1/8" (54).

**Finish:** US 32D to blend with Clear anodized and US 10B to blend with Dark Bronze anodized.

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AC-G43

AC-G44

### AC-G43 ACCESS CONTROL KEY PAD

**Description:** This stand alone access control unit provides three levels of security for indoor or outdoor systems with up to 500 users, on a single door. Powered either by transformer (AC) or regulated power supply (DC). The AC-G43 offers automatic mode recognition and a user-friendly set up menu, simplifying configuration and use. Extra features such as various door alarms, LED control input, and tamper detection provide extra security and flexibility. The backlit keypad is visible during the night or day, making these units suitable for commercial and industrial applications. Operating voltage range of 12 to 24VDC (from a regulated power supply) or 16 to 24VAC (from a transformer).

**Application:** Suitable for mullion installations.

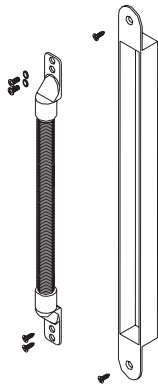
**Dimensions:** 5.33" L x 1.74" W x 1.12" D (135 mm x 44 mm x 28 mm).

#### Optional Key Pad AC-G44:

**Description:** Key Pad with Proximity Card Reader for use with access control cards (Proximity Cards not included with key pad).

#### Optional Proximity Cards:

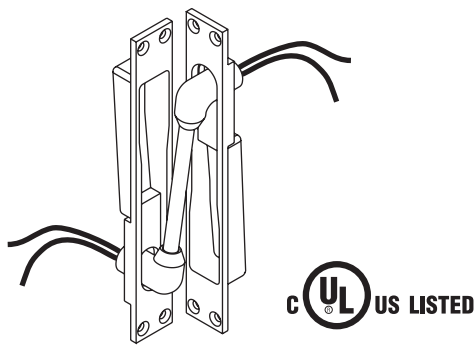
**Description:** AT-R14 Clamshell 26 bit card (25 cards per package).



### EPT (ELECTRIC POWER TRANSFER)

**Description:** The EPT accepts a thick cable and protects it within a flexible steel shield. The interior diameter of the shield is 5/16" (8 mm) which will support interior wire cables up to 1/4" (6 mm) thick. The EPT is suitable for applications where relatively large current is required (such as operating many types of electric hardware). The EPT is universal and will work on doors hung with butt hinges, continuous hinge or offset pivots. Maximum degree of swing is 120°.

**Application:** The Electric Power Transfer installs into the door and frame edges, so that its presence is concealed when the door is closed, thus maintaining good security and esthetic appeal.



### VON DUPRIN EPT-2 / EPT-10 (ELECTRIC POWER TRANSFER)

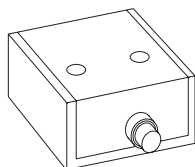
**Description:** Electric Power Transfer provides a means of transferring electrical power from a door frame to the edge of a swinging door. The units are completely concealed when the door is in the closed position, and are ideally suited for installations involving abuse or heavy traffic. The EPT-2 and EPT-10 are UL listed as "miscellaneous door accessory". Maximum degree of swing 180°.

The **EPT-2** has two 18 gauge wires and is rated up to 2 amps.

The **EPT-10** has ten 24 gauge wires and is rated up to 1 amp.

**Application:** This device installs in the door and frame edges, so that its presence is concealed when the door is closed, thus maintaining good security and aesthetic appeal.

**Finish:** Painted to blend with Clear and Dark Bronze anodized.



### LOCKNETICS 660PB (PUSH BUTTON CONTROL)

**Description:** The 660 Series Mini Station Control is designed to release electronic locking mechanism from a remote location. The 660 is supplied with a SPDT momentary action push button. A typical application would be under a desk to release an entrance door.

