

## **District Hardware Standards**

Manufacturers and Products

# **DOOR HARDWARE**

## **SPECIFICATION GUIDELINE**

### **SECTION 087100**

The purpose of this booklet is to support the school districts building standards for door hardware. The school district maintains the following hardware and is currently stocking replacement parts. The products listed in this booklet are pursuant to Public Contract Code Section 3400. The following particular products are designated by brand name in order to match other products in use on a particular improvement, either completed or in the course of completion. No substitutions will be accepted for these products.

It is the intent of this booklet to provide guidelines for the architect's specification section 087100, for product groups and the hardware schedule. It remains the architect's responsibility to coordinate these products to meet the applicable building codes, life safety codes, and ADA requirements.

Section 087100 door hardware preamble must specify the following:

#### **Door and frame prep**

Before hardware installation, verify that all doors and frames are properly prepared to receive the specified hardware. Hollow metal frames shall be prepared for ANSI strike plates per A115.1-2 (4-7/8" high), hinge preps will be mortised and reinforced with a minimum of 8 gauge reinforcement material for closer installation. Hollow metal doors shall be properly prepared and reinforced with a minimum of 16 gauge material for either mortised or cylindrical locks as specified. It is preferred that all hollow metal doors receiving door closers have 12 gauge reinforcement. If this is not possible, the use of sex bolts is mandatory. Wood doors shall be factory prepared to receive the scheduled hardware.

#### **Hardware installation**

**The manufacturer's representative for the locking devices and closing devices must inspect and approve, in writing, the installation of their products. Hardware installed incorrectly must be reported to the architect prior to the architect's final punch list.**

<u>Description</u>	<u>Manufacturer</u>	<u>Model / Series</u>	<u>Finish</u>
<b><u>Hanging Devices</u></b>			
Cont. Hinge	Ives	224XY (High traffic openings, exterior doors, classrooms) 157XY	628 628
		➤ <b>Non removable (NRP) pin required at all hinges</b>	
Butt Hinge	Ives	5BB1HW x NRP (Typical at exterior at classrooms) 5BB1 (Typical at interior)	630 652
		➤ <b>Non removable (NRP) pin required at all hinges</b>	
		➤	
<b><u>Securing Devices</u></b>			
Lock Set	Schlage	<b><u>Cylindrical Locks</u></b> ND Series x Sparta: ND10S Passage Lock ND40S Privacy Lock ND85P Bathroom Faculty ND91PD Vandlgard Office Lock ND93PD Vandlgard Classroom Security Lock with XN12-035 Engraved "LOCK" on inside rose. ND96PD Vandlgard Storeroom Lock	US26D
Panic Hardware	Von Duprin	AX-PA-CDSI-98NL x Ives VR910-NL"Trim Pull" (at exterior single doors) AX-PA-CDSI-98NL x Ives VR910-NL"Trim Pull" x AX-PA-CD-98DT x Ives VR910-DT Trim Pull" X SNB x KR4954 Mullion x 154 (at pairs)	US26D US26D
		➤ <b>Furnished and installed all exit devices with sex bolts</b>	
		➤ <b>All mullions to have a set of #154 stabilizers</b>	
Fire Exit Hardware	Von Duprin	AX-PA-98L-2SI-F-996L-NL-R (F-rated single doors) AX-PA-98L-2SI-F-996L-NL-R x 98EO-F x KR9954 Mullion x 154 (F pairs)	US26D US26D
		➤ <b>Furnished and installed all exit devices with sex bolts</b>	
		➤ <b>All mullions to have a set of #154 stabilizers</b>	
Auxiliary Locks	Schlage	CL777R Cabinet Lock CL888R Drawer Lock	US26D US26D
		➤ <b>All casework to be keyed to match the room door</b>	
Padlock	Schlage	KS43D3200 (Padlock)	Brass
Cut Keys	Schlage	<b>Exterior doors to have Schlage Primus QUAD and interior doors to have Schlage Classic Quad interchangeable cores. All cut keys will be PRIMUS for both the Primus and the Classic interchangeable cores.</b>	
Key System	Schlage	<b>Locks, panic hardware, and fire exit hardware to have construction keyed interchangeable cores. All permanent Schlage Primus QUAD and Classic QUAD interchangeable cores plus the Primus keys are to be furnished by the contractor. All KEYING and KEYWAYS must be approved in writing by WCCUSD before ordering. The contractor</b>	

Description	Manufacturer	Model / Series	Finish
shall be responsible for installing the permanent interchangeable cores after the District receives and inventories them.			
<b><u>Closing Device</u></b>			
Closer	LCN	4010 Series	689
		4040XP EDA TBSRT	689
		4040XP-HCUSH TBSRT	689
		➤ Provide sex-bolted or through bolt mounting for all door closers	
		➤ All door frames to be reinforced for soffit shoe	
<b><u>Stops &amp; Holders</u></b>			
Door Holder	Ives	WS40 (Automatic Holders & Stops)	US26D
		FS43 (Automatic Door Stops & Holders)	US26D
		➤ Backing required at wall holder locations	
Door Stops	Glyn Johnson	104S Concealed Overhead Stop	SP28
	Ives	FS436/R435 (Interior Floor Stop)	US26D
		FS18S (Security Floor Stops)	Black
		WS401/WS402 (Wall Stops)	US26D
		➤ Backing required at wall holder locations	
		➤ Not Accepted:	
		• IVES WS33, IVES FS2442, IVES WS45	
<b><u>PROTECTIVE PLATES AND TRIM</u></b>			
Kick Plate	Ives	8400 Series	US26D
Mop Plate	Ives	8400 Series	US26D
Push/Pull Plates	Ives	8200/8300 Series	US26D
Latch Protector	Ives	LG12	US32D
		➤ To be used on exterior out swing doors, install with sex bolts	
Door Silencer	Ives	SR64	Gray
<b><u>ACCESSORIES</u></b>			
Threshold	ZERO	654A	Alum
		655A	Alum
Threshold	ZERO	623A	Alum
• <b>Threshold Notes</b> - Architect to coordinate with project conditions. Set thresholds in a full bed of butyl-rubber or polyisobutylene mastic sealant complying with requirements in Division 7 "Thermal and Moisture Protection". Use ¼" fasteners, red-head flat-head sleeve anchors (SS/FHSL).			
Auto Door Bot.	Pemko	085698 PDB4131CE36	Clear
	ZERO	360AA	Clear
		➤ To be only with District Approval. District standard for double doors is to use a removeable mulin	



Description	Manufacturer	Model / Series	Finish
Door Sweep	ZERO	329AA ➤ <b>Not Accepted:</b> • National Guard 600A	Clear
Weatherstripping	ZERO	488S-Bk 8780N	Black
Meeting Stiles	ZERO	328AA	Clear
Head & Jamb	ZERO	328AA 429A 142A	Clear Alum Alum

#### Keys and Keying Requirements

- Master Key and grand master key all locks and cylinders as directed by the District representative. Provide temporary cores during the construction phase and remove at the time District takes occupancy at the direction of the District.
- All Permanent I.C. Cores and keys are to be furnished by the Contractor and shipped directly from the factory to the School District Maintenance Office. Initiate and coordinate the Primus face sheet order form with the District. All keying and keyways must be approved in writing by the District representative. The Contractor shall be responsible for installing the permanent I.C. Cores after the District receives and inventories them.
- "Primus" I.C. Cores shall be furnished throughout the Project.
- All standard cores specified shall be furnished with "Primus" keyways.
- Supply 2 "Primus" change keys per lock or cylinder type.
- Supply "Primus" keys in the following quantities:
  - 6 master keys
  - 1 grand master key
  - 3 construction keys per doorway
  - 4 control keys and 6 extra cylinder cores

#### Specification Note(s)

- Use Overtur web-based door opening and hardware information software package to review and coordinate all door opening and hardware information.

#### End of Specification Guideline

### Hardware Location Matrix

Interior	Hinge	Lockset, closer, panic	Door Holder	Door Stop	Kick plate	Mop Plate	Latch Protector	Push Plate	Door Silencer	Door Bottoms	Door Sweeps	Weather Stripping
Teaching Station(Classroom, Learning Studio, Labs)	Butt	As required by code		Floor half moon							X	
Individual Office	Butt	As required by code		Floor half moon							X	
Staff Area(Lounge, Workroom, etc.)	Butt	As required by code		Floor half moon							X	
Janitor	Butt	As required by code		Floor half moon	X					X unless wood	X	
Storage	Butt	As required by code		Floor half moon							X	
Utility Room(Electrical, Data, Fire Riser, etc.)	Butt	As required by code		Floor half moon							X	
Staff Restrooms	Butt	As required by code		Wall holder	X				X	X unless wood	X	
Student Restrooms	Butt	As required by code		Wall holder	X				X	X unless wood	X	
Comments												

### Hardware Location Matrix

Exterior	Hinge	Lockset, closer, panic	Door Holder	Door Stop	Kick Plate	Mop Plate	Latch Protector	Push Plate	Door Silencer	Door Bottoms	Door Sweeps	Weather Stripping
Teaching Station(Classroom, Learning Studio, Labs)	Piano	As Required by code			FS18S	X		X	IVES 8200	X		
Individual Office	Butt	As required by code			FS18S	X		X	IVES 8200	X		
Staff Area(Lounge, Workroom, etc.)	Butt	As required by code			FS18S	X		X	IVES 8200	X		
Janitor	Butt	As required by code	X	Hold Open		X		X	IVES 8200	X		
Storage	Butt	As required by code			FS18S	X		X	IVES 8200	X		
Utility Room(Electrical, Data, Fire Riser, etc.)	Butt	As required by code			FS18S	X		X	IVES 8200	X		
Building Entrance(MPR, Main Office, Hall to multiple teaching stations, etc.)	Piano	As required by code	X	Hold open or FS18S		X		X	IVES 8200	X		
Staff Restrooms	Butt	As required by code			FS18S	X		X	IVES 8200	X		
Student Restrooms	Piano	As required by code			FS18S	X		X	IVES 8200	X		
Comments						11" only on HM		Only on HM		All Metal door unless there is smoke sealant	Sweep where no water, otherwise door shoe	

# Aluminum geared hinges **IVES**



## 224XY Full mortise - door edge protector

- For 1 3/4" doors
- Door edge protector
- Patented center loaded, interlocking bearing design
- Non Handed for custom cut lengths
- 1/16" door inset
- 48" Maximum door width
- Beveled or square edge doors
- Frame guidance lip is extended further for retrofit applications to cover existing heavy weight architectural hinge preps
- For doors weighing up to 450 pounds without reinforcing, 600 pounds with reinforcing
- For lead-lined application consult factory for engineering specials

### Certifications

- Meets ANSI 156.26 for 150lbs and 300lbs
- UL10C certified

### Standard lengths

- 83", 85", 95", 119"

### Standard mounting hardware

- 12-24 x 3/4" Steel self drilling / self tapping phillips head screw

### Finishes

- Clear Anodized (US28), Dark Bronze Anodized (313AN), Black Anodized (315AN)

Custom anodizing and painting are available, consult factory.

### Options:

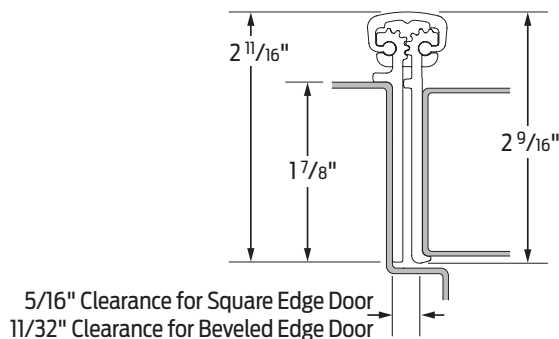
- HT.....Hospital tip
- EPT .....Electric power transfer
- TWP CON.....Electrical through wire panel with Allegion Connect

### Optional mounting hardware:

- SECHM.....Security screws - hollow metal door and frame
- SECWDHM.....Security screws - 1/2 wood, 1/2 hollow metal
- SECWDWD.....Security screws - wood door and frame
- TEKWD.....1/2 self drill, self tap 1/2 wood
- WD.....Wood door and frame

### For single door applications:

For pairs of doors see chart and general information



Hinges & pivots  
**A37**

Pulls & plates  
**B**

Flush bolts & coordinators  
**C**

Latches, catches & bolts  
**D**

Stops  
**E**

Exterior hardware  
**F**

Miscellaneous hardware  
**G**

## 157XY Adjustable continuous hinge

### Basic features

- Full surface, center pivot aluminum geared continuous hinge
- Uncut hinges are non-handed
- Tamper resistant interlocking leaves

### Door information

- Narrow frame
- 1/16" Door inset
- 48" Maximum door width
- Beveled or square edge doors
- For doors weighing up to 550 pounds

### Mounting screws

- 12-24 X 1/2" Steel self drilling and tapping screws
- Optional wood screws available

### Length chart for 157XY Continuous hinge

#### Standard lengths

Standard hinge lengths	Door height range	
	Minimum door height	Maximum door height
83"	N/A	84"
95"	84"	96"
119"	96"	120"

Note: Hinge must not be taller than door height, and can be up to one inch shorter; Hinge can be cut to length in field - cut from bottom end only

### Finishes



US28/628  
Anodized aluminum



US313AN/710  
Anodized aluminum

### How to order

#### Example

Model	Length	Finish
157XY	95" *	US28**

\*Custom cut to length available at additional cost - consult price book.

\*\*Custom painting and anodized colors available at additional cost - consult factory



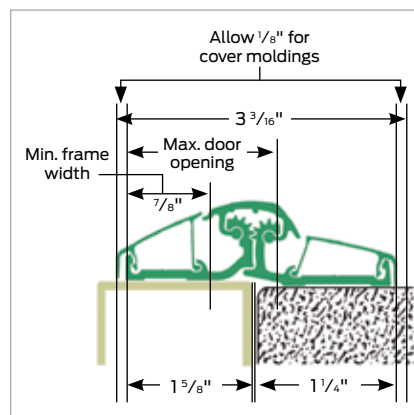
Adjustability



FOCUS™ centralized bearing system



Improved aesthetics



Model

### About Allegion

Allegion (NYSE: ALLE) is a global pioneer in safety and security, with leading brands like CISA®, Interflex®, LCN®, Schlage® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion produces a range of solutions for homes, businesses, schools and other institutions. Allegion is a \$2 billion company, with products sold in almost 130 countries. For more, visit [www.allegion.com](http://www.allegion.com).

# IVES® Architectural Hinges

**A8**  
Hinges & Pivots

**B**  
Pulls & Plates

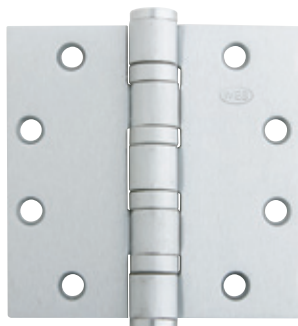
**C**  
Flush Bolts & Coordinators

**D**  
Latches, Catches & Bolts

**E**  
Stops

**F**  
Exterior Hardware

**G**  
Miscellaneous Hardware



Meets ANSI/BHMA A156.1  
A8111 – Steel  
A5111 – Stainless Steel  
A2111 – Brass

## 5BB1HW

### 5 Knuckle, Ball Bearing, Heavy Weight Full Mortise Hinge

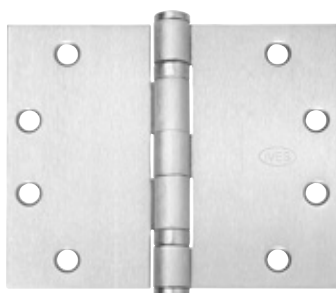
- For heavy weight doors
- High frequency usage
- 4 ball bearing
- Packed with wood and metal screws

#### Options

- NRP, Non-Removable Pin
- SH, Security Stud
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fasteners - Pin-in-Socket

#### Dimensions

Size (Inches)	Size (mm)	Gauge	Size (Inches)	Size (mm)	Gauge
4.5 x 4	114 x 102	0.180	5 x 4.5	127 x 114	0.190
4.5 x 4.5	114 x 114	0.180	5 x 5	127 x 127	0.190



Meets ANSI/BHMA A156.1  
A8111 – Steel

## 5BB1WT

### 5 Knuckle, Ball Bearing, Wide Throw Full Mortise Hinge

- For medium weight doors
- Medium frequency usage
- 2 ball bearing
- Packed with wood and metal screws

#### Options

- NRP, Non-Removable Pin
- SH, Security Stud
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fasteners - Pin-in-Socket

#### Dimensions

Size (Inches)	Size (mm)	Gauge
4.5 x 5	114 x 127	0.134
4.5 x 6	114 x 152	0.134
5 x 6	127 x 152	0.146
5 x 7	127 x 178	0.146
5 x 8	127 x 203	0.146

#### Finishes *brass*

Ives Finish	US3	US4	US10	US10B	US10A	US11	US15	US26	US26D
BHMA	605	606	612	613	614	616	619	625	626

#### Finishes *steel*

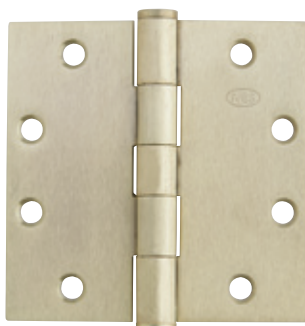
Ives Finish	USP	US3	US4	US10	US10B	US10A	US11	US15	US26	US26D
BHMA	600	632	633	639	640	641	643	646	651	652

#### Finishes *stainless steel*

Ives Finish	US32	US32D
BHMA	629	630

## Architectural Hinges

# IVES®



Meets ANSI/BHMA A156.1  
A8133 – Steel  
A5133 – Stainless Steel  
A2133 – Brass

### 5PB1 5 Knuckle, Plain Bearing Full Mortise Hinge

- For standard weight doors
- Low frequency usage
- Packed with wood and metal screws

*Not for use with a door closer.*

#### Options

- NRP, Non-Removable Pin
- SH, Security Stud
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fasteners - Pin-in-Socket

#### Dimensions

Size (Inches)	Size (mm)	Gauge
3.5 x 3.5	89 x 89	0.123
4 x 4	102 x 102	0.134
4.5 x 4	114 x 102	0.134
4.5 x 4.5	114 x 114	0.134
5 x 4.5	127 x 114	0.134



Meets ANSI/BHMA A156.1  
A8112 – Steel  
A5112 – Stainless Steel  
A2112 – Brass

### 5BB1 5 Knuckle, Ball Bearing Full Mortise Hinge

- For standard weight doors
- Medium frequency usage
- 2 ball bearing
- Packed with wood and metal screws

#### Options

- NRP, Non-Removable Pin
- SH, Security Stud
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fasteners - Pin-in-Socket

#### Dimensions

Size (Inches)	Size (mm)	Gauge	Size (Inches)	Size (mm)	Gauge
3.5 x 3.5	80 x 102	0.130	5 x 4.5	127 x 114	0.146
4 x 4	102 x 102	0.130	5 x 5	127 x 127	0.146
4.5 x 4	114 x 102	0.134			
4.5 x 4.5	114 x 114	0.134			

#### Finishes brass

Ives Finish	US3	US4	US10	US10B	US10A	US11	US15	US26	US26D
BHMA	605	606	612	613	614	616	619	625	626

#### Finishes steel

Ives Finish	USP	US3	US4	US10	US10B	US10A	US11	US15	US26	US26D
BHMA	600	632	633	639	640	641	643	646	651	652

#### Finishes stainless steel

Ives Finish	US32	US32D
BHMA	629	630

Hinges & Pivots  
**A7**

Pulls & Plates  
**B**

Flush Bolts & Coordinators  
**C**

Latches, Catches & Bolts  
**D**

Stops  
**E**

Exterior Hardware  
**F**

Miscellaneous Hardware  
**G**



## ND Series

Grade 1 cylindrical lock

### Overview

The ND Series has long been one of Schlage's best selling mechanical locks for good reason - it's tough, durable and fits a wide variety of applications.

Now we've made our trusted ND Series lock even better by making it easier to install. We've added these enhancements because we know that a lock installed correctly the first time will last longer and perform better. And the longer the lock lasts, the lower the cost of ownership over the life of the lock.

We've also beefed up our warranty to provide 10 years of coverage. The result: greater peace of mind that every door is safe and secured with a lock built to last.



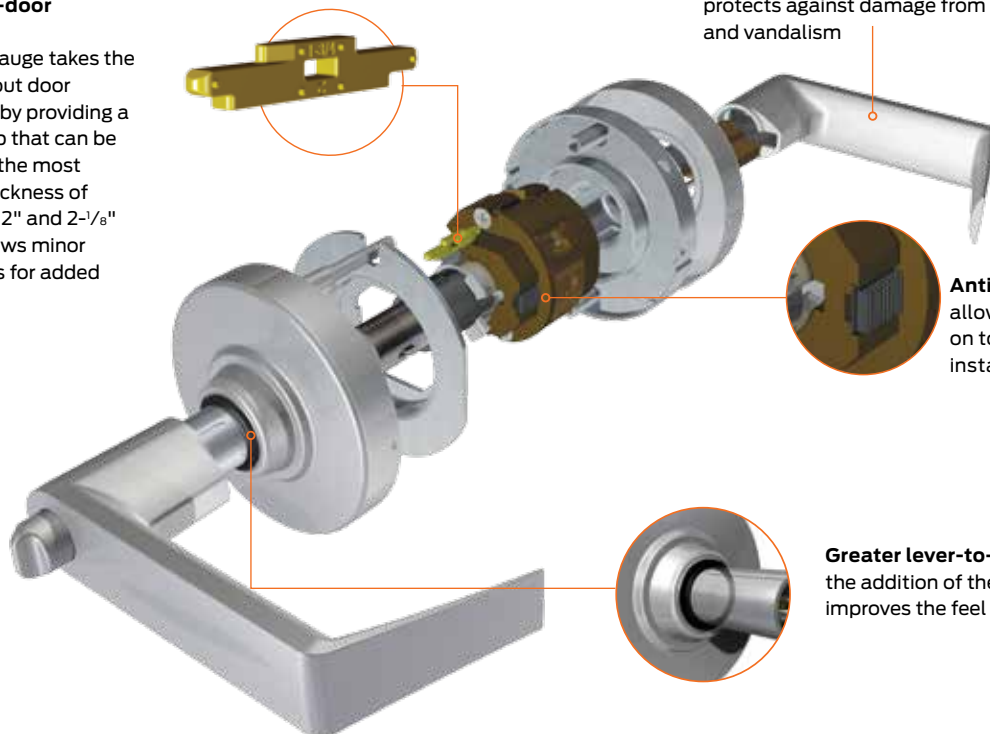


## A simpler, smarter ND Series lock

Built-in durability exceeds ANSI/BHMA grade 1 cycle test requirements

### Chassis-to-door alignment

the yellow gauge takes the guesswork out door adjustment by providing a positive stop that can be adjusted to the most common thickness of 1-5/8", 1-3/4", 2" and 2-1/8" and still allows minor adjustments for added equipment



### Optional Vandlgard® lever

protects against damage from excessive force and vandalism

### Anti-rotation plate retention

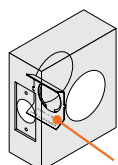
allows the plate to be "snapped" on to the chassis making installation easier

### Greater lever-to-spindle engagement

the addition of the soft durometer spacer improves the feel of the lever during actuation



## ND Series continuous improvements



Reinforcement

### Door reinforcement

Prevents the collapse of hollow metal doors when locksets are tightly mounted. The unit works with 1 3/8" and 1 3/4" thick doors.



### New lever removal tool

The ergonomic design is bigger, stronger and works for both the ND and L series locks. Sold separately.



### Chassis slide

In 2010, we redesigned the slide in order to increase the locks overall durability and improve component alignment.



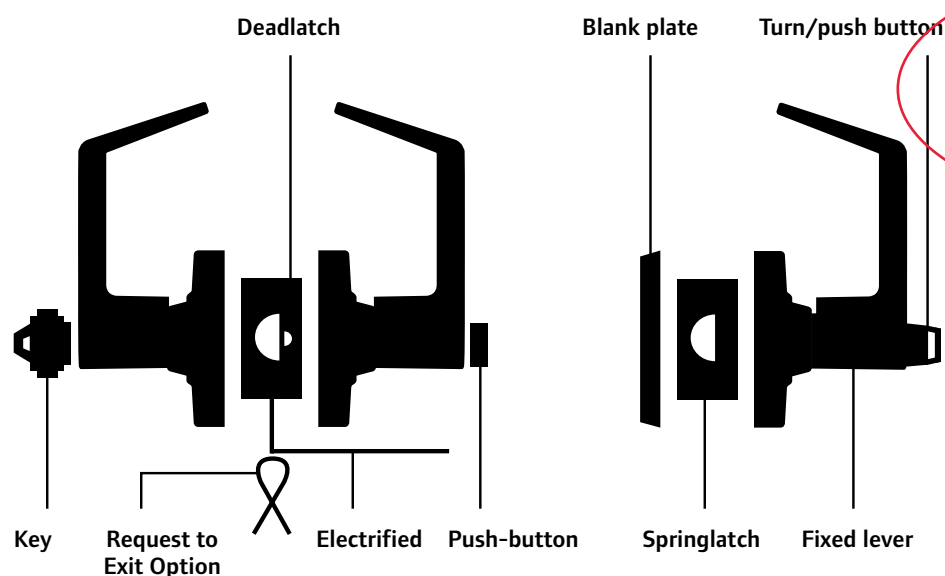
### Locking lug and key cam

In 2009 we improved the locking lug and keycam by making them stronger and more resistant to damage.

## About Allegion

Allegion (NYSE: ALLE) creates peace of mind by pioneering safety and security. As a \$2 billion provider of security solutions for homes and businesses, Allegion employs more than 8,000 people and sells products in more than 120 countries across the world. Allegion comprises 27 global brands, including strategic brands CISA®, Interflex®, LCN®, Schlage® and Von Duprin®. For more, visit [www.allegion.com](http://www.allegion.com)

## Lock Functions | ANSI A156.2 Series 4000 Grade 1

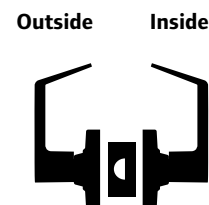


### Non-Keyed Locks

SCHLAGE      ANSI  
**ND10S      F75**

#### Passage Latch

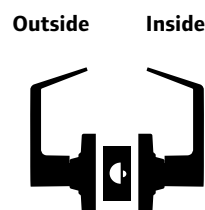
- Both levers always unlocked.



SCHLAGE      ANSI  
**ND12D      F89**

#### Exit Lock

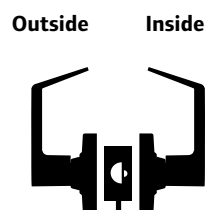
- Outside lever always fixed.
- Inside lever always unlocked.



SCHLAGE      ANSI  
**ND12DEL      -**

#### Electrically Locked (Fail Safe)

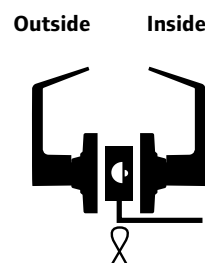
- Outside lever continuously locked electrically.
- Unlocked by switch or power failure.
- Auxiliary latch deadlocks latchbolt when door is closed.
- Inside lever always free for immediate exit.



SCHLAGE      ANSI  
**ND12DEU      -**

#### Electrically Unlocked (Fail Secure)

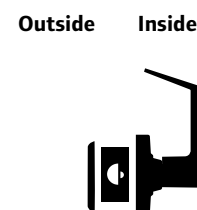
- Outside lever continuously locked until unlocked by electric current.
- Auxiliary latch deadlocks latchbolt when door is closed.
- Inside lever is always free for immediate exit.

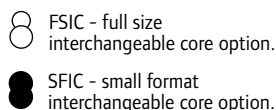
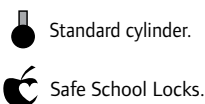


SCHLAGE      ANSI  
**ND25D      -**

#### Exit Lock

- Blank plate outside.
- Inside lever always unlocked.





### † Caution:

Double cylinder locks are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.

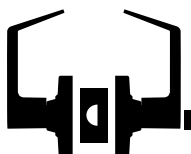
## Keyed Locks

SCHLAGE ANSI  
ND40S F76

### Bath/Bedroom Privacy Lock

- Push-button locking.
- Can be opened from outside with a small screwdriver.
- Turn inside lever or close door to release button.

Outside Inside

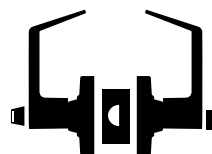


SCHLAGE ANSI  
ND44S -

### Hospital Privacy Lock

- Push-button locking.
- Unlocked from outside by turning emergency turn-button.
- Turn inside lever or close door to release button.

Outside Inside



SCHLAGE ANSI  
ND170

### Single Dummy Trim

- Dummy trim for one side of door.
- Used for door pull or as matching inactive trim.

Outside/Inside



SCHLAGE ANSI  
ND50PD F82

### Entrance/Office Lock

- Push-button locking.
- Push-button locks outside lever until it is unlocked with key or by turning inside lever.

Outside Inside

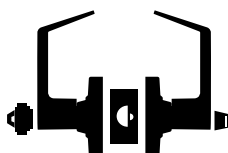


SCHLAGE ANSI  
ND53PD F109

### Entrance Lock

- Turn/push-button locking: Pushing and turning the button locks the outside lever, requiring use of a key until the button is manually unlocked.
- Push-button locking: Pushing button locks outside lever until unlocked by key or by turning the inside lever.

Outside Inside

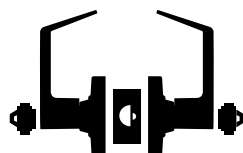


SCHLAGE ANSI  
ND60PD F88

### Vestibule Lock

- Latch retracted by key from outside when the outside lever is unlocked by key in inside lever.
- Inside lever is always unlocked.

Outside Inside

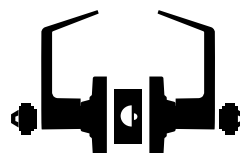


SCHLAGE ANSI  
ND66PD F91

### Store Lock†

- Key in either lever locks or unlocks both levers.

Outside Inside

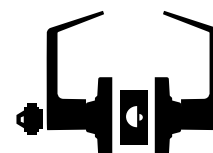


SCHLAGE ANSI  
ND70PD F84

### Classroom Lock

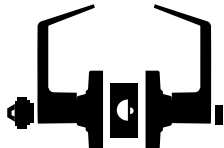
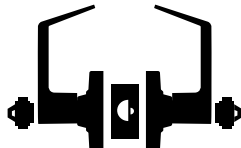






- Outside lever locked and unlocked by key.
- Inside lever always unlocked.

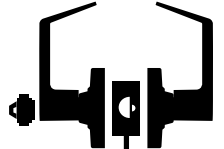
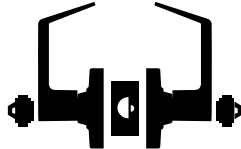
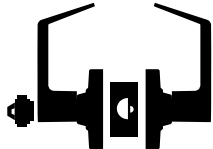





Outside Inside



## Lock Functions | ANSI A156.2 Series 4000 Grade 1

### Keyed Locks (continued)

SCHLAGE	ANSI	SCHLAGE	ANSI	SCHLAGE	ANSI	SCHLAGE	ANSI
<b>ND73PD</b>	<b>F90</b>	<b>ND75PD</b>	-	<b>ND80PD</b>	<b>F86</b>	<b>ND80PDEL</b>	-
<b>Corridor Lock</b>		<b>Classroom Security Lock</b>		<b>Storeroom Lock</b>		<b>Electrically Locked (Fail Safe)</b>	
<ul style="list-style-type: none"> <li>Locked or unlocked by key from outside.</li> <li>Push-button locking from inside.</li> <li>Turn inside lever or close door to release button.</li> <li>When outside lever is locked by key it can only be unlocked by key.</li> <li>Inside lever is always unlocked.</li> </ul>		<ul style="list-style-type: none"> <li>Key in either lever locks or unlocks outside lever.</li> <li>Inside lever is always unlocked.</li> </ul>		<ul style="list-style-type: none"> <li>Outside lever is fixed.</li> <li>Entrance by key only.</li> <li>Inside lever always unlocked.</li> </ul>		<ul style="list-style-type: none"> <li>Outside lever continuously locked electrically.</li> <li>Unlocked by key outside or by switch or power failure.</li> <li>Auxiliary latch deadlocks latchbolt when door is closed.</li> <li>Inside lever always free for immediate exit.</li> </ul>	
<p>Outside      Inside</p> 		<p>Outside      Inside</p> 		<p>Outside      Inside</p> 		<p>Outside      Inside</p> 	
							

SCHLAGE	ANSI	SCHLAGE	ANSI	SCHLAGE	ANSI	SCHLAGE	ANSI
<b>ND80PDEU</b>	-	<b>ND82PD</b>	<b>F87</b>	<b>ND85PD</b>	-	<b>ND91PD</b>	<b>F82</b>
<b>Electrically Unlocked (Fail Secure)</b>		<b>Institution Lock†</b>		<b>Faculty Restroom Lock</b>		<b>Entrance/Office Lock</b>	
<ul style="list-style-type: none"> <li>Outside lever continuously locked until unlocked by key or electric current.</li> <li>Auxiliary latch deadlocks latchbolt when door is closed.</li> <li>Inside lever always free for immediate exit.</li> </ul>		<ul style="list-style-type: none"> <li>Both levers are fixed.</li> <li>Entrance by key in either lever.</li> </ul>		<ul style="list-style-type: none"> <li>Outside lever is fixed.</li> <li>Entrance by key only.</li> <li>Push-button in inside lever activates visual occupancy indicator, allowing only emergency master key to operate.</li> <li>Turn inside lever or close door to release visual occupancy indicator.</li> <li>Rotation of inside spinner-button provides lock-out feature by keeping indicator thrown.</li> </ul>		<ul style="list-style-type: none"> <li>Push-button locking.</li> <li>Push-button disengages outside lever until locked with key or by turning inside lever.</li> <li>Vandlgard is designed to disengage outside spindle from latch when locked.</li> </ul>	
<p>Outside      Inside</p> 		<p>Outside      Inside</p> 		<p>Outside      Inside</p> 		<p>Outside      Inside</p> 	
							

### Vandlgard Functions



Standard cylinder.



Safe School Locks.



FSIC - full size interchangeable core option.



SFIC - small format interchangeable core option.

### † Caution:

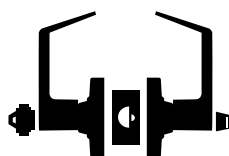
Double cylinder locks are a life safety hazard in times of emergency and their use is not recommended. Installation should be in accordance with existing codes only.

SCHLAGE ANSI  
ND92PD F109

#### Entrance Lock

- Turn/push-button locking: Pushing and turning button disengages outside lever, requiring using of key until button is manually unlocked.
- Push-button locking: Pushing button disengages outside lever until unlocked by key or by turning inside lever.
- Vandlgard is designed to disengage outside spindle from latch when locked.

Outside Inside

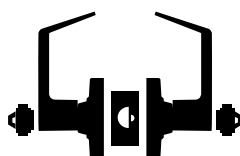


SCHLAGE ANSI  
ND93PD F88

#### Vestibule Lock

- Latch retracted by key from outside when outside lever is disengaged by key in inside lever.
- Inside lever is always unlocked.
- Vandlgard is designed to disengage outside spindle from latch when locked.

Outside Inside



SCHLAGE ANSI  
ND94PD F84

#### Classroom Lock

- Outside lever disengaged and unlocked by key.
- Inside lever always unlocked.
- Vandlgard is designed to disengage outside spindle from latch when locked.

Outside Inside

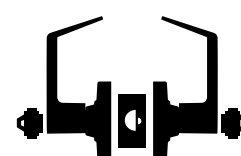


SCHLAGE ANSI  
ND95PD -

#### Classroom Security Lock

- Key in either lever locks or unlocks outside lever.
- Inside lever is always unlocked.

Outside Inside



SCHLAGE ANSI  
ND96PD F86

#### Storeroom Lock

- Outside lever always disengaged.
- Entrance by key only.
- Inside lever is always unlocked.
- Vandlgard is designed to disengage outside spindle from latch when locked.

Outside Inside



SCHLAGE ANSI  
ND96PDEL -

#### Electrically Locked (Fail Safe)

- Outside lever continuously disengaged electrically.
- Unlocked by key outside or by switch or power failure.
- Auxiliary latch deadlocks latchbolt when door is closed.
- Inside lever always free for immediate exit.
- Vandlgard is designed to disengage outside spindle from latch when locked.

Outside Inside

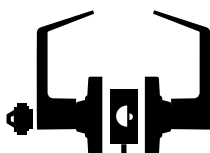


SCHLAGE ANSI  
ND96PDEU -

#### Electrically Unlocked (Fail Secure)

- Outside lever continuously disengaged until unlocked by key or electric current.
- Auxiliary latch deadlocks latchbolt when door is closed.
- Inside lever always free for immediate exit.
- Vandlgard is designed to disengage outside spindle from latch when locked.

Outside Inside



SCHLAGE ANSI  
ND97PD F90

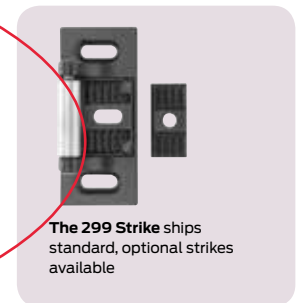
#### Corridor Lock

- Locked or unlocked by key from outside.
- Push-button locking from inside.
- Turning inside lever or closing door releases button.
- When outside lever is locked by key it can only be unlocked by key.
- Inside lever is always unlocked.
- Vandlgard is designed to disengage outside spindle from latch when locked.

Outside Inside



## 98/99 Rim exit device



**98 and 99 Rim exit devices** for all types of single and double doors with mullion, UL listed for panic exit hardware. Devices are ANSI A156.3 – 2008 Grade 1. The 98 device has a smooth mechanism case and the 99 device has a grooved case. The rim device is non-handed except when the following device options are used: SD (special dogging), -2 (double cylinder) or SS (signal switch). See Opposite page for available outside trim and device functions. Covers stock hollow metal doors with 86 or 161 cutouts on single doors (may cover cutouts on pairs – consult template).

**Finishes** – US3, US3A, US4, US4A, US10, US26, US26D, US26D-AM Antimicrobial, US28, 313, 315 & 643E. US15 and US32D available with 98 Series only.

Hex key dogging comes standard on 98/99 Rim exit devices



### Specifications

Device functions	Device ships EO/DT/NL. Field selectable. For TP, K or L remove NL drive screw from device.	
Device lengths	3'	2'4" to 3' (711mm to 914 mm) Door size
	4'	2'10" to 4' (864 mm to 1219 mm) Door size
Device centerline from finished floor	39 <sup>13</sup> / <sub>16</sub> " (1011 mm) 39 <sup>11</sup> / <sub>16</sub> " (1008 mm) with mullion	
Center case dimensions	8" x 2 <sup>3</sup> / <sub>4</sub> " x 2 <sup>3</sup> / <sub>8</sub> " (203mm x 70mm x 60mm)	
Mechanism case dimensions	2 <sup>1</sup> / <sub>4</sub> " x 2 <sup>1</sup> / <sub>4</sub> " (57mm x 57mm)	
Projection	Pushbar neutral – 3 <sup>13</sup> / <sub>16</sub> " (97 mm) Pushbar depressed – 3 <sup>1</sup> / <sub>16</sub> " (78 mm)	
Latch bolt	Deadlocking, 3/4" (19mm) throw	
Fasteners & sex bolts (SNB)	Includes screw pack for 1 <sup>3</sup> / <sub>4</sub> " (44mm) and 2 <sup>1</sup> / <sub>4</sub> " (57mm) thick metal or wood doors. Optional 425 SNB available, see page 9 for quantities.	
Electric options	LX	Latchbolt monitor switch
	RX	Pushpad monitor switch
	RX2	Double pushpad monitor switch
	E	Electric locking & unlocking trim
	EL	Electric latch retraction
	QEL	Quiet electric latch retraction
	SS	Signal switch
	CX	Chexit delayed exit
	ALK	Alarm exit kit
	WP-RX	Waterproof request to exit
	CON	Allegion Connect
Mechanical options	-2	Double cylinder
	AX	Accessible device
	GBK	Glass bead kit
	PN	Pneumatic latch retraction
	XP	Extra protection
	SNB	Sex bolts
	SEC	Security screws
Dogging feature	Hex key dogging standard	
Dogging options	CD	Cylinder dogging
	SD	Special center case dogging
	LD	Less dogging
	DI	Dogging indicator
	CI	Cylinder dogging indicator
Strikes	299 – Dull black	

**XP**

**Extra protection**

- 90° latch-to-strike contact
- Force resistance of 2,000+ lbs.

**CD**

**Cylinder dogging**

- Replaces hex key dogging
- Requires 1<sup>1</sup>/<sub>4</sub>" mortise cylinder with inverted cam

**QEL**

**Quiet electric latch retraction**

- Bolt retraction via switch
- Converts exit door to push-pull operation

**RX**

**Pushpad monitor switch**

- Signals use of an opening
- SPDT switch to monitor pushpad

**CX**

**Chexit delayed exit**

- Meets NFPA 101 requirements
- Self-contained controls, locking, alarm

**AX**

**Accessible device**

- UL certified to meet new 5 lb. maximum operating force requirement
- Exceeds ANSI/BHMA requirements

**EL**

**Electric latch retraction**

- Enables remote unlatching
- Alternative to manual dogging

**ALK**

**Alarm exit kit**

- Unauthorized opening triggers 85-decibel horn
- Set in armed or disarmed mode by key

**PN**

**Pneumatic latch retraction**

- For areas where electrical devices banned
- Special linkage for mechanical or pneumatic dogging

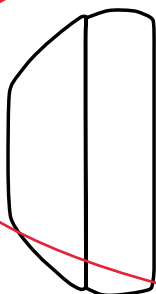
**CON**

**Allegion Connectors**

- Common connectors to connect various door hardware all the way to the power supply

# IVES® Vandal Resistant Trim

<b>A</b>	Hinges & Pivots
<b>B12</b>	Pulls & Plates
<b>C</b>	Flush Bolts & Coordinators
<b>D</b>	Latches, Catches & Bolts
<b>E</b>	Stops
<b>F</b>	Exterior Hardware
<b>G</b>	Miscellaneous Hardware



## VR910-DT VR914-DT

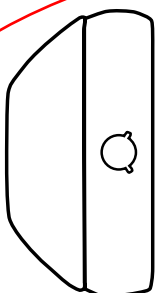
### With black grip Without black grip

- For use with Von Duprin 98/99 Series rim and vertical rod exit device
- Non-handed
- Thru-bolts direct to the exit device
- Pull operation only.

Width	Height	Thru-Bolt Pattern	Clearance Grip to Door	Projection
5-1/4"	11"	1-3/8" Wide x 7" High	1-1/2"	1-7/8"

#### Finishes

US Finish	US32D
BHMA	630



## VR910-NL VR914-NL

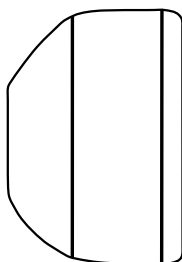
### With black grip Without black grip

- For use with Von Duprin 98/99 rim and vertical rod exit device
- Non-handed
- Thru-bolts direct to the exit device
- Night latch operation (cylinder not furnished)

Width	Height	Thru-Bolt Pattern	Clearance Grip to Door	Projection
5-1/4"	11"	1-3/8" Wide x 7" High	1-1/2"	1-7/8"

#### Finishes

US Finish	US32D
BHMA	630



## VR910M-DT VR914M-DT

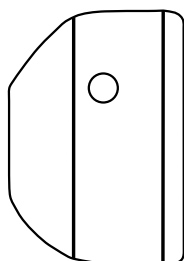
### With black grip Without black grip

- For use with Von Duprin 9875/9975 mortise lock exit device
- Non-handed
- Thru-bolts direct to the exit device
- Night latch operation (cylinder not furnished)

Width	Height	Thru-Bolt Pattern	Clearance Grip to Door	Projection
7-1/4"	11"	1-3/8" Wide x 7" High	1-1/2"	1-7/8"

#### Finishes

US Finish	US32D
BHMA	630



## VR910M-NL RHR VR910M-NL LHR VR914M-NL RHR VR914M-NL LHR

### With black grip With black grip Without black grip Without black grip

- For use with Von Duprin 9875/9975 Series mortise lock exit device
- Thru-bolts direct to the exit device
- Night latch operation (cylinder not furnished)

Width	Height	Thru-Bolt Pattern	Clearance Grip to Door	Projection
7-1/4"	11"	1-3/8" Wide x 7" High	1-1/2"	1-7/8"

#### Finishes

US Finish	US32D
BHMA	630



## 98-F/99-F Rim exit device



The 299F Strike ships standard, optional strikes available



499F Strike with 9854/9954 mullion

**98-F and 99-F Rim fire exit devices** for all types of single doors up to 4' x 10' (1219mm x 3048mm) or 8' x 10' (2438mm x 3048mm) double doors with 9954 or 9854 mullion, UL listed for fire exit hardware. See page 76 for detailed information on UL listed fire exit hardware label and door opening size information. Devices are ANSI A156.3 – 2008 Grade 1. The 98-F device has a smooth mechanism case and the 99-F device has a grooved case. The rim device is non-handed except when the following device options are used: -2 (double cylinder) or SS (signal switch). See opposite page for available outside trim and device functions.