#### Specifications:

Switch contact rating: 6 AMP @ 128 VAC

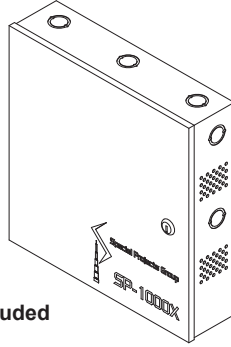
Length: 2"

Width: 2"

Height: 1"

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Batteries not included

## SP-1000X POWER SUPPLY

**Description:** The SP-1000X will operate up to two (2) 24VDC exit hardware devices simultaneously. It is designed to handle the high in-rush current exit hardware locking devices demand. Each lock output has an adjustable relock delay timer. It will control a pair of doors simultaneously or independently control two individual doors. It has a follower relay for each output to trigger external relays, control ADA push plate switches, etc. Delayed follower relays control automatic door operators for doors that are always locked or for doors that are unlocked during the business day. In addition, two un-switched auxiliary voltage outputs are provided for powering card readers, keypads, REX PIRs, electronic timers, relays, etc. A configurable FACP interface will either provide power or remove power to the lock outputs when activated. LED status indicators are provided to monitor AC power, FACP status and for lock output wiring supervision. Intelligent logic provides protection against accidental shorting of lock outputs.

### Input:

- Input 115VAC 60Hz, 6.3 amp.
- Two (2) NO trigger inputs.
- Input fuse rating: 6.3 amp.

### Outputs:

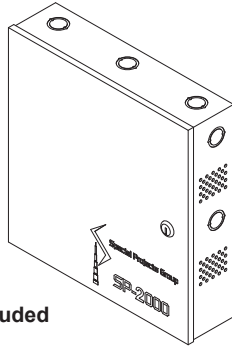
- Power options:  
Two (2) 20VDC to 26.4VDC individually controlled lock outputs for applications with battery back-up. 24VDC for applications without battery back-up (US applications only).  
Current rating 15 amp for 300ms, 0.75 amp continuous supply current.

5V holding voltage with 20VDC to 26.4VDC initial 100ms pulse.  
Maximum total 5V holding current of both outputs is 0.74 amp.

- One (1) 20VDC to 26.4 VDC for applications with battery back-up, 24VDC for applications in US not requiring battery back-up. Auxiliary output rated @ 0.75 amp continuous supply current (Not affected by FACP trigger).
- One (1) 12VDC filtered regulated auxiliary output rated @ 0.5 amp (Not affected by FACP trigger).
- Two (2) follower form "A" SPST relay outputs rated @ 0.6 amp/28VDC. Relays energize while input is closed.
- Two (2) delayed follower Normally Open relay outputs rated @ 0.6 amp/28VDC. Delay time is selectable 0.5 seconds or 1 second. Energized duration is 1 second.
- Trouble relay output indicating low DC output voltage.

### Battery Back-up:

- Battery fuse rating: 25A/32V.
- Maximum charge current 650mA.
- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switch over to stand-by battery when AC fails.
- When 7AH batteries are used, battery capacity for emergency stand-by is 30 minutes.



## SP-2000 POWER SUPPLY

**Description:** SP-2000 will operate up to two (2) low current lock hardware devices simultaneously. It is designed to operate motorized electric latch retraction exit devices, electric strikes, mag-locks, electric mortise and cylindrical locksets, etc. Each lock output has an adjustable re-lock delay timer. It will control a pair of doors simultaneously, or independently control two single door leaves. SP-2000 has integrated output relays which trigger automatic door operators and control ADA activation push plates/accessories. In addition, one (1) 12VDC and one (1) 24VDC unswitched auxiliary voltage outputs are provided for powering ancillary devices. A configurable FACP interface will either remove or apply power from the lock outputs when activated. LED status indicators are provided to monitor input status, battery condition, AC power loss, and FACP status. Intelligent logic provides protection against accidental shorting of lock outputs.

### Batteries not included

#### Input:

- Voltage: 115VAC, 60Hz, 2.5A or 230VAC, 50Hz, 1.5A. two (2) NO trigger inputs.  
 FACP Normally Closed (N.C.) input.  
 Two normally open ADA inputs for special mode of interfacing with automatic door operators.
- Fusing: Input fuse rating: 3A.

#### Outputs:

- Power options:
- Two (2) 19.8VDC-26.4VDC rated individually controlled lock outputs configurable for fail-secure or fail-safe electronic locking hardware for applications with battery back-up. 24VDC-26.4VDC rated for applications without battery back-up (US applications only). Current rating 2A combined.
  - One (1) 19.8VDC-26.4VDC @ 0.8A rated filtered regulated auxiliary output for applications with battery back-up, 24VDC-26.4VDC @ 0.8A rated for applications in US not requiring battery back-up.  
Not affected by FACP trigger.
  - One (1) 12VDC filtered regulated auxiliary output rated 0.5A.  
Not affected by FACP trigger.
  - Two (2) follower Normally Open relay outputs for controlling ADA actuators/accessories rated 28VDC @ 0.5A.
  - Two momentary door operator activation relay outputs.
  - Trouble relay output indicating low AC voltage trouble and battery trouble.