**Finishes** – US3, US3A, US4, US4A, US10, US26, US26D, US26D-AM Antimicrobial, US28, 313, 315 & 643E. US15 and US32D available with 98 Series only.

### Specifications

Device functions	Device ships EO/DT/NL. Field selectable. For TP, K or L remove NL drive screw from device.	
Device lengths	3'	2'4" to 3' (711mm to 914 mm) Door size
	4'	2'10" to 4' (864 mm to 1219 mm) Door size
Device centerline from finished floor	39 <sup>13</sup> / <sub>16</sub> " (1011 mm) 39 <sup>11</sup> / <sub>16</sub> " (1008 mm) with mullion	
Center case dimensions	8" x 2 <sup>3</sup> / <sub>4</sub> " x 2 <sup>3</sup> / <sub>8</sub> " (203mm x 70mm x 60mm)	
Mechanism case dimensions	2 <sup>1</sup> / <sub>4</sub> " x 2 <sup>1</sup> / <sub>4</sub> " (57mm x 57mm)	
Projection	Pushbar neutral – 3 <sup>13</sup> / <sub>16</sub> " (97 mm) Pushbar depressed – 3 <sup>1</sup> / <sub>16</sub> " (78 mm)	
Latch bolt	Deadlocking, 3/4" (19mm) throw	
Fasteners & sex bolts (SNB)	Includes screw pack for 1 <sup>3</sup> / <sub>4</sub> " (44mm) and 2 <sup>1</sup> / <sub>4</sub> " (57mm) thick metal or wood doors. Optional 425 SNB available for metal doors. 425 & 825 SNB required on wood doors without SLM blocking. See page 11 for quantities.	
Electric options	<b>LX</b> Latchbolt monitor switch <b>RX</b> Pushpad monitor switch <b>RX2</b> Double pushpad monitor switch <b>E</b> Electric locking & unlocking trim <b>EL</b> Electric latch retraction <b>QEL</b> Quiet electric latch retraction <b>SS</b> Signal switch <b>CX</b> Chexit delayed exit <b>ALK</b> Alarm exit kit <b>WP-RX</b> Waterproof request to exit <b>CON</b> Allegion Connect	
Mechanical options	<b>-2</b> Double cylinder <b>AX</b> Accessible device <b>GBK</b> Glass bead kit <b>PN</b> Pneumatic latch retraction <b>XP</b> Extra protection <b>SNB</b> Sex bolts <b>SEC</b> Security screws <b>SLM</b> Special Laminated Material Blocking	
Dogging option	No mechanical dogging. EL and QEL option available	
Strikes	<b>299F</b> – Dull black, <b>499F</b> with mullions	

#### XP

##### Extra protection

- 90° latch-to-strike contact
- Force resistance of 2,000+ lbs.

#### RX

##### Pushpad monitor switch

- Signals use of an opening
- SPDT switch to monitor pushpad

#### EL

##### Electric latch retraction

- Enables remote unlatching
- Alternative to manual dogging

#### ALK

##### Alarm exit kit

- Unauthorized opening triggers 85-decibel horn
- Set in armed or disarmed mode by key

#### QEL

##### Quiet electric latch retraction

- Bolt retraction via switch
- Converts exit door to push-pull operation

#### CX

##### Chexit delayed exit

- Meets NFPA 101 requirements
- Self-contained controls, locking, alarm

#### AX

##### Accessible device

- UL certified to meet new 5 lb. maximum operating force requirement
- Exceeds ANSI/BHMA requirements

#### SG

##### Safety glow

- Shows exit door location in darkness or smoke
- Developed to meet MEA standards

#### PN

##### Pneumatic latch retraction

- For areas where electrical devices banned
- Special linkage for mechanical or pneumatic dogging





#### CON





##### Allegion Connectors

- Common connectors to connect various door hardware all the way to the power supply



# Standard trim

	EO	DT	NL	NL-OP
				
Product description	98EO-F 99EO-F	98DT-F 99DT-F	98NL-F 99NL-F	98NL-OP-F 99NL-OP-F
Trim description	—	990DT	990NL-R/V	110NL-MD 110NL-WD
Escutcheon plate size	—	3" x 14 <sup>13</sup> / <sub>16</sub> " x 3 <sup>3</sup> / <sub>32</sub> " (76x360x2mm)	3" x 14 <sup>13</sup> / <sub>16</sub> " x 3 <sup>3</sup> / <sub>32</sub> " (76x360x2mm)	—
Pull center to center	—	5 <sup>1</sup> / <sub>2</sub> " (140mm)	5 <sup>1</sup> / <sub>2</sub> " (140mm)	—
Projection	—	2" (51mm)	2" (51mm)	—
ANSI function	01	02	03	03
Cylinder type	—	—	Rim	Rim
Handing	—	—	—	—
Optional trim	x990EO x996EO	x996K-DT x996L-DT x696DT x697DT	x996K-NL x996L-NL x696NL x697NL	
#425 SNB optional - HMD req. WD w/o SLM pkg.	2	2	2	2
#825 SNB req. WD w/o SLM pkg.	2 (if using trim)	2	2	2
#425 SNB req. w/ 499F	2	2	2	2

	L	L-NL	L-BE	L-DT
				
Product description	98L-F 99L-F	98L-NL-F 99L-NL-F	98L-BE-F 99L-BE-F	98L-DT-F 99L-DT-F
Trim description	996L-R/V*	996L-NL-R/V	996L-BE-R/V*	996L-DT
Escutcheon plate size	2 <sup>3</sup> / <sub>4</sub> " x 10 <sup>3</sup> / <sub>4</sub> " x 27 <sup>27</sup> / <sub>32</sub> " (70x273x21mm)	2 <sup>3</sup> / <sub>4</sub> " x 10 <sup>3</sup> / <sub>4</sub> " x 27 <sup>27</sup> / <sub>32</sub> " (70x273x21mm)	2 <sup>3</sup> / <sub>4</sub> " x 10 <sup>3</sup> / <sub>4</sub> " x 27 <sup>27</sup> / <sub>32</sub> " (70x273x21mm)	2 <sup>3</sup> / <sub>4</sub> " x 10 <sup>3</sup> / <sub>4</sub> " x 27 <sup>27</sup> / <sub>32</sub> " (70x273x21mm)
Pull center to center	—	—	—	—
Projection	2 <sup>7</sup> / <sub>8</sub> " (73mm)	2 <sup>7</sup> / <sub>8</sub> " (73mm)	2 <sup>7</sup> / <sub>8</sub> " (73mm)	2 <sup>7</sup> / <sub>8</sub> " (73mm)
ANSI function	08	03	14	02
Cylinder type	Rim	Rim	—	—
Handing	Handed/Reversible	Handed/Reversible	Handed/Reversible	Handed/Reversible
#425 SNB optional - HMD req. WD w/o SLM pkg.	2	2	2	2
#825 SNB req. WD w/o SLM pkg.	2 (if using trim)	2	2	2
#425 SNB req. w/ 499F	2	2	2	2

\* Electrified lever operation available

## 98/99 Dogging options

### CDSI/HDSI dogging indicators



Indicator provides an at-a-glance verification of the status of the door from inside of the room. Visible "LOCKED" and "UNLOCKED" indicators show whether the device is undogged or dogged. This feature can be used with Hex key (HDSI) or Cylinder dogging (CDSI) options

on various device types – rim, mortise and vertical systems.

- Modular conversion kits allow you to quickly and easily upgrade your existing devices
- Available for 98/99 & 33A/35A Series panic devices

#### To order, specify:

- Use prefix, CDSI or HDSI, example CDSI99L

### CD Cylinder dogging



Cylinder dogging is available on all 98/99™ Panic exit devices to replace the standard hex key dogging. Unit requires a standard 1 $\frac{1}{4}$ " (32mm) mortise cylinder with an inverted straight cam (Schlage Cam B502-191 reference).

#### To order, specify:

- Use prefix, CD, example CD99L

### CDK Cylinder dogging kit\*

For field conversion, a cylinder dogging conversion kit is available.

**To order, specify:** 99CDK or 98CDK, specify finish.

\*Cannot be added to fire exit hardware.

### HDK Hex key dogging kit\*



For field conversion, a hex key dogging conversion kit is available.

**To order, specify:** 99HDK or 98HDK, specify finish.

\*Cannot be added to fire exit hardware.

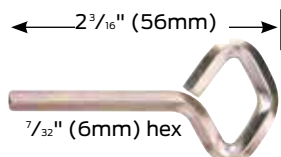
### LD Less dogging

Less dogging is available in all 98/99™ Panic exit devices to remove the dogging option.

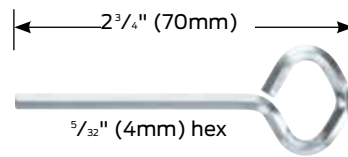
**To order, specify:** Use prefix LD, example LD99L

### Dog keys

#### Dog key (old style)



#### Dog key (standard)



### -2SI Double cylinder with security indicator



The Von Duprin Classroom Security Indicator provides an at-a-glance verification of the locked/unlocked status of the door from inside of the room. This option can be ordered as a new product or as a retrofit conversion kit to an existing 98/99 device. Indicator in Unlocked state presents a  $\frac{1}{2}$ " x  $\frac{1}{2}$ " metal flag (white background with black icon) at top of device head. Indicator in Locked state has no flag present.

#### To order, specify:

1. Suffix-2SI with device/trim number, example 99L-2SI.
2. Hanging required, LHR or RHR.

### SD Special center case dogging



Special cylinder dogging in the center case is available for Chexit, EL, QEL, ALK panic devices to allow for mechanical push/pull operation. With this option, the latchbolt is held retracted and pushbar is still operable. Specify handing—RHR or LHR.

SD requires 1 $\frac{3}{4}$ " (32mm) mortise cylinder with an inverted straight cam. (Schlage cam reference B502-191.)

Note: Available on Rim and Vertical Rod Panic Exit Devices only.

#### To order, specify:

- Use prefix SD, example SD99L and Handing
- Not for 98/9975 Devices

### Double cylinder



Double cylinder features an inside key cylinder which locks or unlocks the outside trim and an outside key cylinder which retracts the latch bolt only (Night latch function). Available on rim or mortise lock device.

Rim requires two rim type cylinders. Mortise device requires 1 rim cylinder and 1 mortise cylinder 1 $\frac{1}{4}$ " with a straight cam. (Schlage cam reference B502-191.)

Available functions are thumbpiece, knob or lever.

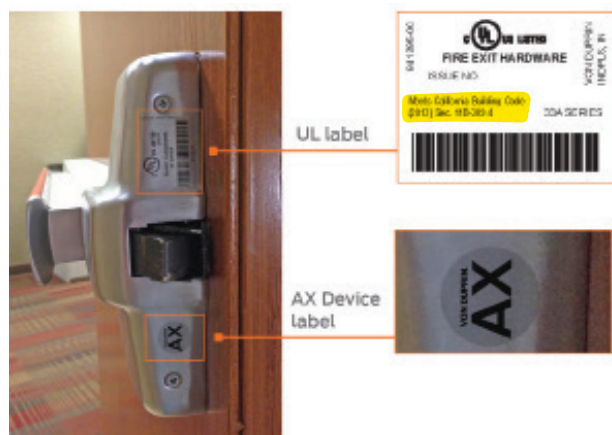
#### To order, specify:

1. Suffix-2 with device/trim number, example 99TP-2.
2. Handing required, LHR or RHR.

## Mechanical options

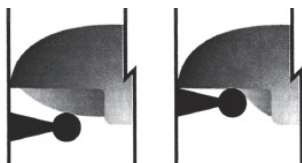
### AX Accessible device

The AX device is a UL certified exit device designed to meet the progressive requirements of the California Building Code for accessible openings. This device meets the 5 lbs of operating force requirement called for in chapter 11B-309.4. The AX device also exceeds ANSI/BHMA requirements. Available devices include: AX98/99, AX98/99-F, AX98/9949LBL, AX98/9949-F LBL, AX98/9949-F LBLAFL. Additionally, all AX devices will be shipped with a new UL label clearly stating "Meets California building Code (2013) Sec. 11B-309.4" and an "AX" identifier label on device center case. See images below for reference.



### XP Extra performance

For increased security the XP98/99 Rim exit device has a static load force resistance of more than 2,000 pounds, twice that of standard rim exit devices. The two-piece latch bolt forms a 90° latch-to-strike contact. The "smart" latch changes shape when subjected to external forces. This design enables the exit door to withstand an external attack and remain secure. Additionally, the patented latch bolt design provides a greater, longer-lasting latch bolt to strike contact which is not easily affected by the twisting motion of a weakened frame, resulting in an opening that will remain strong.



With a door loaded to 250 pounds, XP98/99 requires less than 40 pounds of pressure to open, 25% less than the safety code requires.

XP98/99 is available for panic or fire exit hardware applications. Dimensions, finishes and trim options are equal to the standard 98/99 series rim exit device.

**Note:** The 909 strike is to be used for all applications. The exception occurs with the use of fire rated double door applications, in this instance the 954 strike is required.

### PA Pushpad armor

Built to absorb impact, the pushpad armor stands up to the wear and tear of demanding high-traffic areas. This composite accessory provides added support, while protecting the pushpad on the hinge side of the device. Available for 33A/35A and 98/99 series exit devices. See images below for reference.



## 98/99 Device options & accessories

### Mullions

Removable steel mullions provide single door performance in double door openings with rim devices. Mullions are easily removed by loosening bottom set screw and removing top fitting cover. The top mullion fitting is attached to the frame and is concealed by the fitting cover.

Steel mullions are 2" (51mm) wide and 3" (76mm) deep, with a wall thickness of  $\frac{1}{8}$ " (3mm).

Mullions are shipped with mounting screws and prepared for strikes. Strikes are not included except where indicated.

Steel mullions are available in SP28 and SP313 finishes. Consult factory for other powder coat finish options.

**KR – Keyed removable steel mullions** make removal faster and easier by a single operation of the mortise cylinder. Once mullion is removed, large equipment or furniture can freely pass through the opening. The unit will self lock when re-installed, without the use of the cylinder key. Uses a  $1\frac{1}{4}$ " mortise cylinder with a straight cam (Schlage cam reference B502-191). Cylinders are sold separately. Prefix mullion model with "KR".

Removable aluminum mullions are  $1\frac{1}{16}$ " (27mm) wide on face closest to the door and  $2\frac{3}{8}$ " (60mm) at the widest point. The depth is  $3\frac{1}{8}$ " (79mm) with a wall thickness of  $\frac{1}{8}$ " (3mm).

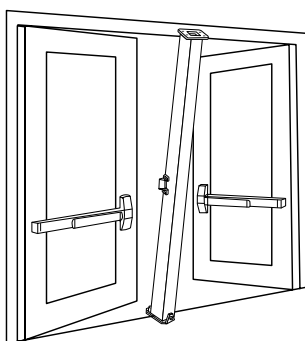
Aluminum mullions are available in US4, US10, US28, 313 and 315 finishes. Consult factory for other powder coat finish options. Aluminum mullion are not available keyed removable.

Stock hollow metal applications for devices mounted to cover ANSI 161 cutouts are higher than the standard mullion strike location. Consult the factory for special strike preparation or order a blank mullion. See below.

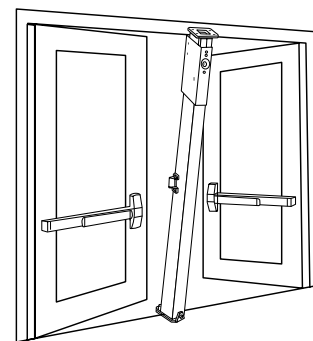
**Blank mullions** are furnished without strike preparation. They are used to mount devices at a strike height different from the standard mullion preparation.

#### To order, specify:

1. For keyed Removable option on steel mullions, prefix model number with "KR"
2. Model number
3. Height of opening
4. Finish
5. Handing if required
6. Centerline deviation (refer to device template for standard centerline)
7. Strikes, when required, should be ordered with device



Removable mullions



Keyed removable steel mullions

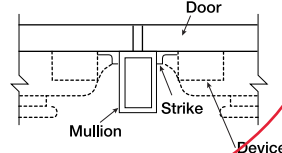
### Steel mullions

**1654** Prepared for two 1606 strikes. If 1606 strikes are not specified on the order, two per mullion will be added. Additional charges apply.

**4954** Prepared for 264 or 299 strikes. For use with all Von Duprin Panic rim devices.



**9954** Prepared for and must be used with two 268 strikes (88-F device), or two 499F (22-F, 98-F, 99F devices). UL fire labeled mullion for up to 3 hour opening using Von Duprin fire exit rim devices. This mullion is not easily removed due to special fittings.



98-F and 99-F devices are rated up to 10'0" (3048 mm).

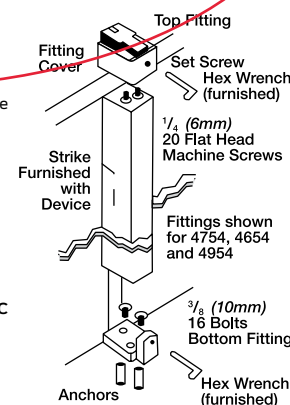
**Note:** If 268 or 499F strikes are not specified on the order, two per mullion will be added. Additional charges apply.

**4754** Prepared for two 4263 monitor strikes.

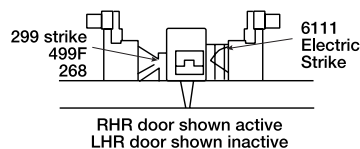
**4854** Prepared for one 299 and one 6111 electric strike. Indicate handing for electric strike.



**9854** Prepared for one 268 or 499F strike and one 6111 electric strike. Indicate handing for electric strike. UL fire labelled mullion for up to 3 hour openings up to 8' x 8' (2438mm x 2438mm) using Von Duprin fire exit rim devices



4854/9854 – Using one electric strike



RHR door shown active  
LHR door shown inactive

# Cabinet lock functions

## Conventional cylinder



### Cabinet door lock - CL100PB

Rekeyable: Easily rekeyed via patented set-screw cylinder removal mechanism  
Certifications: ANSI A156.11, Grade 2  
Body: Die cast zinc  
Bolt: Brass, 1<sup>5</sup>/<sub>16</sub>" projection  
Door thickness: 7/8" to 1<sup>3</sup>/<sub>8</sub>"  
Barrel diameter: 1<sup>1</sup>/<sub>8</sub>"  
Cylinder: Everest 29 S123 keyway standard, Available in Primus XP, Everest 29, Everest and Classic keyways  
Keying: KD, KA or MK  
Finishes: 605, 626

Not available without cylinder



### Drawer lock - CL200PB

Rekeyable: Easily rekeyed via patented set-screw cylinder removal mechanism  
Certifications: ANSI A156.11, Grade 2  
Body: Die cast zinc  
Bolt: Steel, 3/4" throw  
Door thickness: 7/8" to 1<sup>3</sup>/<sub>8</sub>"  
Barrel diameter: 1<sup>1</sup>/<sub>8</sub>"  
Cylinder: Everest 29 S123 keyway standard, Available in Primus XP, Everest 29, Everest and Classic keyways  
Stock keying: KD, KA or MK  
Finishes: 605, 626

Not available without cylinder

## Finishes

Bright brass 605



Satin chrome 626



## Full size interchangeable core (FSIC)



### Cabinet door lock - CL777R

Rekeyable: Easily rekeyed via patented set-screw cylinder mechanism  
Certifications: ANSI A156.11, Grade 1  
Body: Die cast zinc  
Bolt: Brass, 1<sup>5</sup>/<sub>16</sub>" projection  
Barrel length: 17/16"  
Barrel diameter: 1<sup>1</sup>/<sub>8</sub>"  
Cylinder: Everest 29 S123 keyway standard, Available in Primus XP, Everest 29, Everest and Classic keyways  
Keying: KA, KD, MK or construction core  
Finishes: 605, 626

Not available without cylinder



### Drawer lock - CL888R

Rekeyable: Easily rekeyed via patented set-screw cylinder mechanism  
Certifications: ANSI A156.11, Grade 2  
Body: Die cast zinc  
Bolt: Brass, 7/8" projection  
Door thickness: 7/8" to 1<sup>3</sup>/<sub>8</sub>"  
Barrel diameter: 1<sup>1</sup>/<sub>8</sub>"  
Cylinder: Everest 29 S123 keyway standard, Available in Primus XP, Everest 29, Everest and Classic keyways  
Keying: KA, KD, MK or construction core  
Finishes: 605, 626

Not available without cylinder



### Cam lock - CL920R

Body: Die cast zinc  
Body diameter: 1<sup>1</sup>/<sub>8</sub>"  
Mounting cutout: 1<sup>5</sup>/<sub>32</sub>"  
Max material thickness: 1<sup>1</sup>/<sub>8</sub>"  
Min material thickness: 0.08"  
Across flats: 7/8"  
Cylinder: Everest 29 S123 keyway standard, Available in Primus XP, Everest 29, Everest and Classic keyways  
Keying: KA, KD, MK or construction core  
Finishes: 605, 626

Not available without cylinder



### Ratchet lock - CL929R

Body: Die cast zinc  
Body diameter: 1<sup>1</sup>/<sub>8</sub>"  
Max door material thickness: 1/4"  
Cylinder: Everest 29 S123 keyway standard, Available in Primus XP, Everest 29, Everest and Classic keyways  
Keying: KA, KD, MK or construction core  
Finishes: 626

Not available without cylinder

## Brass padlocks

- Meet or exceed ASTM standards for standard steel shackle, shackle cutting and corrosion resistance
- Solid brass body resists corrosion for all-weather performance
- Molybdenum hardened steel shackle offers greater cut resistance
- Double deadbolt locking mechanism provides extra security
- Patented interchangeable shackle design allows for easy disassembly
- Standard cylinder features include:
  - Schlage conventional key-in-knob (KNK) cylinder
  - 6-pin solid brass cylinder (pinned 5) offers increased pick resistance
  - Two nickel silver cut Schlage keys



	Body size			Shackle dimension			Shackle dimension (metric)					
Part #	Width	Height	Depth	A	B	C	A	B	C	Cylinder type	Case pack	Master pack
Keyed different												
KS23D2300	1 <sup>25</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	5/16"	1½"	¾"	8 mm	38 mm	19 mm	KNK	6	24
KS23F2300	1 <sup>25</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	5/16"	2"	¾"	8 mm	51 mm	19 mm	KNK	6	24
KS43D2300	1 <sup>15</sup> / <sub>16</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	¾"	1½"	¾"	9.5 mm	38 mm	19 mm	KNK	6	24
KS43F2300	1 <sup>15</sup> / <sub>16</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	¾"	2"	¾"	9.5 mm	51 mm	19 mm	KNK	6	24
Less cylinder - KNK												
KS23D2200	1 <sup>25</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	¼"	2"	¾"	6.4 mm	51 mm	19 mm	KNK	6	24
KS23F2200	1 <sup>25</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	5/16"	¾"	¾"	8 mm	19 mm	19 mm	KNK	6	24
KS43D2200	1 <sup>25</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	¼"	2"	¾"	6.4 mm	51 mm	19 mm	KNK	6	24
KS43F2200	1 <sup>25</sup> / <sub>32</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	5/16"	¾"	¾"	8 mm	19 mm	19 mm	KNK	6	24
Less cylinder - FSIC <sup>1</sup>												
KS43D3200	1 <sup>15</sup> / <sub>16</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	¾"	1½"	¾"	9.5 mm	38 mm	19 mm	KNK	6	24
KS43F3200	1 <sup>15</sup> / <sub>16</sub> "	2 <sup>3</sup> / <sub>16</sub> "	7/8"	¾"	2"	¾"	9.5 mm	51 mm	19 mm	KNK	6	24

Note: 1) Less cylinder padlocks ship without a cylinder. Driver and all other internal padlock parts are included.



# 4010 Series



The 4010 is LCN's best performing heavy duty closer designed specifically for institutional and other rugged high traffic applications.

## Features

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 hour salt spray, meets BAA - Buy American Act	<b>Cover</b>	<ul style="list-style-type: none"> <li>Plastic Cover (PC), standard</li> <li>Metal Cover (MC), optional</li> </ul>
<b>Body construction</b>	<ul style="list-style-type: none"> <li>Cast iron body</li> <li>Full complement bearing</li> <li>1 1/2" diameter piston</li> <li>1/16" diameter double heat treated pinion journal</li> </ul>	<b>Fasteners</b>	Self Reaming and Tapping Screws (SRT)
<b>Fluid</b>	All weather fluid	<b>Mounting</b>	Hinge (Pull side)
<b>Handing</b>	Handed	<b>Arms</b>	Regular arm
<b>Templating</b>	Peel-n-Stick templates - 2 1/2" x 6" mounting hole pattern	<b>Finishes/colors/ powder coat</b>	<ul style="list-style-type: none"> <li>689 Aluminum</li> <li>690 Statuary bronze</li> <li>691 Light bronze</li> <li>693 Black</li> <li>695 Dark bronze</li> <li>696 Brass</li> <li>Custom colors optional</li> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes</li> </ul>
<b>Size</b>	Adjustable 1-5 or sized 6		
<b>Warranty</b>	30 years		

### Special templates

Customized installation templates or products may be available to solve non-standard applications. Contact LCN Product Support for assistance.

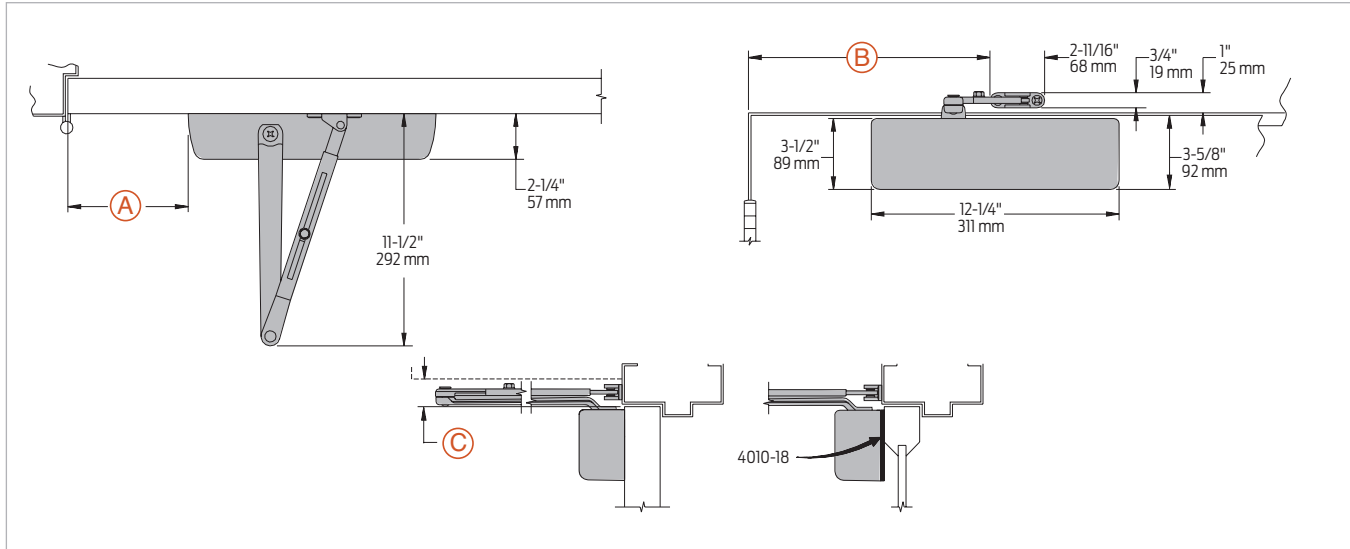
Mounting	Finish	Cover	Cylinder	Arm function*
Hinge (pull) side	Plastic	Non-handed	Regular (double)	Regular (double)
Top jamb (pull)	Metal	Non-sized	Standard (single)	Standard (single)
Top jamb (push)		Accessibility	Hold Open	Hold Open
Parallel arm	Powder coat	Delay action**	Fusible Link	Fusible Link
Stop face	Plated	CYLAVB***	EDA/HEDA	EDA/HEDA
			CUSH/HCUSH	CUSH/HCUSH
			SCUSH/SHCUSH	SCUSH/SHCUSH
			Double Egress	Double Egress

■ Available  
■ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.  
 \* Maximum opening/hold open point with standard template.  
 \*\* Advanced Variable Back Check.  
 \*\*\* Delay action for 4040XP incorporates standard 4041 cylinder.

## Mounting details

### Hinge (pull) side mounting



Butt hinges	Should not exceed 5" (127 mm) in width		
Auxiliary stop	Recommended at hold open point or where a door cannot swing 140°		
Reveal	Should not exceed 3/4" (19 mm). Should not exceed 1/8" (3 mm) for Fusible Link Arm		
Top rail	<ul style="list-style-type: none"> <li>Less than 3 3/4" (95 mm) requires plate, 4010-18</li> <li>Plate requires 2" (51 mm) minimum</li> <li>Clearance of 2 1/4" (57 mm) behind door required for 90° installation</li> </ul>		
Delay action	<ul style="list-style-type: none"> <li>Add suffix "CYLDEL" to selected cylinder</li> <li>Not available with 4016 cylinder</li> <li>Delays closing from maximum opening to approximately 70°</li> <li>Delay time adjustable up to approximately 1 minute</li> </ul>		
Maximum opening	Can be templated for:		
	100°:	A = 5 15/16" (151 mm) B = 11 15/16" (303 mm)	140°: A = 4 3/16" (106 mm) B = 10 3/16" (259 mm)
	Hold open points up to maximum opening with Hold Open Arm		
Arm clearance	Regular Arm: C = 1 1/16" (27 mm) Hold Open Arm: C = 1 3/8" (35 mm) Fusible Link Arm requires: C = 1 5/8" (41 mm)		

Note: Hold open points up to maximum opening with Hold Open Arm.



## Accessories

### Cylinders



**4011(6)-3071  
Cast iron cylinder  
assembly (CYL)**

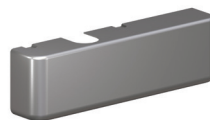
- Handed
- Standard

### Covers



**4010-72  
Plastic Cover (PC)**

- Non-handed



Right hand shown

**4010-72MC  
Metal Cover (MC)**

- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

### Arms



**4010-3077  
Regular Arm (REGARM)**

- Non-handed



**4010-3049  
Hold Open Arm (H)**

- Handed
- Provides hold open function, adjustable at elbow
- Optional



**4010-3049FL  
Fusible Link Arm (FL)**

- Handed
- Releases hold-open function when exposed to temperatures above 165° F; 1/8" (3 mm) maximum reveal
- Optional

Note: Check local codes before specifying FL arms.  
 NOT A life safety product!

### Installation accessories



**4010-18  
Plate**

- Required where top rail is less than 3 3/4" (95 mm)
- Requires minimum 2" (51 mm) top rail

## Ordering information

### How-to-order 4010 Series closers

#### 1. Select cylinder size

- ☐ 4011 (adjustable from size 1 to 5)
- ☐ 4016 (CYLDEL not available)

#### 2. Specify hand

- ☐ Right Hand (RH)
- ☐ Left Hand (LH)

#### 3. Select finish

- ☐ Standard powder coat  
Aluminum (689), Dark Bronze (695), Statuary Bronze (690), Light Bronze (691), Black (693), or Brass (696)

#### Closer will be shipped with:

- Standard cylinder
- Standard cover
- Regular arm
- Self reaming and tapping screws (unless options listed below are selected)

### Closer options

#### Cylinder

- ☐ Delay Action Cylinder (CYLDEL)

#### Cover

- ☐ Metal Cover (MC)

#### Arm

- ☐ Hold Open Arm (H)
- ☐ Fusible Link Arm, 165°F (FL)

#### Finish

- ☐ Custom powder coat (RAL) \_\_\_\_\_ (handed metal cover required)
- ☐ Plated finish \_\_\_\_\_ (handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

#### Screw pack

- ☐ Through Bolt<sup>1</sup> and Self Reaming and Tapping Screws (TBSRT)
- ☐ Wood and Machine Screws (WMS)
- ☐ Through Bolt<sup>1</sup> Wood and Machine Screw (TBWMS)
- ☐ Torx Machine Screws (TORX)
- ☐ Wood and Machine Screws (WMS)
- ☐ Through Bolt<sup>1</sup> and Torx Machine Screws (TBTRX)

#### Installation accessories

- ☐ Plate, 4010-18

#### Special template

- ☐ ST- \_\_\_\_\_

1. Specify door thickness if other than 1 3/4".



### Table of sizes

- Select closer based on width of door
- The spring power of non-sized 4011 cylinder is adjustable from size 1 through size 5 and is shipped set to size 3
- Sized 4010 Series cylinders available in size 6
- Delay action not available with 4016 cylinder

#### Exterior (and vestibule) door width

	24" 610mm	30" 762mm	36" 914mm	42" 1067mm	48" 1219mm
	size 3	size 4	size 5	size 6	
*4011					
4016					

#### Interior door width

	24" 610mm	34" 864mm	38" 965mm	48" 1219mm	54" 1372mm	60" 1524mm
	size 2	size 3	size 4	size 5	size 6	
*4011						
4016						
	Minimum door width					

Indicates recommended range of door width for closer size.  
\* Adjustable Size 1 thru 5.

### Reduced opening force 4010 Series closers

**CAUTION!** Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

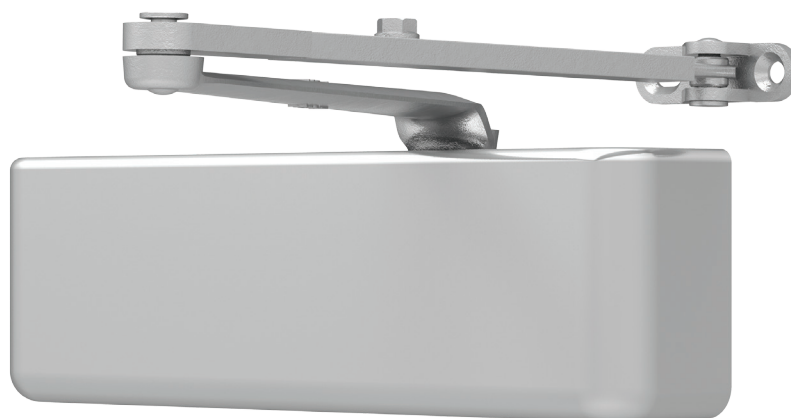
Refer to Automatic Operators catalog for information on systems that meet reduced opening force requirements without effecting closing power.

	Door width	36"	42"	48"
	8.5* lbs.	4011	4011	4011
	5.0* lbs.	4011	4011	4011

\* Maximum opening force.

## 4040XP Series

### Features

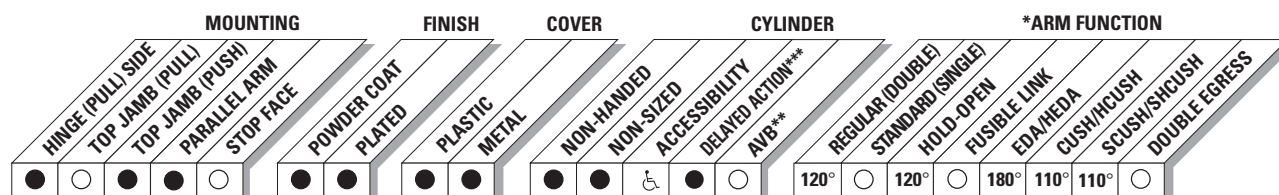


The 4040XP is LCN's most durable and flexible heavy duty closer designed for institutional and other demanding high traffic applications.

<b>Certifications</b>	Grade 1 - ANSI A156.4, UL 10C, ADA, 100 Hour Salt Spray, Meets BAA - Buy American Act	<b>Cover</b>	<ul style="list-style-type: none"> <li>Plastic, Standard</li> <li>Metal, Optional</li> </ul>
<b>Body Construction</b>	<ul style="list-style-type: none"> <li>Cast Iron Body</li> <li>Full Complement Bearings</li> <li>1-1/2" Diameter Piston</li> <li>3/4" Diameter Double Heat Treated Pinion Journal</li> </ul>	<b>Fasteners</b>	Self Reaming and Tapping Screws (SRT)
<b>Fluid</b>	All Weather Liquid X Fluid	<b>Mounting</b>	Hinge (Pull Side), Top Jamb (Push Side), Parallel Arm (Push Side)
<b>Handing</b>	Non-Handed	<b>Arms</b>	Regular Arm
<b>Templating</b>	Peel-n-Stick templates - 2-1/4" x 5" Mounting Hole Pattern	<b>Finishes/Colors/ Powder Coat</b>	<ul style="list-style-type: none"> <li>Aluminum (689)</li> <li>Statuary Bronze (690)</li> <li>Light Bronze (691)</li> <li>Black (693)</li> <li>Dark Bronze (695)</li> <li>Brass (696)</li> <li>Custom colors optional</li> </ul>
<b>Size</b>	Adjustable Spring Size 1-6, includes Patented Green Dial		<ul style="list-style-type: none"> <li>Optional SRI primer - powder coat only</li> <li>Optional plated finishes</li> </ul>
<b>Warranty</b>	30 years		

### Special Templates

Customized installation templates or products may be available to solve unusual applications. Contact LCN Product Support for assistance.



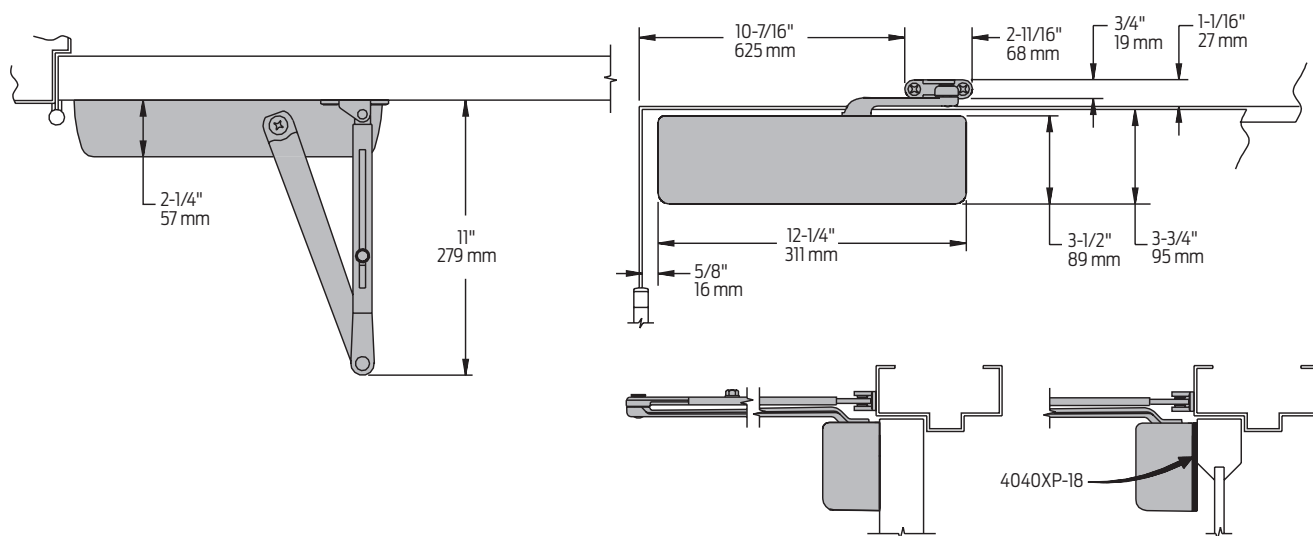
● AVAILABLE  
○ NOT AVAILABLE

✎ Closer available with less than 5.0 lbs. opening force on 36" door.  
\* Maximum opening/hold-open point with standard template.  
\*\* Advanced Variable Backcheck.  
\*\*\* Delay feature incorporates standard 4040 cylinder (not XP).

## 4040XP Series

### Mounting details

#### Hinge (Pull Side) Mounting

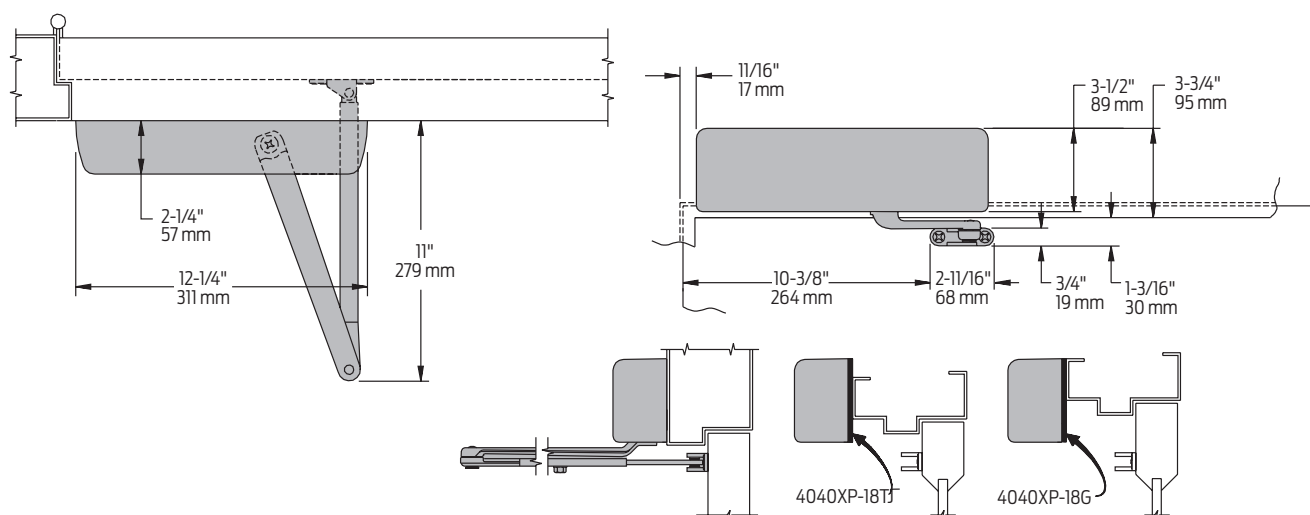


<b>Butt Hinges</b>	<ul style="list-style-type: none"> <li>Should not exceed 5" (127 mm) in width</li> </ul>
<b>Auxiliary Stop</b>	<ul style="list-style-type: none"> <li>Recommended at hold-open point or where a door cannot swing beyond 120°</li> </ul>
<b>Reveal</b>	<ul style="list-style-type: none"> <li>Should not exceed 3/4" (19 mm) for regular arm or hold-open arm</li> </ul>
<b>Top Rail</b>	<ul style="list-style-type: none"> <li>Less than 3-3/4" (95 mm) requires PLATE, 4040XP-18. Plate requires 2" (51 mm) minimum</li> </ul>
<b>Clearance</b>	<ul style="list-style-type: none"> <li>2-3/8" (60 mm) behind door required for 90° installation</li> </ul>
<b>Delayed Action</b>	<ul style="list-style-type: none"> <li>Incorporates standard 4041 cylinder, without XP cylinder</li> <li>Delays closing from 120° to 70°</li> <li>Delay time adjustable up to approximately 1 minute</li> </ul>
<b>Maximum Opening</b>	<ul style="list-style-type: none"> <li>Templating allows up to 120°.</li> <li>Hold-open points 90° up to 120° with hold-open arm.</li> </ul>