#### Battery Back-up:

- Type: Sealed lead acid or gel type.  
 Failover: Upon AC loss, instantaneous.  
 When 7 AH batteries are used, battery capacity for emergency stand-by is 30 minutes.

#### Fire Alarm Disconnect:

- Normally Closed FACP trigger input.  
 Programmable Fire Alarm Disconnect options: - Removes power to outputs and disables delayed follower relays.  
 - Connects power to lock outputs and enables delayed follower relays.

#### Indicators (LED):

- AC Power (Green) Input voltage is present.  
 Trigger Input (Red) Panic device status/trouble.  
 FAI (Green) FACP disconnect.  
 Battery (Red) Low battery

#### Agency Listings:

- UL:** UL 294 Access Control Unit Power Supply.  
**cUL:** UCL-S319 Access Control Unit Power supply, Class 1.

#### Physical and Environmental

- Dimensions {H x W x D}  
 13" x 12.5" x 3.25" (330.2mm x 317.5mm x 82.6mm). Enclosure accommodates up to two (2) 12VDC/7 AH batteries.  
 Product Weight: 6.25 lbs. (2.83 kg).  
 Shipping Weight: 7.15 lbs. (3.24 kg).  
 Temperature:  
 Operating 0°C to 49°C (32°F to 120°F).  
 Storage -20°C to 70°C (-4°F to 158°F)  
 Relative Humidity 85% +/-5%.  
 BTU/Hr: 120 BTU/Hr.

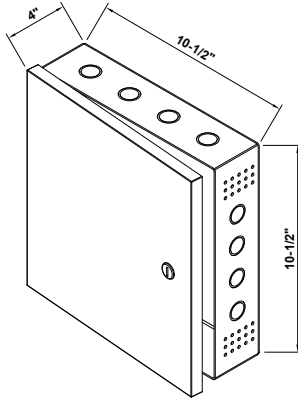
**Application:** For use with Paneline MEL, Falcon 1690 MEL, Falcon 1790 MEL, and other electric exit devices.



## NP1 POWER SUPPLY

**Description:** For use with Kawneer 1686 MEL and 1786 MEL exit devices.

The NP1 power supply is a UL listed, 24V regulated, linear power supply, featuring solid-state design to offer durability and predictable door control. The NP1 offers built in surge capacity and battery backup to power (2) electric latch pullback devices simultaneously.



### NP1

#### Input:

- Input voltage - 120VAC
- Input fuse 2 amp fuse at 120VAC

#### Outputs:

- Output voltage - 24VDC regulated at 3.2A
- Temperature range - 13° to 158° F

#### Additional Features:

- UL 62368-1, TUV 50448593
- Wire run up to 200' with 18/2 wire
- Dual input / output
- (3) Year "No hassle" warranty

#### Battery Backup:

- Standard with power supply
- Required to insure fail secure operation

#### Fire Alarm:

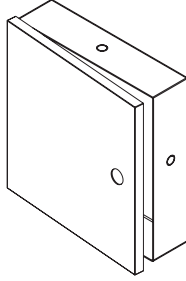
- Fire link standard

#### Exit Device Application:

- (2) 1686 exit devices per NP1 power supply
- (2) 1786 exit devices per NP1 power supply

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## ALTRONIX AL175UL POWER SUPPLY

**Description:** A power limited power supply/chargers that will convert 115VAC / 60Hz input, into two individually PTC protected 12VDC or 24VDC output.

**Input:**

- 115VAC 60 Hz, 0.6 amp.

**Output:**

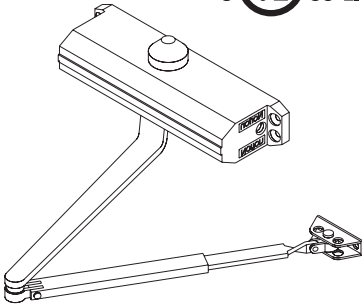
- 12VDC or 24VDC selectable output.
- 1.75 amp continuous supply current.
- Class 2 Rated power limited outputs.
- Two (2) PTC protected Class 2 Rated power limited outputs.
- Filtered and electronically regulated output.
- Short circuit and thermal overload protection.
- Maximum charge current: 400mA.
- Aux relay output (form "C" contacts).
- Automatic switch over to standby battery when AC fails.
- AC fail supervision (form "C" contacts).
- AC input and DC output LED indicators.