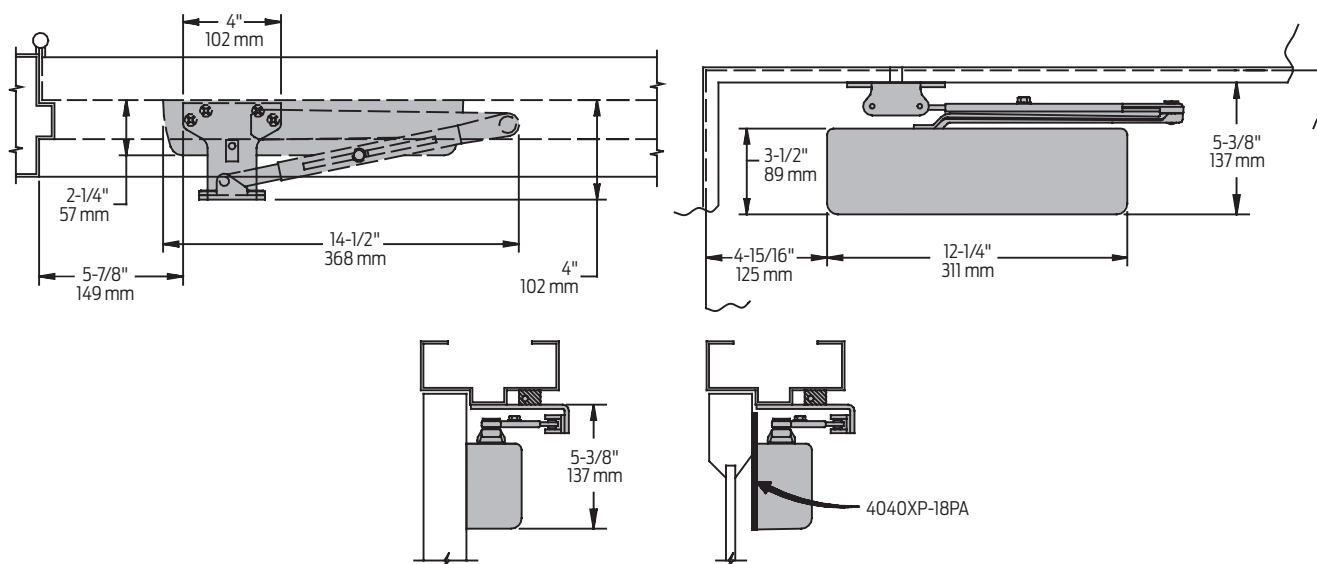
## 4040XP Series

### Mounting details

#### Top Jamb (Push Side) Mounting



<b>Butt Hinges</b>	Should not exceed 5" (127 mm) in width		
<b>Auxiliary Stop</b>	Recommended at hold-open point or where a door cannot swing beyond 120°		
<b>Reveal</b>	Arm Type	Reveal	Max Opening
	Regular Arm	2-9/16"	Up to 120°
	Long	4-13/16"	Up to 120°
	Hold-Open	2-9/16"	Up to 120°
	Long Hold-Open Arm	8"	Up to 120°
<b>Top Rail</b>	<ul style="list-style-type: none"> <li>Requires 1-1/4" (32 mm) minimum</li> <li>2-1/4" (57 mm) minimum with closer on PLATE, 4040XP-18TJ</li> <li>3" (76 mm) minimum with closer on PLATE, 4040XP-18G</li> </ul>		
<b>Head Frame</b>	<ul style="list-style-type: none"> <li>Less than 3-1/2" (89 mm) requires PLATE, 4040XP-18TJ</li> <li>With flush ceiling, use PLATE, 4040XP-18G. Either plate requires 1-3/4" (44 mm) minimum</li> </ul>		
<b>Maximum Opening</b>	<ul style="list-style-type: none"> <li>Templating allows up to 120°.</li> <li>Hold-open points 85° up to 120° with hold-open arm.</li> </ul>		
<b>Delayed Action</b>	<ul style="list-style-type: none"> <li>Incorporates standard 4041 cylinder, without XP cylinder</li> <li>Delays closing from 120° to 70°</li> <li>Delay time adjustable up to approximately 1 minute</li> </ul>		

**4040XP  
Series****Mounting details****Parallel Arm (Push Side)  
Mounting**

<b>Butt Hinges</b>	Should not exceed 5" (127 mm) in width
<b>Auxiliary Stop</b>	Recommended at hold-open point, where the door cannot swing 180°, or where CUSH-N-STOP arm is not used
<b>Reveal</b>	Should not exceed 7/32" (6 mm)
<b>Top Rail</b>	Less than 5-3/8" (137 mm) measured from the stop requires PLATE, 4040XP-18PA. Plate requires 2" (51 mm) minimum from the stop
<b>Head Frame</b>	Flush or rabbeted requires PA SHOE ADAPTER, 4040XP-419
<b>Stop Width</b>	Minimum 1" (25 mm). CUSH arm requires minimum 1-1/2" (38 mm)
<b>Blade Stop</b>	Clearance requires 1/2" (13mm) BLADE STOP SPACER, 4040XP-61.
<b>Clearance</b>	<ul style="list-style-type: none"> <li>4040XP-62PA shoe is 4" (102 mm) from door face.</li> <li>EDA shoe projects 5-1/2" (140 mm) from door face.</li> <li>CUSH shoe projects 6" (152 mm) from door face</li> </ul>
<b>Delayed Action</b>	<ul style="list-style-type: none"> <li>Incorporates standard 4041 cylinder, without XP cylinder</li> <li>Delays closing from 120° to 70°.</li> <li>Delay time adjustable up to approximately 1 minute.</li> </ul>
<b>Maximum Opening</b>	<ul style="list-style-type: none"> <li>180° opening/hold-open points with all except CUSH arms</li> <li>110° opening/hold-open with CUSH arms</li> </ul>

**Notes:**

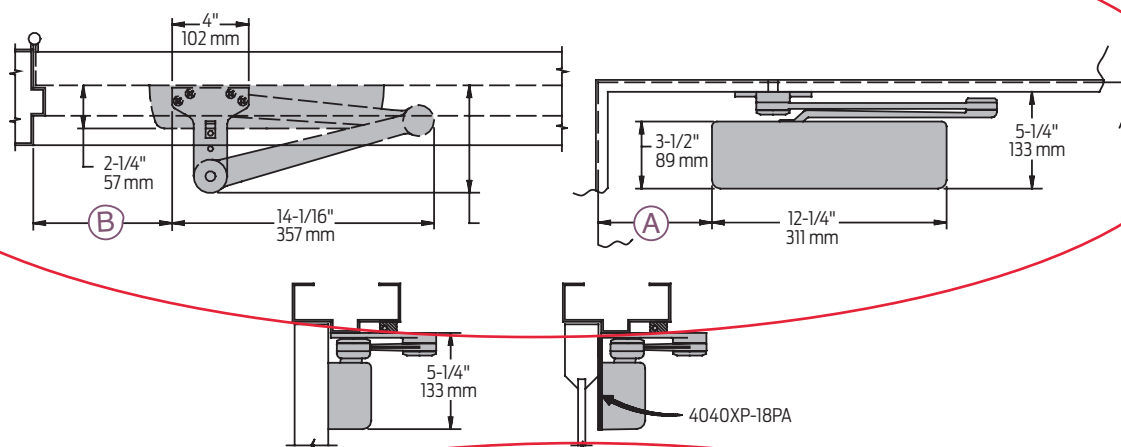
- Optional mounting requires PA SHOE, 4040XP-62PA for regular or HOLD-OPEN arms
- Add prefix "P" to closer description (eg. P4040XP)
- P4040XP closer includes 4040XP-201 FIFTH HOLE SPACER to support PA SHOE

# 4040XP Series

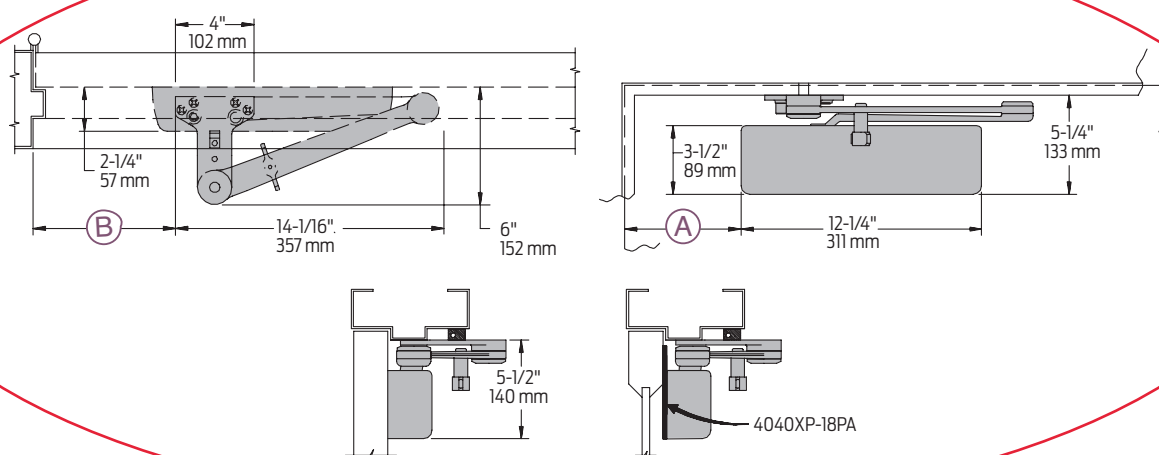
## Mounting details

EDA and CUSH Mounting

### EDA mount



### CUSH mount



<b>Clearance</b>	4040XP-62EDA is 5-1/2" (140 mm) from door face. 6" (152 mm) for CUSH	
<b>Head Frame</b>	Flush or rabbeted requires CUSH FLUSH PANEL ADAPTER, 4040XP-419	
<b>CUSH ARM</b>	Requires SHOE SUPPORT, 4040XP-30 for fifth screw anchorage where reveal is less than 3-1/16" (78 mm)	
<b>Delayed Action</b>	<ul style="list-style-type: none"> <li>Incorporates standard 4041 cylinder, without XP cylinder.</li> <li>Delays closing from maximum opening to ; 115° with 180° template, 95° with 110° template, 85° with 100° template, 75° with 90° template. Delay time adjustable up to approximately 1 minute.</li> </ul>	
<b>Maximum Opening</b>	EDA arm can be templated for points at:	CUSH arms can be templated for opening/hold-open point at:
	110°: A = 6-3/8" (162 mm) B = 7-3/4" (197 mm)	85°: A = 7-15/16" (202 mm) B = 9-1/8" (232 mm)
	or 180°: A = 2-7/8" (73 mm) B = 4-1/4" (108 mm)	90°: A = 7-3/16" (183 mm) B = 8-1/2" (216 mm)
	Hold-open points up to maximum opening with HEDA arm	100°: A = 6-1/16" (154 mm) B = 7-1/4" (184 mm)
		or 110°: A = 5-1/16" (129 mm) B = 6-3/8" (162 mm)

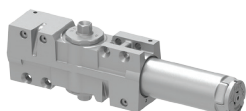
#### Notes:

- 4040XP Series closers ordered with EDA or CUSH arms include 4040XP-201 FIFTH HOLE SPACER to support the shoe
- Spring Cush stop points are approximately 5° more than templated stop point
- Hold open at templated stop points

# 4040XP Series

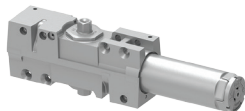
## Accessories

### Cylinders



**4040XP-3071**  
Cast Iron Cylinder Assembly

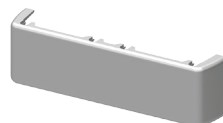
- Non-handed
- Heavy duty



**4041-3071 DEL**  
Cast Iron Cylinder Assembly

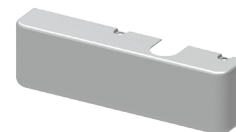
- Used for delayed action closing
- Non-handed
- Heavy duty

### Covers



**4040XP-72**  
Plastic Cover

- Includes 4040XP-54 snap-on cover clip
- Non-handed
- Standard



**4040XP-72MC**  
Metal Cover

- Handed
- Required for plated finishes and custom powder coat finishes
- Optional

### Installation Accessories



**4040XP-18**  
Plate

- Required for hinge side mount where top rail is less than 3-3/4" (95 mm)
- Requires minimum 2" (51 mm) minimum top rail



**4040XP-18G**  
Plate

- Locates top jamb mounted closer flush with top of head frame face in flush ceiling condition
- Requires 1-3/4" (44 mm) minimum head frame



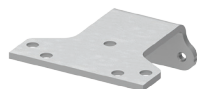
**4040XP-18TJ**  
Plate

- Centers top jamb mounted closer vertically on head frame where face is less than 3-1/2" (89 mm). Plate requires 1-3/4" (44 mm) minimum head frame



**4040XP-18PA**  
Plate

- Required for parallel arm mounting where top rail is less than 5-1/2" (140 mm), measured from the stop
- Requires 2" (51 mm) minimum top rail



**4040XP-62PA**  
PA Shoe

- Required for parallel arm mounting



## Arms

## 4040XP Series

### Accessories



**4040XP-3077**  
Regular Arm

- Non-handed
- Mounts pull side or top jamb with shallow reveal P4041 closer includes PA SHOE, 4040XP-62PA required for parallel arm mounting



**4040XP-3077L**  
Long Arm

- Non-handed
- Includes LONG ROD AND SHOE, 4040XP-79LR for top jamb mount
- Optional



**4040XP-3077ELR**  
Extra Long Arm

- Non-handed
- Includes EXTRA LONG ROD AND SHOE, 4040XP-79ELR for top jamb mount with deep reveal
- Optional



**4040XP-3049**  
Hold-Open Arm

- Non-handed
- Mounts pull side or top jamb with shallow reveal, hold-open adjustable shoe
- 4040XP closer includes 4040XP-62PA shoe required for parallel arm mounting
- Optional



**4040XP-3049L**  
Long Hold-Open Arm

- Non-handed
- Includes LONG HEAD AND TUBE, 4040XP-3048L for top jamb mount
- Optional



**4040XP-3077EDA**  
Extra Duty Arm

- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- Optional



**4040XP-3049EDA**  
Hold-Open Extra Duty Arm

- Handed
- Parallel arm features forged, solid steel main and forearm for potentially abusive installations
- Hold-open function is adjusted at the shoe
- Optional



**4040XP-3077EDA/62G**  
Extra Duty Arm with 62G

- Non-handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance
- Optional



**4040XP-3049EDA/62G**  
Hold-Open Extra Duty Arm with 62G

- Handed
- Features forged, solid steel main and forearm for potentially abusive installations
- 62G shoe provides additional blade stop clearance. Hold-open function is adjusted at the shoe
- Optional



**4040XP-3077CNS**  
Cush-N-Stop Arm

- Non-handed
- Features solid forged steel main arm and forearm with stop in soffit shoe.
- Optional



**4040XP-3049CNS**  
HCUSH Arm

- Non-handed
- Hold-open function with templated stop/hold-open points
- Handle controls hold-open function
- Optional



**4040XP-3077SCNS**  
Spring CUSH Arm

- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Optional



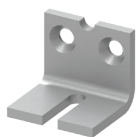
**4040XP-3049SCNS**  
Spring HCUSH Arm

- Non-handed
- For abusive applications features solid forged steel main arm and forearm with spring loaded stop in the soffit shoe
- Handle controls hold-open function
- Optional

## 4040XP Series

### Accessories

#### Installation Accessories cont.



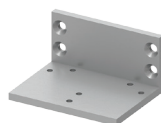
**4040XP-30**  
CUSH Shoe Support

- Provides anchorage for fifth screw used with CUSH arms, where reveal is less than 3-1/16" (78 mm)
- Optional



**4040XP-61**  
Blade Stop Spacer

- Required to lower parallel arm shoe to clear 1/2" (13 mm) blade stop
- Optional



**4040XP-419**  
PA Flush Panel Adapter

- Provides horizontal mounting surface for parallel arm shoe on single rabbetted or flush frame
- Optional



**4040XP-62A**  
Auxiliary Shoe

- Requires a top rail of 7" (178 mm)
- Shoe replaces -62PA for parallel arm mounting of regular arm with overhead holder/stop
- Optional



**4040XP-54**  
Snap-On Cover Clip

- Used to secure 4040XP-72 Plastic Cover to cylinder body

## How-to-order 4040XP Series closers

### 1. Select finish

- ☐ Standard Powder Coat \_\_\_\_\_  
Aluminum, Dark Bronze, Statuary,  
Light Bronze, Black, Brass.

### Closer will be shipped with:

- Standard cylinder
- Standard cover
- Regular arm
- Self-reaming and tapping screws  
unless options listed below are selected.

## Closer options

### Cylinder

- ☐ Delayed Action (4041 DEL)

### Cover

- ☐ Metal (specify right or left hand) (MC)

### Finish

- ☐ Custom Powder Coat (RAL) \_\_\_\_\_  
(handed metal cover required)
- ☐ Plated Finish, US \_\_\_\_\_  
(handed metal cover required)
- ☐ SRI primer (use with powder coat finishes only)

### Arm

- ☐ Regular (REG)
- ☐ Regular w/62PA (Rw/PA)
- ☐ Regular w/62A (R/62A)
- ☐ Long (LONG)
- ☐ Extra Long (XLONG)
- ☐ Hold-Open (H)
- ☐ Hold-Open w/62PA (Hw/PA)
- ☐ Long Hold-Open (HLONG)
- ☐ Extra Duty Arm (EDA)
- ☐ Extra Duty Arm with 62G (EDA/62G)
- ☐ Hold Open Extra Duty Arm (HEDA)  
(Handed)
- ☐ Hold Open Extra Duty Arm with 62  
(HEDA/62G)(Handed)
- ☐ Cush-N-Stop (CUSH)
- ☐ HCush-N-Stop (HCUSH)
- ☐ Spring Cush (SCUSH)
- ☐ Spring HCush (SHCUSH)

### Optional Screw Packs

- ☐ TB\* w/Self-Reaming and Tapping (TBSRT)
- ☐ Wood & Machine Screw (WMS)
- ☐ TB\*, Wood & Machine Screw (TBWMS)
- ☐ TORX Machine Screw (TORX)
- ☐ TB\* & TORX Machine Screw (TBTRX)  
\* Specify door thickness if other than  
1-3/4".

### Installation Accessories

- ☐ Plate, 4040XP-18
- ☐ Plate, 4040XP-18TJ
- ☐ Plate, 4040XP-18G
- ☐ Plate, 4040XP-18PA
- ☐ CUSH Shoe Support, 4040XP-30
- ☐ Blade Stop Spacer, 4040XP-61
- ☐ Auxiliary Shoe, 4040XP-62A
- ☐ PA Flush Panel Adapter, 4040XP-419

### Special Template

- ☐ ST- \_\_\_\_\_

## Table of sizes

- 4040XP cylinders are adjustable from size 1 through size 6 and is shipped set to size 3
- Closing power of 4040XP Series closers may be adjusted 50%

### Exterior (and vestibule) door width

24"	30"	36"	42"	48"
610mm	762mm	914mm	1067mm	1219mm



### Interior door width

24"	30"	38"	48"	54"	60"
610mm	762mm	965mm	1219mm	1372mm	1524mm




→ Indicates recommended range of door width for closer size. \* Adjustable Size 1 thru 6.

## Reduced opening force 4040XP Series closers

**CAUTION!** Any manual door closer, including those certified by BHMA to conform to ANSI Standard A156.4, that is selected, installed and adjusted based on ADA or other reduced opening force requirements may not provide sufficient power to reliably close and latch a door.

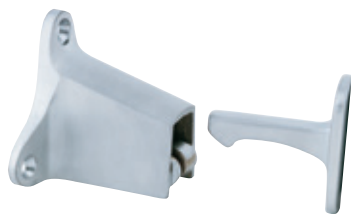
Refer to POWER OPERATORS section for information on systems that meet reduced opening force requirements without effecting closing power.

	DOOR WIDTH	36"	42"	48"
	8.5* lbs.	4040XP	4040XP	4040XP
	5.0* lbs.	4040XP	4040XP	4040XP

\* Maximum opening force.

## Automatic Wall Holders

# IVES®



Meets ANSI/BHMA 156.16, L11291 for brass  
and L31291 for aluminum.

### WS40 Automatic Wall Holder

- Constructed of sturdy cast brass, or aluminum.
- Holder is mounted on wall and strike is mounted on door.
- Roller on holder rides up seats itself on strike, with a heavy duty bumper pad deadening the sound and shock.
- Universal screw pack accommodates all types wall construction.

#### Dimensions

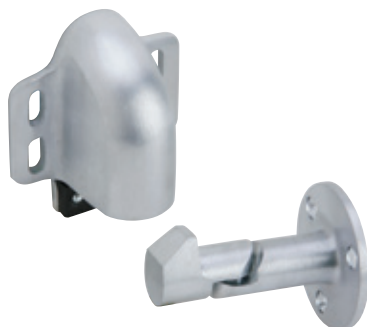
Base Height: 2"	Strike Height: 2-1/16"
Base Width: 2-1/2"	Strike Width: 3/4"
Base Projection: 2-1/4"	Strike Projection: 2"
Engaged Projection: 3-1/2"	

#### Finishes *brass*

Ives Number	US3	US4	US10	US10B	US26	US26D
BHMA	605	606	612	613	625	626

#### Finishes *aluminum*

Ives Number	US28
BHMA	628



WS45  
Meets ANSI/BHMA 156.16, L11291 for brass  
and L31291 for aluminum.

### WS45 WS45X Automatic Wall Holder

- Constructed of cast brass, bronze or aluminum.
- Spring loaded roller rides up the face of the strike, seating itself on the strike, holding the door firmly in the open position.
- A heavy rubber pad cushions the shock and absorbs the sound.
- With unit mounted on door and the strike on wall, vertical adjustment is available on body.
- The strike is adjustable 45 degrees left or right, both adjustments easily accomplished at time of installation or at a later date.

WS45 strike is furnished with wood screws for drywall mounting.

WS45X strike is furnished with a threaded stud and expansion shield for masonry type mounting.

#### Dimensions

Base Height: 3-11/16"	Strike Diameter: 2-3/8"
Base Width: 3"	Strike Projection: 3"
Base Projection: 2"	
Engaged Projection: 3-7/16"	

#### Finishes *brass*

Ives Number	US3	US4	US10	US10B	US26	US26D
BHMA	605	606	612	613	625	626

#### Finishes *aluminum*

Ives Number	US28
BHMA	628

Hinges & Pivots  
**A**

Pulls & Plates  
**B**

Flush Bolts & Coordinators  
**C**

Latches, Catches & Bolts  
**D**

Stops  
**E15**

Exterior Hardware  
**F**

Miscellaneous Hardware  
**G**

## Floor Stops

# IVES®



Meets ANSI/BHMA 156.16, L11241.

### FS9 Floor Stop & Semi-Automatic Holder

- Semi-automatic floor-mounted holders accommodates with door to floor clearance of 1-1/2" or less.
- Cast from heavy-duty brass.
- Activate holder by flipping the engagement tongue forward. When door is opened, the hook (mounted on door) engages the tongue. To release, push firmly on door to disengage tongue.
- Universal screw pack accommodates all types of floor and door construction.

#### Dimensions

Overall Height: 3-1/2"

Base Dimensions: 2" wide x 3-1/2" long

#### Finishes

Ives Number	US3	US4	US10	US10B	US26	US26D
BHMA	605	606	612	613	625	626

### FS40 Floor Stop & Automatic Holder FS41 FS42 FS43

- Automatic door holders ideal for heavy-traffic situations that require a simple, fool-proof, Hold-Open device.
- Forged from brass.
- Unit is activated automatically when door is opened. A firm pull on door releases the mechanism.
- Strikes accommodate different door to floor clearances.
- Model numbers are determined by strike/door-to-floor clearances.
- Holder position on door is adjustable.
- Universal screw pack allows for installation in all types of door construction.

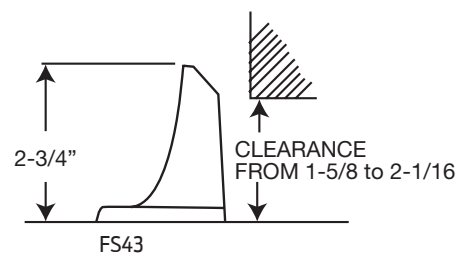
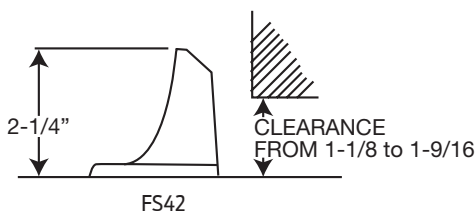
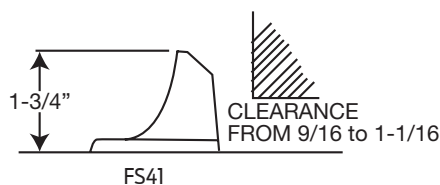
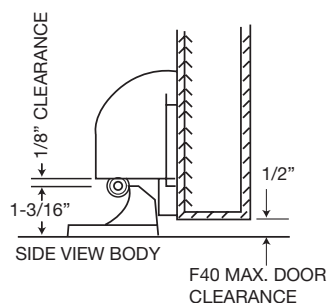
#### Dimensions

Door to Floor Clearance:	FS40	1/2" or less
	FS41	9/16" to 1-1/16"
	FS42	1-1/8" to 1-9/16"
	FS43	1-5/8" to 2-1/16"

Holder Dimensions: 3" Wide x 3-11/16" High

#### Finishes *brass*

Ives Number	US3	US4	US10	US10B	US26	US26D
BHMA	605	606	612	613	625	626





### **Glynn Johnson 104S Concealed Overhead Door Stop 33-1/16" - 39" Door (Stop Only)**

Stop-Only models provide a reliable method of door control.

Stop-Only models provide the same shock-absorbing capability as Hold-Open models. The Stop-Only model may be used on fire doors.

**Glynn-Johnson 100 series holders and stops** provide the most reliable and versatile concealed overhead door control. They are designed for installation on virtually all types of doors mounted on conventional type butt hinges, pivots, continuous hinges, swing clear hinges and numerous other specialty hinges.

When used in conjunction with many surface-applied door closers, 100 series holders and stops provide the most effective control for entrance doors and vestibule doors of all types, as well as heavy or often used interior doors.

Templates provided allow for variable mounting positions, ranging from 85° - 110° of opening

Non-handed • Improved Compatibility with Door Closers • Single/Double-Acting Doors • Interior/Exterior Applications • Reduced Door Prep • Improved Corrosion Resistance

#### **Materials and Finishes:**

In Heavy Gauge Brass or 300 Series Stainless Steel, these models offer the broadest range of finishes in the industry, complementing any design and offering the highest resistance to corrosion

Available in the following finishes: US3 Polished Brass, US4 Satin Brass, US10 Satin Bronze, US10B Oil Rubbed Bronze, US32 Polished Stainless Steel, US32D Satin Stainless Steel, SP4 Powder Coat Brass, SP10 Powder Coat Bronze, SP28 Powder Coat Aluminum, SP313 Powder Coat Dark Bronze, SPBLK Powder Coat Black

**Models:** Glynn Johnson, 100, 104, 104S, 104S32D, 104SUS32D, 104SUS32, 104SUS3, 104SUS10B, 104SSP28, 104SSP10, 104SSP4, 104SSP313

## Floor Stops – Dome

# IVES®



**FS436**  
Meets ANSI/BHMA 156.16, L12141 for brass or bronze and L32141 for aluminum.



**FS438**  
Meets ANSI/BHMA 156.16, L12141 for brass or bronze and L32141 for aluminum.

### **FS436 Dome Stop**

### **FS438 Dome Stop**

- FS436 for doors without threshold.
- FS438 for doors with threshold or undercut doors.
- Heavy-Duty Cast Dome Stops constructed of brass, bronze or aluminum.
- Packed with wood screw and plastic anchor.

Replaceable gray, non-marring rubber bumper.

### **Dimensions**

#### **FS436**

Overall Height: 1"

Base Height: 3/16"

Base Diameter: 1-3/4" x 2" Oval

#### **FS438**

Overall Height: 1-3/8"

Base Height: 9/16"

Base Diameter: 1-3/4" x 2" Oval

### **Finishes brass**

Ives Number	US3	US4	US5	US10	US10B	US15	US26	US26D	B716
BHMA	605	606	609	612	613	619	625	626	

### **Finishes aluminum**

Ives Number	US28
BHMA	628



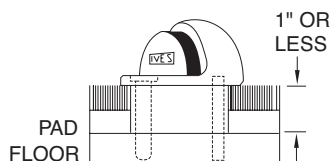
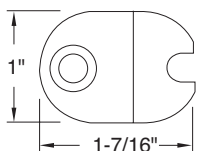
### **R435 Riser for FS436 Dome Stop**

### **R437 Riser for FS438 Dome Stop**

- Extruded aluminum, mill finish.
- R435 for conversion of FS436 Dome Stop to carpet installation.
- R437 For conversion of FS438 Dome Stop to carpet installation.
- Packed with wood screws, lead shield and stud. Specify Tampin (TPN) if required.

### **Dimensions**

Available in 1/4", 3/8", 1/2", 5/8", 3/4" and 1" height.



Hinges & Pivots  
**A**

Pulls & Plates  
**B**

Flush Bolts & Coordinators  
**C**

Latches, Catches & Bolts  
**D**

Stops  
**E3**

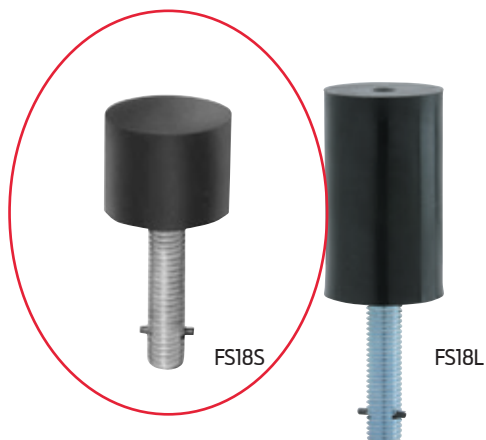
Exterior Hardware  
**F**

Miscellaneous Hardware  
**G**

**E3**

## Floor Stops

# IVES®



### FS18S FS18L Floor Stops

- Security Door Stops designed for use in high vandalism areas.
- Molded from black flame resistant, resilient material around a heavy-duty stud.
- Once grouted in concrete, leaves no exposed fasteners to be tampered with or removed.
- Ideal for jail or security cell areas where floor mounted stops are required.
- FS18L also ideal for concrete wall applications.

#### Dimensions

FS18S Height: 1-1/2"

FS18L Height: 3-1/2"

FS18S Diameter: 2"

FS18L Diameter: 2"

FS18S Stud Length: 2-1/2"

FS18L Stud Length: 2-1/2"

### FS434 Floor Stop

- Burnished wrought steel.
- For undercut doors up to 1-1/2".
- Packed with screws and plastic anchors.
- Replaceable soft, resilient gray rubber.



#### Dimensions

Overall Height: 2-5/8"

Base Size: 1-1/2" W x 2-3/4" L

#### Finishes

Ives Number	USC
BHMA	604

### 430 Floor Door Stop

- Burnished wrought steel.
- For undercut doors up to 1-1/2".
- Packed with screws and plastic anchors.
- Replaceable soft, resilient gray rubber.



#### Dimensions

Overall Height: 1-5/16"

Base Diameter: 1-1/4"

#### Finishes *brass*

Ives Number	B3	B4	B5	B10B	B15	B26	B26D
BHMA	605	606	609	613	619	625	626

#### Finishes *aluminum*

Ives Number	A3*	A5	A14	A92
BHMA	666		669	673

\* only available in Slim-Pak of 25

A  
Hinges & Pivots

B  
Pulls & Plates

C  
Flush Bolts & Coordinators

D  
Latches, Catches & Bolts

E5  
Stops

F  
Exterior Hardware

G  
Miscellaneous Hardware



## Wall Bumpers

# IVES®



WS401CCV & WS402CCV  
Meets ANSI/BHMA 156.16 L12251 for brass

WS401CVX & WS402CVX  
Meets ANSI/BHMA 156.16 L12101 for brass

### WS401CVX Wall Bumpers WS401CCV WS402CVX WS402CCV

- Constructed in heavy-duty cast brass.
- Special retainer cup makes rubber tamper resistant.

WS401CVX (401) – convex rubber bumper, packed with wood screw and plastic anchor.

WS401CCV (401-1/2) – concave rubber bumper which avoids damage to locks with projecting buttons, packed with wood screw and plastic anchor.

WS402CVX (402) – convex rubber bumper packed with screw and drywall anchor.

WS402CCV (402-1/2) – concave rubber bumper which avoids damage to locks with projecting buttons and is packed with screw and drywall anchor.

#### Dimensions

Base Diameter: 2-1/2"

Base Thickness: 3/8"

Overall Projection: 1"

#### Finishes

Ives Number	US3	US4	US10	US10B	US15	US26	US26D
BHMA	605	606	612	613	619	625	626



### WS404CVX Wall Bumpers

- Compact size.
- Constructed in cast brass.
- Totally concealed mounting discourages vandalism or tampering.
- Unit furnished with grey convex rubber bumper.
- Packed with sheet metal screw, rawl plug and brad.

#### Dimensions

Base Diameter: 1"

Overall Projection: 17/32"

#### Finishes

Ives Number	US3	US4	US5	US10	US10B	US15	US26	US26D
BHMA	605	606	609	612	613	619	625	626

A  
Hinges & Pivots

B  
Pulls & Plates

C  
Flush Bolts & Coordinators

D  
Latches, Catches & Bolts

E11  
Stops

F  
Exterior Hardware

G  
Miscellaneous Hardware

# IVES® Automatic wall holders

## WS40 Automatic wall holder

- Holder is mounted on wall and strike is mounted on door
- Roller on holder rides up seats itself on strike, with a heavy duty bumper pad deadening the sound and shock
- Packed with fasteners for light duty masonry and drywall/wood applications

### Certifications

- Meets ANSI/BHMA 156.16, L11291 for brass, and L31291 for aluminum

### Material substrate

- Made from cast brass or aluminum

### Available accessory items

- Security pin screw
- Hook package

### Dimensions

- Base height: 2"
- Base width: 2-1/2"
- Base projection: 2-1/4"
- Engaged projection: 3-1/2"
- Strike height: 2-1/16"
- Strike width: 3/4"
- Strike projection: 2"

### Finishes - Brass

BHMA	Description	Substrate	Finish
605	Bright brass	Brass	US3
606	Satin brass	Brass	US4
612	Satin bronze	Brass	US10
613	Oil rubbed bronze	Brass	US10B
625	Bright chrome	Brass	US26
626	Satin chrome	Brass	US26D

### Finishes - Aluminum

BHMA	Description	Substrate	Finish
628	Satin aluminum	Aluminum	US28

For other colors, consult factory.

## WS45 Automatic wall holder - drywall/wood

## WS45X Automatic wall holder - masonry

- Spring loaded roller rides up the face of the strike, seating itself on the strike, holding the door firmly in the open position
- A heavy rubber pad cushions the shock and absorbs the sound
- With unit mounted on door and the strike on wall, vertical adjustment is available on body
- The strike is adjustable 45 degrees left or right, both adjustments easily accomplished at time of installation or at a later date.
- WS45 is packed with fasteners for drywall/wood applications.
- WS45X is packed with fasteners for heavy duty masonry applications

### Certifications

- WS45 Meets ANSI/BHMA 156.16, L11291 for brass and L31291 for aluminum
- WS45X Meets ANSI/BHMA 156.16, L11291 for brass and L31291 for aluminum

### Material substrate

- Made from cast brass or aluminum

### Available accessory items

- Security pin screw
- Hook package

### Dimensions

- Base height: 3-11/16"
- Base width: 3"
- Base projection: 2"
- Engaged projection: 3-7/16"
- Strike diameter: 2-3/8"
- Strike projection: 3"

### Finishes - Brass

BHMA	Description	Substrate	Finish
605	Bright brass	Brass	US3
606	Satin brass	Brass	US4
612	Satin bronze	Brass	US10
613	Oil rubbed bronze	Brass	US10B
619	Satin nickel	Brass	US15
622	Matte black	Brass	BLK
625	Bright chrome	Brass	US26
626	Satin chrome	Brass	US26D
---	Aged bronze	Brass	643e/716

### Finishes - Aluminum

BHMA	Description	Substrate	Finish
628	Satin aluminum	Aluminum	US28

For other colors, consult factory.

A  
Hinges & pivotsB  
Pulls & platesC  
Flush bolts & coordinatorsD  
Latches, catches & boltsE14  
StopsF  
Exterior hardwareG  
Miscellaneous hardware

**8400 Series Protection Plates**

- Door protection plates are available in .050" thick brass, stainless steel or aluminum; and 1/8" thick high impact polyethylene in clear or black.
- Bevel edge options; specify B4E for all four edges.
- Mounting screw pack furnished standard, 16 screws per pack. Optional screw packs are available for TEK or TORK screw heads. Refer to the following chart for ordering.
- Specify NMH for no mounting holes. (Not available on 8402)
- Specify NMH-A for no mounting holes with adhesive. (Not available on 8402)
- Specify CS for counter sunk mounting holes.
- Specify ERS prepped with extra row of screws.

**Kickplate Gasket Tape** Tape is recommended when using a brass plate on a metal door to reduce tarnishing from electrolytic oxidation. One tape pack will cover an the perimeters of a 8" x 34" kickplate. Order 8401 Gasket Tape.



### 8400 Protection Plate

### 8402 (UL)\* Protection Plate

\*UL mark appears in upper right corner. Factory supplied screws must be used.

Number of screw packs required by plate size (specify TEK Screws or TORK screws).

	22"-25"	26"-33"	34"-41"	42"-48"
4"-8"	1	1	1	1
9"-16"	1	1	1	1
17"-24"	1	1	1	2
25"-32"	1	1	2	2
33"-40"	1	2	2	2
41"-48"	2	2	2	2

#### Finishes brass 24" x 48" max. size

US Number	US3	US4	US10	US10B	US15	US26	US26D
BHMA	605	606	612	613	619	625	626

#### Finishes stainless steel

US Number	US32	US32D
BHMA	629	630

#### Finishes aluminum

US Number	US28
BHMA	628

#### Finishes plastic

Clear and Black

Residential Grade Kickplates available Carded only, finishes PA28, PA3, PA619, PA716, B3, B505, B619, B716

**8400 Series Protection Plates**

- Door protection plates are available in .050" thick brass, stainless steel or aluminum; and 1/8" thick high impact polyethylene in clear or black.
- Bevel edge options; specify B4E for all four edges.
- Mounting screw pack furnished standard, 16 screws per pack. Optional screw packs are available for TEK or TORK screw heads. Refer to the following chart for ordering.
- Specify NMH for no mounting holes. (Not available on 8402)
- Specify NMH-A for no mounting holes with adhesive. (Not available on 8402)
- Specify CS for counter sunk mounting holes.
- Specify ERS prepped with extra row of screws.

**Kickplate Gasket Tape** Tape is recommended when using a brass plate on a metal door to reduce tarnishing from electrolytic oxidation. One tape pack will cover an the perimeters of a 8" x 34" kickplate. Order 8401 Gasket Tape.


**8400 Protection Plate**  
**8402 (UL)\* Protection Plate**

*\*UL mark appears in upper right corner. Factory supplied screws must be used.*

Number of screw packs required by plate size (specify TEK Screws or TORK screws).

	22"-25"	26"-33"	34"-41"	42"-48"
4"-8"	1	1	1	1
9"-16"	1	1	1	1
17"-24"	1	1	1	2
25"-32"	1	1	2	2
33"-40"	1	2	2	2
41"-48"	2	2	2	2

**Finishes brass 24" x 48" max. size**

US Number	US3	US4	US10	US10B	US15	US26	US26D
BHMA	605	606	612	613	619	625	626

**Finishes stainless steel**

US Number	US32	US32D
BHMA	629	630

**Finishes aluminum**

US Number	US28
BHMA	628

**Finishes plastic**

Clear and Black

Residential Grade Kickplates available Carded only, finishes PA28, PA3, PA619, PA716, B3, B505, B619, B716



## Architectural Door Trim

<b>A</b>	Hinges & Pivots
<b>B6</b>	Pulls & Plates
<b>C</b>	Flush Bolts & Coordinators
<b>D</b>	Latches, Catches & Bolts
<b>E</b>	Stops
<b>F</b>	Exterior Hardware
<b>G</b>	Miscellaneous Hardware



**8200 Push Plate**  
**8300 Pull Plate, Prep for Pull (less pull)**

### Available Sizes

3" x 12"

3.5" x 15"

4" x 16"

6" x 16"

8" x 16"

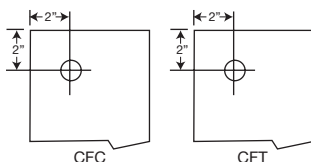
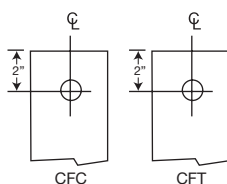
*Special sizes are available. Consult factory.*

### Plates Cut for Cylinder or Thumbturns

Plates are available with cutout for cylinder or thumbturn; standard cutout is 2" from top and centered on plates up to 4" wide. For plates wider than 4" cutout is located 2" from outer edge, specify LH or RH. When pull location interferes with standard cutout location a detail drawing should be furnished with the order.

Standard cutout is 1-1/4" for cylinder and 3/8" for thumbturn.

Specify CFC for cutout for cylinder or CFT for cutout for thumbturn.



### Finishes brass

US Number	US3	US4	US10	US10B	US15	US26	US26D*
BHMA	605	606	612	613	619	625	626

### Finishes stainless steel

US Number	US32D*
BHMA	630

### Finishes aluminum

US Number	US28
BHMA	628

*\* Available with Antimicrobial Coating, use suffix AM*

## Architectural Door Trim

# IVES®



### 8302 Pull plate

Available mounting – Standard, F, G, H-I-L, or J see pages B15 and B16  
Pulls have new heavy duty 5/16-18" mounting.

8300 Plate	8102 Pull
3-1/2" x 15"	6" centers
4" x 16"	8" centers
6" x 16"	10" centers

#### Finishes brass

US Number	US3	US4	US10	US10B	US26	US26D*
BHMA	605	606	612	613	625	626

#### Finishes stainless steel

US Number	US32D*
BHMA	630

#### Finishes aluminum

US Number	US28
BHMA	628

\* Available with Antimicrobial Coating, use suffix AM



### 8303 Pull plate

Available mounting – Standard, F, G, H-I-L, or J see pages B15 and B16  
Pulls have new heavy duty 3/8-16" mounting.

8300 Plate	8103 Pull
3-1/2" x 15"	8" centers
4" x 16"	10" centers
6" x 16"	7" centers

#### Finishes brass

US Number	US3	US4	US10	US10B	US26	US26D*
BHMA	605	606	612	613	625	626

#### Finishes stainless steel

US Number	US32D*
BHMA	630

#### Finishes aluminum

US Number	US28
BHMA	628

\* Available with Antimicrobial Coating, use suffix AM



### 8305 Pull plate

Available mounting – Standard or F see page B15  
Pulls have 1/4 - 20" mounting

8300 Plate	8105 Pull
3-1/2" x 15"	6" centers
4" x 16"	8" centers
6" x 16"	10" centers

#### Finishes brass

US Number	US3	US4	US10	US10B	US26	US26D
BHMA	605	606	612	613	625	626

#### Finishes stainless steel

US Number	US32D
BHMA	630

#### Finishes aluminum

US Number	US28
BHMA	628

\* Available with Antimicrobial Coating, use suffix AM

A  
Hinges & Pivots

B7  
Pulls & Plates

C  
Flush Bolts & Coordinators

D  
Latches, Catches & Bolts

E  
Stops

F  
Exterior Hardware

G  
Miscellaneous Hardware

**A**

Hinges &amp; Pivots

**B8**

Pulls &amp; Plates

**C**

Flush Bolts &amp; Coordinators

**D**

Latches, Catches &amp; Bolts

**E**

Stops

**F**

Exterior Hardware

**G**

Miscellaneous Hardware

**8311 Pull plate***Available mounting – Standard or F see page B15**Pulls have 1/4-20" mounting.***8300 Plate**

3-1/2" x 15"

4" x 16"

6" x 16"

**8111-5 Pull**

5-1/8" centers

**Finishes brass**

US Number	US3	US4	US10	US10B	US26	US26D*
BHMA	605	606	612	613	625	626

**Finishes stainless steel**

US Number	US32D*
BHMA	630

**Finishes aluminum**

US Number	US28
BHMA	628

*\* Available with Antimicrobial Coating, use suffix AM***9100 Series Push Bar and Pull Combinations**

- Available in brass, stainless steel or aluminum.
- Standard fasteners furnished for 1-3/4" thick doors. Specify door thick if other than standard.
- Special lengths are available, contact customer service.