**Application:** For use with electric strikes and magnetic locks.

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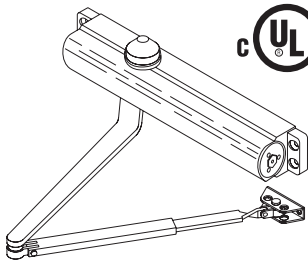
## NORTON 1601



**Description:** The Norton 1601 is ANSI Grade 1 certified and is the standard 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 Norton 1601 offers adjustable spring sizes 1 - 6 and is ADA compliant for interior doors. The closer is non-handed, with separate adjustment for sweep and latch ranges are standard, an adjustment screw controls the back-check. Drop plates, corner brackets, and hold open arms are optional accessories.

**Application:** Closer mounting options are: Hinge (Pull) Side Mounting; the closer is mounted to the top door rail with the arm attached to the transom bar/header. Top Jamb (Push Side) Mounting; the closer is mounted to the transom bar/header. Parallel Arm (Push Side) Mounting; 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 and #40 finish.

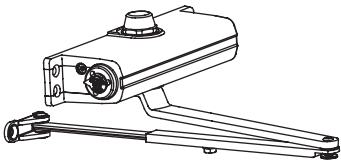


## NORTON 8101

**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 1601 closer above.

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

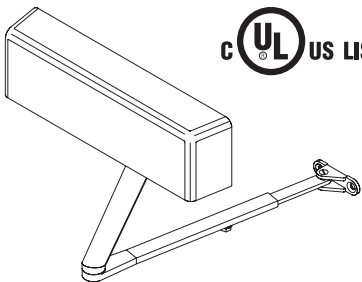


## LCN 1260 SERIES

**Description:** A versatile closer incorporating spring and hydraulic powered rack and pinion operation with a 1-5 spring power adjustment. The 1261 is a one-piece cast iron closer to ensure reliability, extra leak protection, and longer closer life. An adjustable backcheck cushion is also standard. The 1261 is offered in a full range of arm options including heavy duty, extra duty, hold open, cushion and stop, and spring cushion. Adapter plates, cover, and other accessories are also offered. As with all LCN closers, a "peel and stick" template comes standard with each closer for faster closer installation.

**Application:** See 1601 closer above.

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

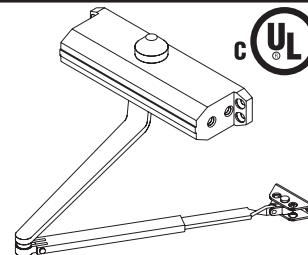


## LCN 4040 XP

**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:** Closer mounting options are: Hinge (Pull) Side Mounting; the closer is mounted to the top door rail with the arm attached to the transom bar/header. Top Jamb (Push Side) Mounting; the closer is mounted to the transom bar/header. Parallel Arm (Push Side) Mounting; 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 adaptable to special applications and medium and heavy traffic volume.

**Finish:** Painted to match #17 finish, #29 finish or #40 finish.



## FALCON 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%. Plates, Parallel Arms and Hold-Open Arms are optional accessories.

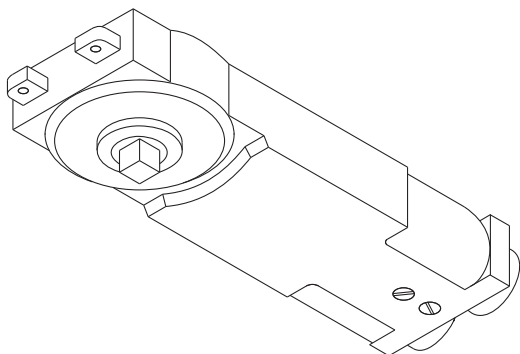
**Application:** See 1601 closer above.