See page B17 for special mounting requirements.

Caution – the length of the pushbar should not interfere with the door jamb or cause a pinch point.

**9100HD Push Bar***Available mounting – NO or NS see page B17**with heavy duty 3/8-16" mounting*

Product No.	Projection	Clearance	Center to Center	Overall Length
9100-28	2-1/2"	1-1/2"	28"	29"
9100-33	2-1/2"	1-1/2"	33"	34"

*Special lengths available, consult factory***Finishes brass**

US Number	US3	US4	US10	US10B	US15	US26	US26D*
BHMA	605	606	612	613	619	625	626

**Finishes stainless steel**

US Number	US32	US32D*
BHMA	629	630

*\* Available with Antimicrobial Coating, use suffix AM*

# Lock Guards **IVES**



## **LG11 Lock Guard**

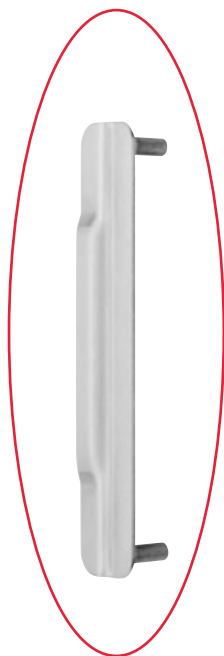
- Designed for use on aluminum doors with latch-type locks or doors equipped with electric strikes.
- Unit is Handed - Specify left or right hand when ordering.
- No exposed fasteners on face of unit.
- Unique design provides maximum security, virtually eliminating the opening between door and frame at latch point.
- Available in 13 Gauge Stainless Steel or 12 Gauge Steel.

### **Dimensions**

2-1/2" Wide x 9-1/2" High  
Stud center to center: 8-1/2"

### **Finishes**

Ives Number	US32D	SP313
BHMA	630	695



## **LG12 Lock Guard**

- Narrow design unit for use on rose or escutcheon 3-1/2" or less.
- For use with Type 86 Mortise and Type 161 Cylinder Locks (ANSI 156.13 Series 1000 and ANSI 156.2 Series 4000).
- No exposed fasteners on face of unit.
- Unique design provides maximum security, virtually eliminating the opening between door and frame at the latch point.
- Available in 13 Gauge Stainless Steel or 12 Gauge Steel

### **Dimensions**

1-1/2" Wide x 9-1/2" High  
Stud center to center: 8-1/2"

### **Finishes**

Ives Number	USP	US32D
BHMA	600	630

A  
Hinges & Pivots

B  
Pulls & Plates

C  
Flush Bolts & Coordinators

D  
Latches, Catches & Bolts

E  
Stops

F3  
Exterior Hardware

G  
Miscellaneous Hardware



# Door Silencers IVES®



Meets ANSI/BHMA 156.16, L03011.



Meets ANSI/BHMA 156.16, L03021



## SR64 Door Silencer

- For use on metal frames featuring pneumatic design that, once installed, forms an air pocket to absorb shock and reduce noise of door closing.
- Tamper-proof once installed on the frame.
- Proper installation also eliminates door rattle and provides constant tension for door latches or locks.

Packed in bags of 100.  
Grey Available in bulk pack of 2500.  
Each bag has an installation tool included.

### Dimensions

Diameter: 1/2"  
Thickness: 1/8"

### Finishes

GRY, TAN

## SR65 Door Silencer

- For use on wood frames, also feature pneumatic design to cushion shock and absorb noise.
- To prevent removal, a small brad should be driven into stop strip and through stem of silencer, as shown in the detail.

Packed in bags of 100.

### Dimensions

Height: 3/4"  
Diameter: 3/8"  
Thickness: 1/8"

### Finishes

GRY

## SR66 Door Silencer

- Self Adhesive Rubber Silencers.
- Economical installation requires no drilling of frames.

Packed two sheets of 50 (100 minimum).

### Dimensions

Diameter: 1/2"  
Thickness: 1/8"

### Finishes

BRN, GRY, WHT

A  
Hinges & Pivots

B  
Pulls & Plates

C  
Flush Bolts & Coordinators

D  
Latches, Catches & Bolts

E23  
Stops

F  
Exterior Hardware

G  
Miscellaneous Hardware



# Saddle thresholds

Thresholds

Automatic door bottoms

Perimeter seals

Weatherstripping

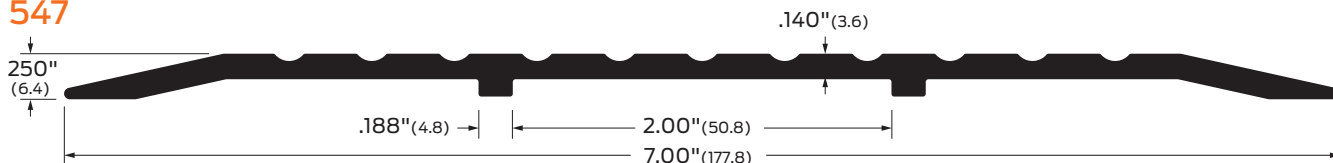
Intumescent

Sound control

Specialty applications

Appendix

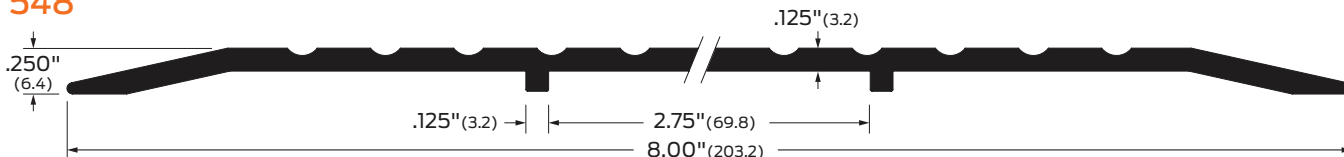
547



Finishes: A, BK, D, G Options: E, EL, V3, EV3, ELV3 ANSI/BHMA: 547A, 547BK, 547D, 547G J32100, J32130 547A-E, 547BK-E, 547D-E, 547G-E J32200, J32230

Supplied without mounting holes.

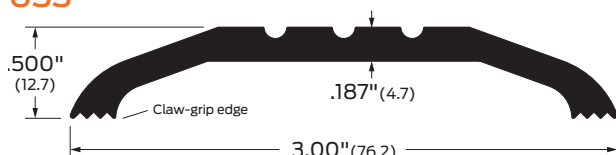
548



Finishes: A, BK, D, G Options: E, EL, V3, EV3, ELV3 ANSI/BHMA: 548A, 548BK, 548D, 548G J32100, J32130 548A-E, 548BK-E, 548D-E, 548G-E J32200, J32230

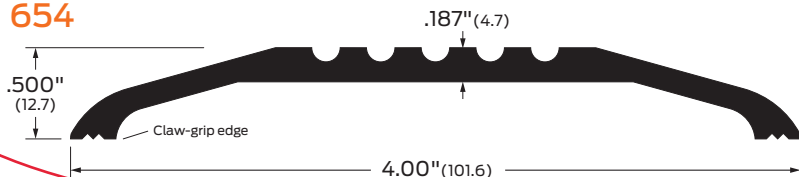
Supplied without mounting holes.

653



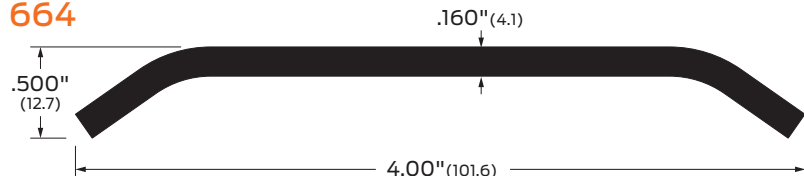
Finishes: A, BK, D, G Options: E, EL, V3, EV3, ELV3 ANSI/BHMA: 653A, 653BK, 653D, 653G J32100, J32130 653A-E, 653BK-E, 653D-E, 653G-E J32200, J32230

654



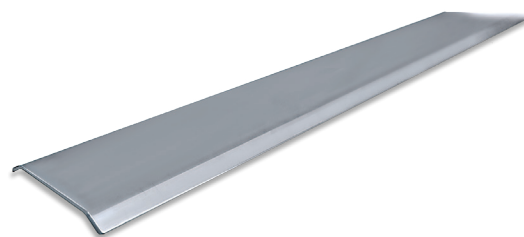
Finishes: A, BK, D, G, B, B-ORB Options: E, EL, V3, EV3, ELV3 (not available for B-ORB finish) ANSI/BHMA: 654A, 654BK, 654D, 654G J32100, J32130 654A-E, 654BK-E, 654D-E, 654G-E J32200, J32230 654B J12100, J12130 654B-E J12200, J12230

664



Finishes: Stainless steel only Options: E, EL, V3, EV3, ELV3 ANSI/BHMA: 664STST J52300 664STST-E J52400

E-Epoxy recommended for public access openings



See Thresholds Accessories & options page for details.

## Finishes:

**A** Aluminum mill finish  
**BK** Aluminum black anodized  
**D** Aluminum dark bronze anodized  
**G** Aluminum gold anodized  
**B** Bronze, architectural mill finish  
**B-ORB** Oil-rubbed bronze

## Options:

**E** Epoxy abrasive tread  
**EL** Photoluminescent and abrasive epoxy tread  
**V3** Full body strength fill  
**EV3** Epoxy and full body strength fill  
**ELV3** Photoluminescent and abrasive epoxy tread, full body strength fill

## Note:

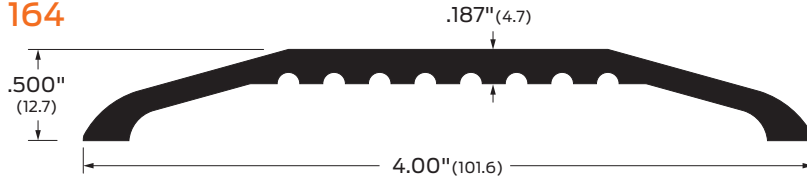
Special anchors available for mounting most thresholds on concrete surfaces.



## Thresholds

## Saddle thresholds

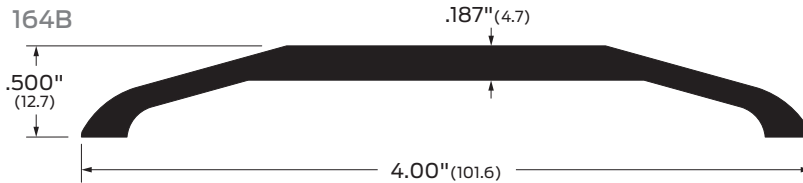
## 164



**Finishes:** A, BK, D, G **ANSI/BHMA:** 164A, 164BK, 164D, 164G J32300, J32330  
164A-E, 164BK-E, 164D-E, 164G-E J32400, J32430

Model #654 is a recommended alternative if epoxy and/or body strength fills are desired.

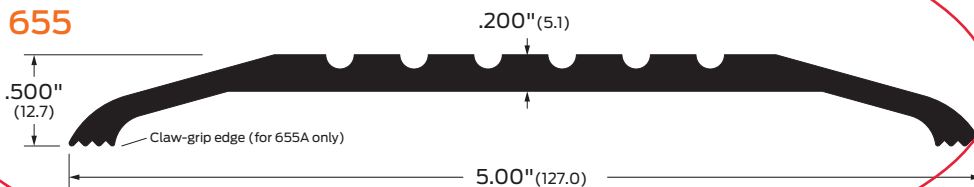
## 164B



**Finishes:** B, B-ORB **ANSI/BHMA:** 164B J12100, J12130  
164B-E J12200, J12230

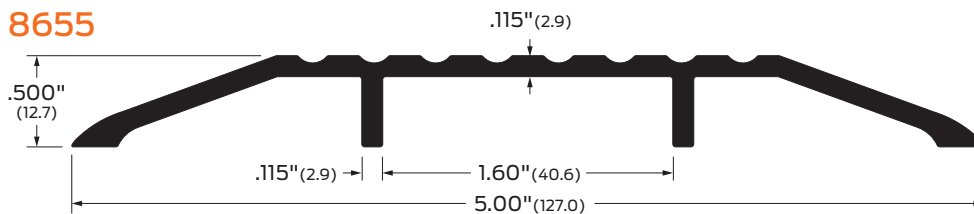
Model #654 is a recommended alternative if epoxy and/or body strength fills are desired.

## 655



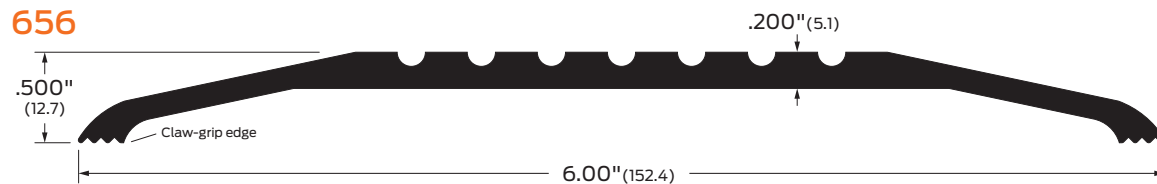
**Finishes:** A, BK, D, G, E, EL, V3, EV3, ELV3 **ANSI/BHMA:** 655A, 655BK, 655D, 655G J32100, J32130  
655A-E, 655BK-E, 655D-E, 655G-E J32200, J32230  
655B J12100, J12130  
655B-E J12200, J12230  
(not available for B-ORB finish)

## 8655



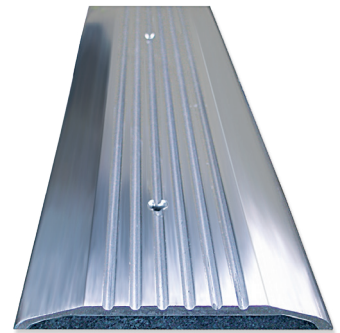
**Finishes:** A, BK, D, G, E, EL, V3, EV3, ELV3 **ANSI/BHMA:** 8655A, 8655BK, 8655D, 865G J32100, J32130  
8655A-E, 8655BK-E, 8655D-E, 8655G-E J32200, J32230

## 656



**Finishes:** A, BK, D, G, B, B-ORB **ANSI/BHMA:** 656A, 656BK, 656D, 656E J32100, J32130  
656A-E, 656BK-E, 656D-E, 656G-E J32200, J32230  
656B J12100, J12130  
656B-E J12200, J12230  
(not available for B-ORB finish)

Supplied without mounting holes.



655A-V3 (Full body strength)

See Thresholds Accessories & options page for details.

## Finishes:

**A** Aluminum mill finish  
**BK** Aluminum black anodized  
**D** Aluminum dark bronze anodized  
**G** Aluminum gold anodized  
**B** Bronze, architectural mill finish  
**B-ORB** Oil-rubbed bronze

## Options:

**E** Epoxy abrasive tread  
**EL** Photoluminescent and abrasive epoxy tread  
**V3** Full body strength fill  
**EV3** Epoxy and full body strength fill  
**ELV3** Photoluminescent and abrasive epoxy tread, full body strength fill

## Note:

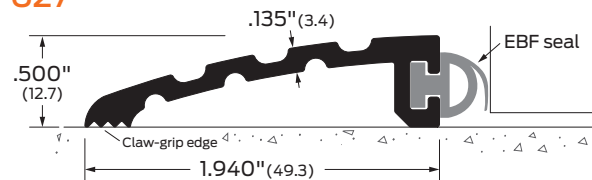
Special anchors available for mounting most thresholds on concrete surfaces.



Thresholds

# Half-saddle threshold

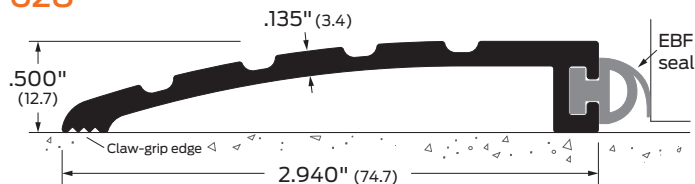
627



**Finishes:** A, BK, D, G  
**Options:** E, EL, V3, EV3, ELV3  
**ANSI/BHMA:** 627A, 627D, 627G, 627BK, 627A-E, 627D-E, 627G-E, 627BK-E  
J33100, J33120, J33200

Neoprene extruded bulb/finger for double-sealing protection.

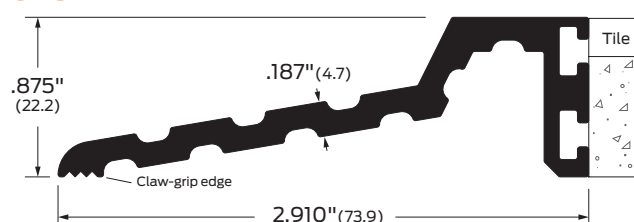
628



**Finishes:** A, BK, D, G  
**Options:** E, EL, V3, EV3, ELV3

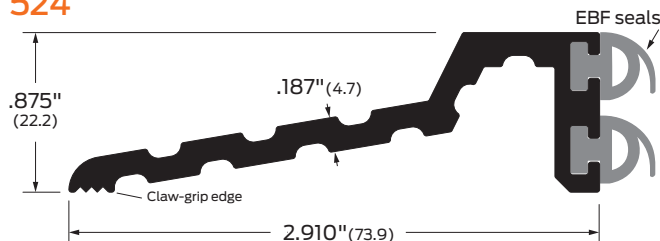
Neoprene extruded bulb/finger for double-sealing protection.

523



**Finishes:** A, BK, D, G  
**Options:** E, EL, V3, EV3, ELV3  
**BHMA CERTIFIED**  
**ANSI/BHMA:** 523A, 523D, 523G, 523BK, 523A-E, 523D-E, 523G-E, 523BK-E  
J33100, J33160, J33180, J33200, J33260

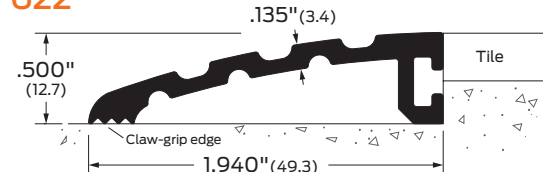
524



**Finishes:** A, BK, D, G  
**Options:** E, EL, V3, EV3, ELV3  
**BHMA CERTIFIED**  
**ANSI/BHMA:** 524A, 524D, 524G, 524BK, 524A-E, 524D-E, 524G-E, 524BK-E  
J33100, J33200

Neoprene extruded bulb/finger for double-sealing protection.

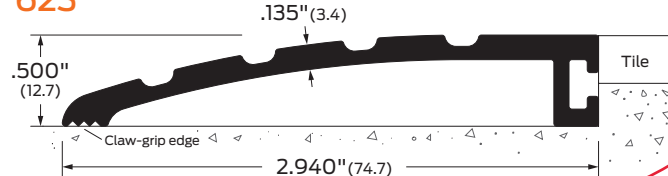
622



**Finishes:** A, BK, D, G  
**Options:** E, EL, V3, EV3, ELV3  
**BHMA CERTIFIED**  
**ANSI/BHMA:** 622A, 622D, 622G, 622BK, 622A-E, 622D-E, 622G-E, 622BK-E  
J33100, J33160, J33180, J33200, J33260

Also suitable for use as carpet divider threshold.  
ADA compliant when installed flush with the flooring

623



**Finishes:** A, BK, D, G  
**Options:** E, EL, V3, EV3, ELV3

Also suitable for use as carpet divider threshold.  
ADA compliant when installed flush with the flooring

See Thresholds Accessories & options page for details.

**Finishes:**

**A** Aluminum mill finish  
**BK** Aluminum black anodized  
**D** Aluminum dark bronze anodized  
**G** Aluminum gold anodized  
**B** Bronze, architectural mill finish  
**B-ORB** Oil-rubbed bronze

**Options:**

**E** Epoxy abrasive tread  
**EL** Photoluminescent and abrasive epoxy tread  
**V3** Full body strength fill  
**EV3** Epoxy and full body strength fill  
**ELV3** Photoluminescent and abrasive epoxy tread, full body strength fill

**Note:**

Special anchors available for mounting most thresholds on concrete surfaces.



## Pemko 085698 PDB4131CE36 Automatic Door Bottom, Clear

- End Plates Are Provided For All Mounting Applications
- All Pemko Automatic Door Bottoms Are Provided Net Length
- When The Plunger Contacts The Jamb, The Drop Bar Seal Actuates From The Hinge Side First Allowing Multiple Compression Points
- Unit Count: 1.0

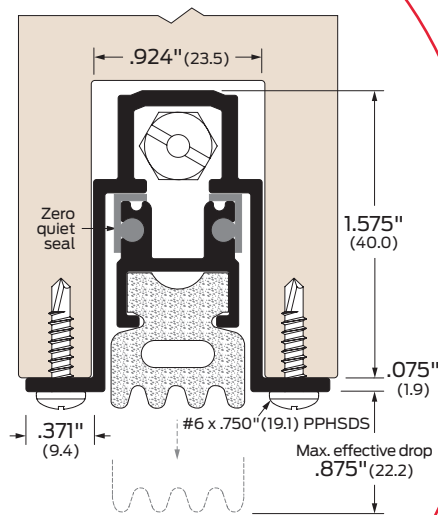
### Specifications for this item

Brand Name	Pemko
Ean	0049306856980
Global Trade Identification Number	00049306856980
Item Weight	3.00 pounds
Material	Aluminum
Model Number	085698
Number of Items	1
Part Number	085698
UNSPSC Code	40000000
UPC	049306856980
Width	2.0 inches



# Heavy duty

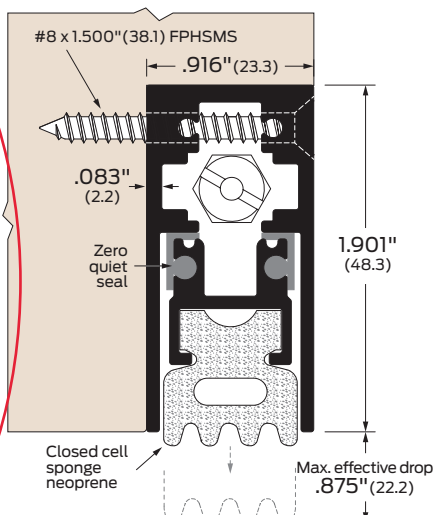
360



**Finishes:** AA  
**Options:** LS, Z49  
End Cap,  
PL, NH  
**ANSI/BHMA:**  
360AA R3C3241  
**BHMA**  
CERTIFIED

Mortised. Supplied with closed cell sponge neoprene.  
Note: Consult your local AHJ for maximum allowable door undercut.