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



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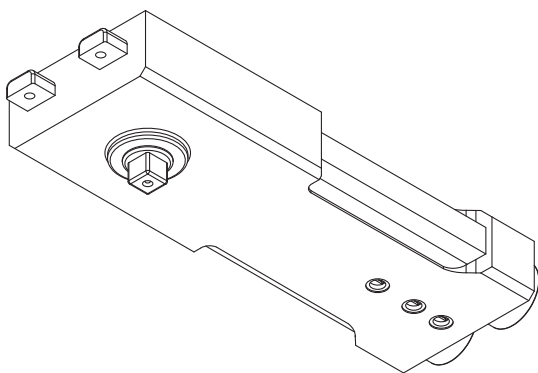
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### CALIBRE® CONCEALED OVERHEAD / DOUBLE ACTING

**Description:** The CALIBRE® COC incorporates full hydraulic and spring power control. The closer 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. The closer allows 105 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 closer 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 standard concealed closer, refer to the Single Acting Offset Arm description below.



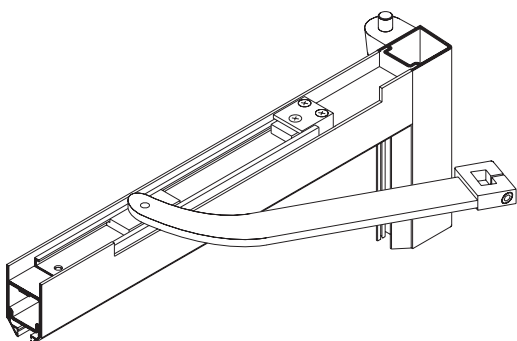
### INTERNATIONAL® CONCEALED OVERHEAD / DOUBLE ACTING

**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 meets ANSI 156.4 Grade 2 certification and comes with a 5-year warranty. Closing and latching speeds are separately adjustable with easy access.

The closer is available with backcheck,  
105° backstop with hold open  
105° backstop without hold open  
90° backstop with hold open  
90° backstop without hold open

A minimum 1-3/4" x 4" (44.5 x 101.6) transom bar or header is required to accept this closer.

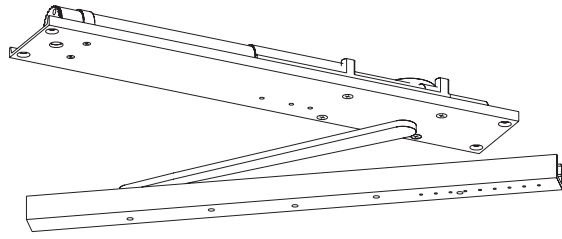
**Application:** The closer is used with center-hung exterior or interior double acting doors. The doors may be modified to single acting by applying a surface stop on the frame header or transom bar. The closer is compatible with most Kawneer doors as well as most of the framing systems. Side loading 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 Single Acting Offset Arm description shown below.



### SINGLE ACTING OFFSET ARM For use with Concealed Overhead Closers

**Description:** This application of the concealed closer offers the same aesthetic and functional advantages of the double acting closer 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 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 105 degrees.

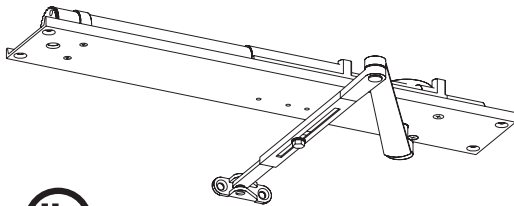
**Application:** The concealed top arm is adaptable to most Kawneer entrance doors. This door control system is suited for areas of medium and high traffic volume. Closers are available with either 100 degrees hold-open or without hold-open.



### 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.

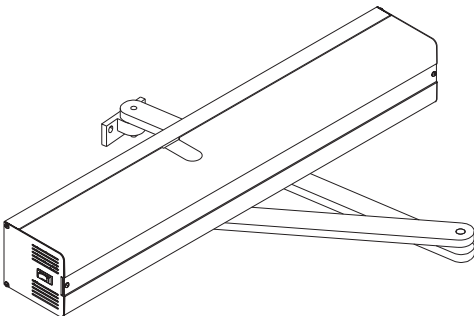
**Application:** For butt hung, offset pivot, continuous gear hinge, and center pivoted doors. Designed for concealment in transom bars or headers with a minimum dimension of 1-3/4" x 4" (44.5 x 101.6). An auxiliary stop is recommended where a door cannot swing 180°. Optional track bumper assembly assists 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, offset pivot doors, or continuous gear hinge. 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.



### LOW ENERGY CLOSER

**Description:** The Low Energy swing door operator is a low cost, easily adjustable automatic door system. It delivers exceptional long lasting performance, and meets ANSI standard A156.19 that specifies opening and closing speeds as well as force requirements. This non-handed power open, spring close operator is applicable to interior and exterior doors up to 48" wide and weighing up to 220 pounds. Using a reliable rack and pinion mechanism and state-of-the-art digital programmable microprocessors, the low energy closer is a good solution on the market for conformance with ADA (Americans with Disabilities Act) requirements.

**Application:** This closer is for use with continuous hinge, butt hinge and offset pivot doors. 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.

**Dimensions:** 4-9/16" (116) High x 5" (127) Deep x 31-1/2" (800) Long.



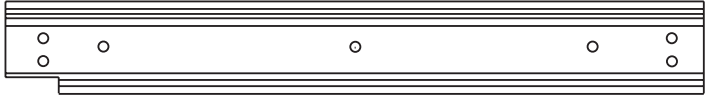
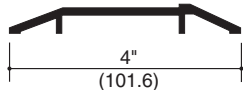

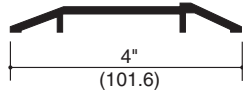
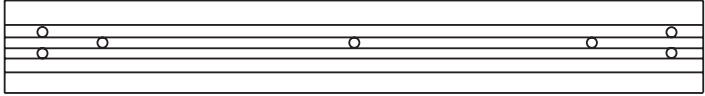
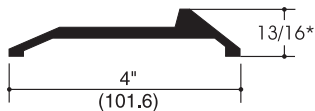
**Finish:** Cover is Clear or Dark Bronze anodized, Arm is Black anodized.

**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" (12.7 mm) except as noted.

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	<p><b>CENTER HUNG</b>                  For Concealed Overhead Closer</p>  <p>4" (101.6)</p>
	<p><b>OFFSET PIVOT</b>                  For Overhead Closer</p>  <p>4" (101.6)</p>
	<p><b>BUTT HUNG</b>                  For Overhead Closer</p>  <p>4" (101.6)</p>
	<p><b>OPTIONAL</b>                  For Offset Pivot and Butt Hung Doors</p>  <p>4" (101.6)</p> <p>13/16*</p>

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

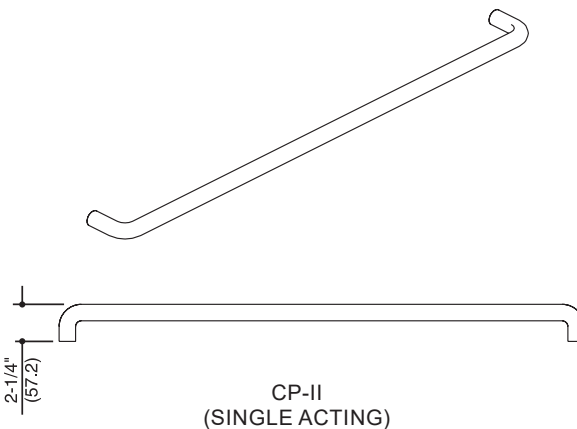
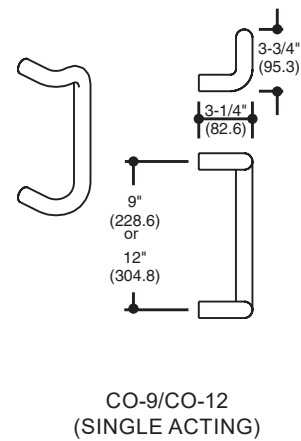
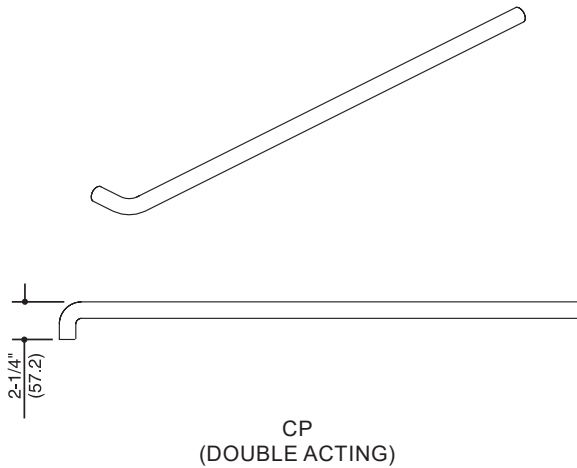
## KAWNEER STANDARD "ARCHITECTS CLASSIC" HARDWARE

**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 single 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:** Hardware is 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



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