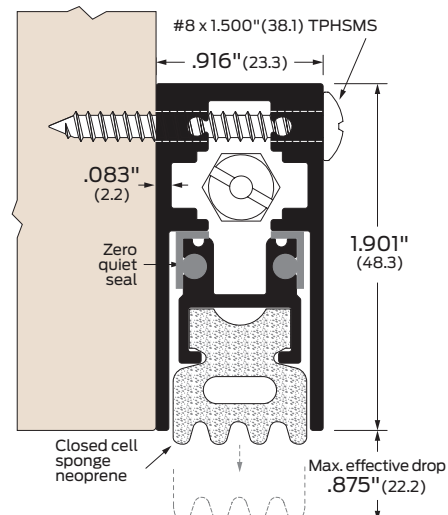
362



**Finishes:** AA, BK,  
D, G  
**Options:** LS, PL,  
SEC, LK, NH  
**ANSI/BHMA:**  
362AA, 362BK, 362D, 362G R3B3441  
**BHMA**  
CERTIFIED

Semi-mortised applications. Supplied with closed cell sponge neoprene.  
Note: Consult your local AHJ for maximum allowable door undercut.

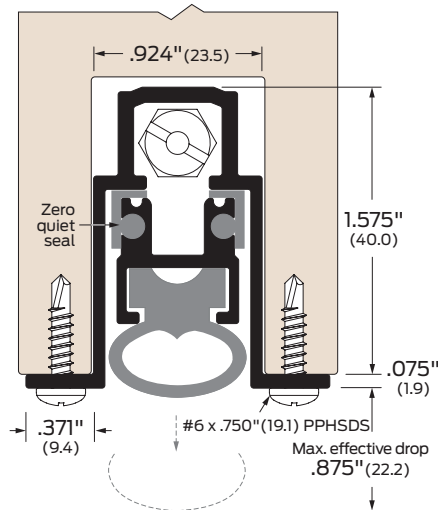
361



**Finishes:** AA, BK,  
D, G  
**Options:** LS, PL,  
NH, LK, SEC  
**ANSI/BHMA:**  
361AA, 361BK, 361D, 361G R3C3341  
**BHMA**  
CERTIFIED

Surface-mounted applications. Supplied with closed cell sponge neoprene.

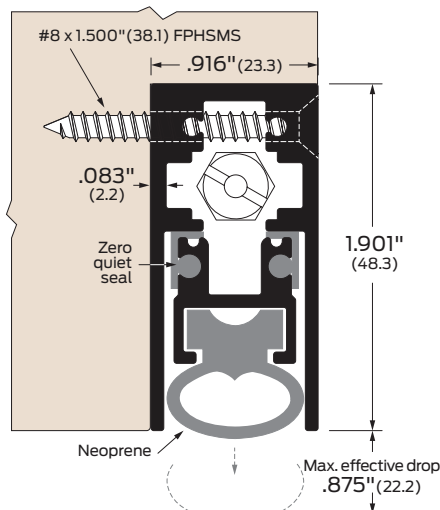
364



**Finishes:** AA  
**Options:** LS, Z49  
End Cap,  
PL, NH  
**ANSI/BHMA:**  
364AA R3B3241  
**BHMA**  
CERTIFIED

Mortised. Supplied with solid neoprene extrusion.  
Note: consult your local AHJ for maximum allowable door undercut.

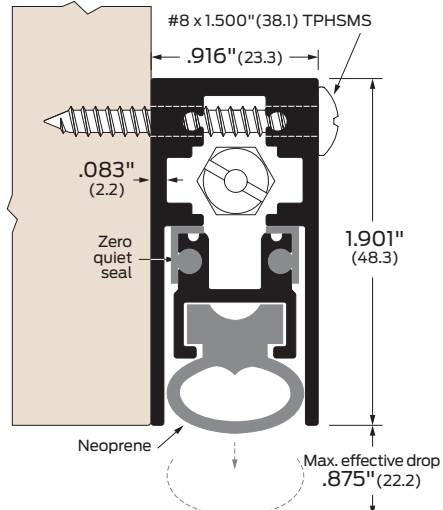
366



**Finishes:** AA, BK,  
D, G  
**Options:** LS, PL, SEC,  
LK, NH  
**ANSI/BHMA:**  
366AA, 366BK, 366D, 366G R3B3441  
**BHMA**  
CERTIFIED

Semi-mortised applications. Supplied with solid neoprene extrusion.  
Note: Consult your local AHJ for maximum allowable door undercut.

365



**Finishes:** AA, BK,  
D, G  
**Options:** LS, PL, SEC,  
LK, NH  
**ANSI/BHMA:**  
365AA, 365BK, 365D, 365G R3B3341  
**BHMA**  
CERTIFIED

Surface-mounted applications.  
Supplied with solid neoprene extrusion.

See ADB Accessories & options page for details.

## Finishes:

**AA** Aluminum clear anodized  
**BK** Aluminum black anodized  
**D** Aluminum dark bronze anodized  
**G** Aluminum gold anodized

## Options:

**LS** Light spring  
**FLO** Air flow/ sound block  
**Z49** Removable end cap  
**PL** Pull out  
**SEC** Torx security screws  
**LK** Locking key  
**NH** No holes

## Note:

Maximum order length is 60" unless noted otherwise. Lengths up to 96" on some models available as engineering special order.

Lengths 10" - 18" available only with light spring drop mechanism.  
Not recommended for maximum drop greater than .500".

Except where noted, all models on this page are shipped in standard LH/RHR configuration with locking screw concealed (facing the door). Handing is reversible.



# Door sweeps

Thresholds

Automatic door bottoms

Perimeter seals

Weatherstripping

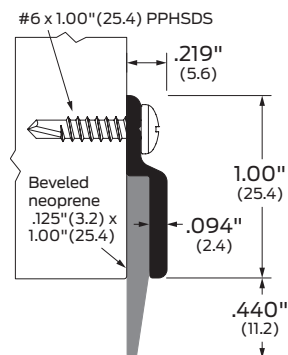
Intumescent

Sound control

Specialty applications

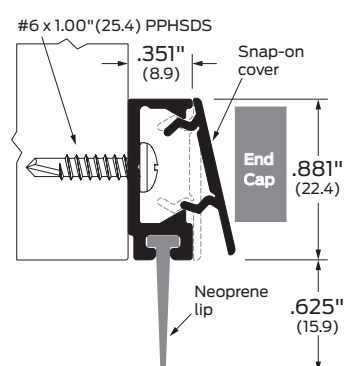
Appendix

## 50M



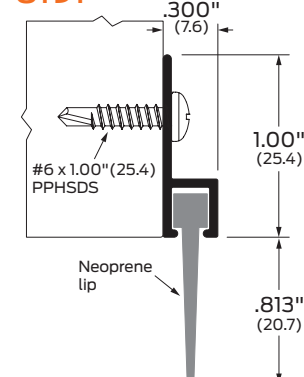
Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 50MAA, 50MBK, 50MD, 50MG R3B434  
**BHMA** CERTIFIED

## 477



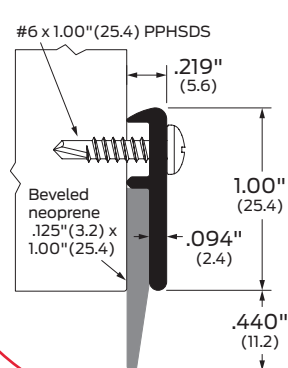
Finishes: AA, BK, D, G Options: SEC, End Cap ANSI/BHMA: 477AA, 477BK, 477D, 477G R3B434  
**BHMA** CERTIFIED  
Specify End Cap option for a clean look on edges.

## 8191



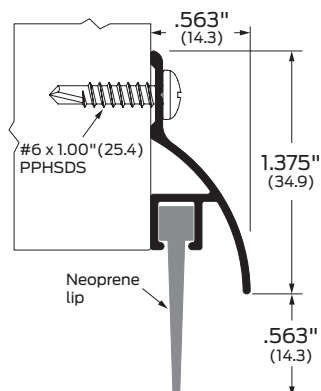
Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 8191AA, 8191BK, 8191D, 8191G R3B434  
**BHMA** CERTIFIED

## 329



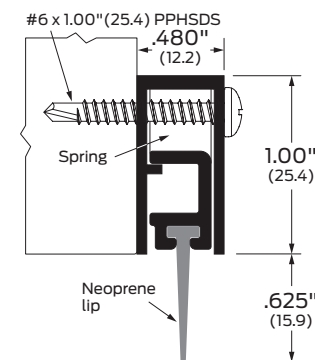
Finishes: AA, BK, D, G, B, B-ORB Options: SEC ANSI/BHMA: 329AA, 329BK, 329D, 329G R3B434 R1B434  
**BHMA** CERTIFIED

## 8197



Finishes: AA, BK, D, G Options: SEC ANSI/BHMA: 8197AA, 8197BK, 8197D, 8197G R3B536  
**BHMA** CERTIFIED

## 571



Finishes: AA, BK, D, G Options: SEC

See Perimeter seals Accessories & options page for details.

### Finishes:

**A** Aluminum mill finish  
**AA** Aluminum clear anodized  
**BK** Aluminum black anodized  
**D** Aluminum dark bronze anodized  
**G** Aluminum gold anodized  
**B** Bronze, architectural mill finish  
**B-ORB** Oil-rubbed aged bronze

### Options:

**FLO** Air flow/ sound block  
**PSA** Pressure-sensitive adhesive  
**ZAG** Ligature resistant gasketing  
**S** Order as a set  
**SEC** Security screws

### Note:

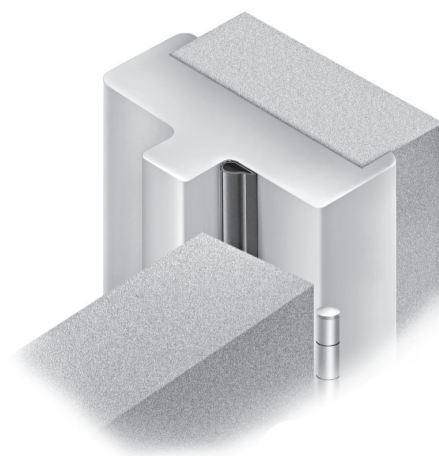


# Weatherstripping

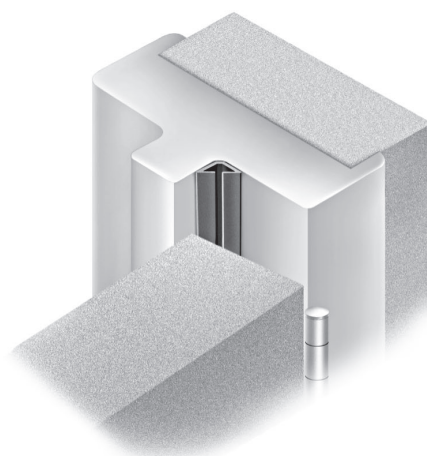


## Self-adhesive weatherstripping

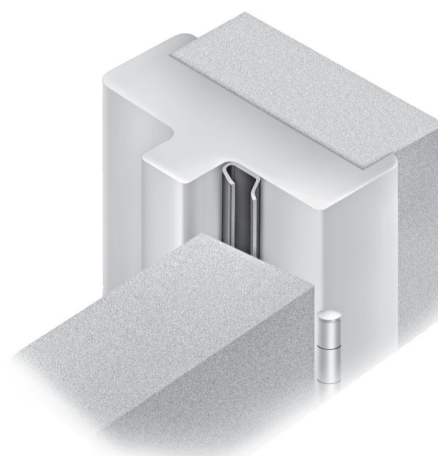
### Solid neoprene and silicone seals



188 /488

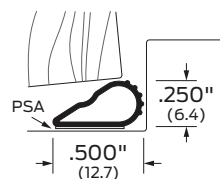


8144



8042

#### 188S/188FS/188BIO



**Material/ Finishes:**  
S: BK, BR, CL, GY, WH  
FS: BK  
BIO: BR

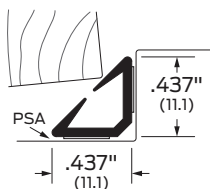
**Options:**  
ZAG  
ZAG  
ZAG

**ANSI/BHMA:**  
188S ROE151  
188FS ROU154  
-

**BHMA CERTIFIED**

S: PSA standard. 20-minute fire rating.  
FS: Intumescent rubber for fire and smoke protection. PSA standard. 45-minute fire rating.  
BIO: BioWall antimicrobial rubber. PSA standard.

#### 8144S/8144FS



**Finishes:**  
S: BK, WH  
FS: BK

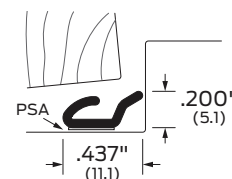
**Options:**  
ZAG  
ZAG

**ANSI/BHMA:**  
8144S ROE154  
8144FS ROU154

**BHMA CERTIFIED**

S: PSA standard.  
FS: Intumescent rubber for fire and smoke protection. PSA standard.

#### 8042S



**Finishes:**  
BK

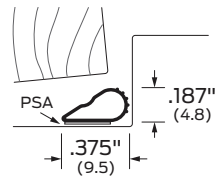
**Options:**  
ZAG

**ANSI/BHMA:**  
8042S ROE154

**BHMA CERTIFIED**

PSA standard.

#### 488S/488FS/488BIO



**Material/ Finishes:**  
S: BK, BR, CL, GY, WH  
FS: BK  
BIO: BR

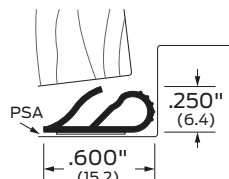
**Options:**  
ZAG  
ZAG  
ZAG

**ANSI/BHMA:**  
488S ROE154  
488FS ROU154  
-

**BHMA CERTIFIED**

S: PSA standard.  
FS: Intumescent rubber for fire and smoke protection. PSA standard.  
BIO: BioWall antimicrobial rubber. PSA standard.

#### 8145S



**Finishes:**  
BK, BR

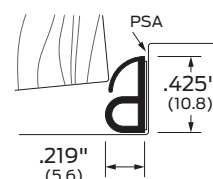
**Options:**  
ZAG

**ANSI/BHMA:**  
8145S ROE154

**BHMA CERTIFIED**

PSA standard.

#### 824N



**Finishes:**  
BK

**Options:**  
ZAG

**ANSI/BHMA:**  
824N ROE154

**BHMA CERTIFIED**

PSA standard.

See Weatherstripping Accessories & options page for details.

#### Finishes:

**BK** Black  
**BR** Brown  
**CL** Clear  
**GY** Gray  
**WH** White  
**B** Architectural mill finish bronze  
**Z** Mill finish Zinc

#### Options:

**PSA** Pressure-sensitive adhesive  
**ZAG** Ligature-resistant gasketing

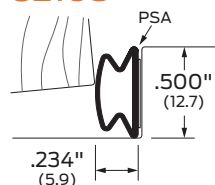




# Self-adhesive weatherstripping

## Solid neoprene and silicone seals (cont.)

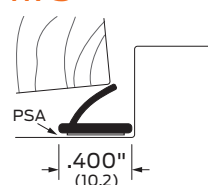
### 8216S



Finishes: BK  
Options: ZAG  
ANSI/BHMA: 8216S R0E154

PSA standard.

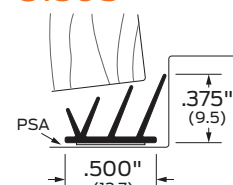
### 117S



Finishes: BK  
Options: ZAG  
ANSI/BHMA: 117S R0E154

PSA standard.

### 8150S

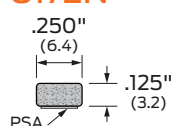


Finishes: BK  
Options: ZAG  
ANSI/BHMA: 8150S R0E154

PSA standard.

## Closed cell sponge neoprene seals

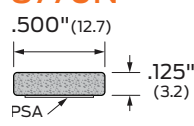
### 8172N



Finishes: BK  
Options: ZAG  
ANSI/BHMA: 8172N R0C155

PSA standard.

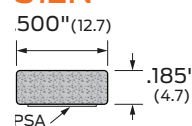
### 8770N



Finishes: BK  
Options: ZAG  
ANSI/BHMA: 8770N R0C155

PSA standard.

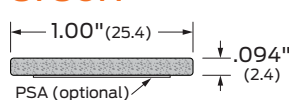
### 312N



Finishes: BK  
Options: ZAG  
ANSI/BHMA: 312N R0C155

PSA standard.

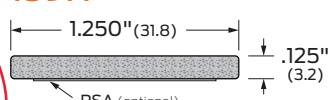
### 8780N



Finishes: BK  
Options: PSA, ZAG  
ANSI/BHMA: 8780N R0C155

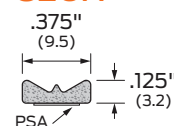
Mullion seal

### 139N



Finishes: BK  
Options: PSA, ZAG

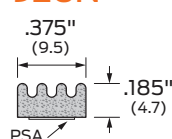
### 826N



Finishes: BK  
Options: ZAG  
ANSI/BHMA: 826N R0C155

PSA standard.

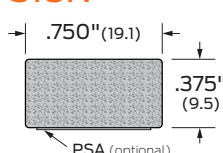
### 926N



Finishes: BK  
Options: PSA, ZAG  
ANSI/BHMA: 926N R0C155

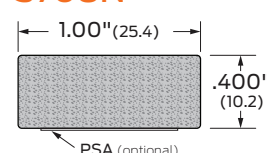
PSA standard.

### 318N



Finishes: BK  
Options: PSA, ZAG

### 3708N



Finishes: BK  
Options: PSA, ZAG

See Weatherstripping Accessories & options page for details.

#### Finishes:

BK Black  
BR Brown  
CL Clear  
GY Gray  
WH White  
B Architectural mill finish bronze  
Z Mill finish Zinc

#### Options:

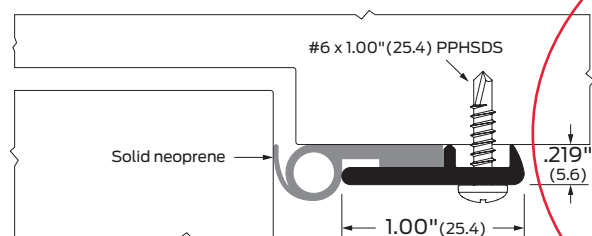
PSA Pressure-sensitive adhesive  
ZAG Ligature-resistant gasketing

Perimeter seals



# Head and jamb gasketing

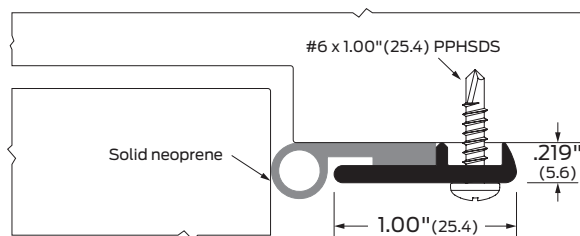
326



**Finishes:** AA, BK, D, G, B, B-ORB  
**Options:** ZAG, S, SEC  
**ANSI/BHMA:** 326AA, 326BK, 326D, 326G, 326B, R3B164, R1B164  
**BHMA CERTIFIED**

Extruded Bulb/Finger for double-sealing protection.

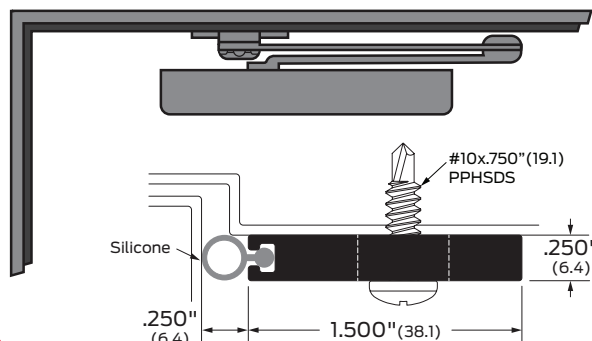
328



**Finishes:** AA, BK, D, G, B, B-ORB  
**Options:** ZAG, S, SEC  
**ANSI/BHMA:** 328AA, 328BK, 328D, 328G, 328B, R3B164, R1B164  
**BHMA CERTIFIED**

ZAG option for mental health applications includes security screws

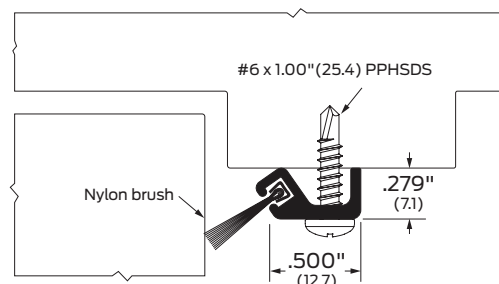
429



**Finishes:** AA, BK, D, G  
**Options:** S, SEC  
**ANSI/BHMA:** 429AA, 429BK, 429D, 429G, R3E164  
**BHMA CERTIFIED**

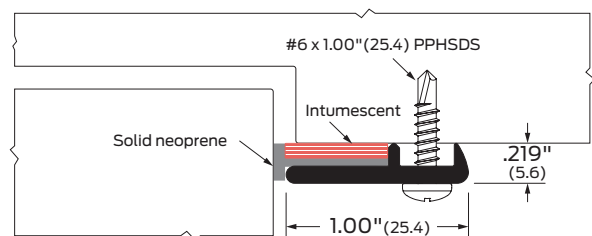
Gasketing protection for closer bracket or door coordinator.

8305



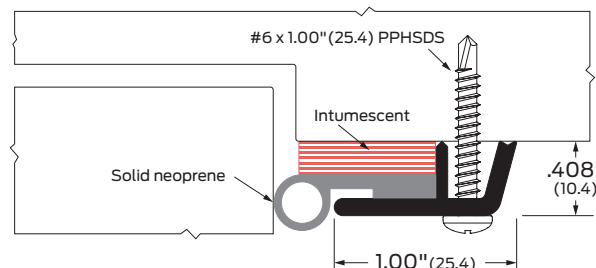
**Finishes:** AA, BK, D, G  
**Options:** S, SEC  
**ANSI/BHMA:** 8305AA, 8305BK, 8305D, 8305G, R3A166  
**BHMA CERTIFIED**

302FS



**Finishes:** AA, BK, D, G, B  
**Options:** S, SEC  
**ANSI/BHMA:** 302FS-AA, 302FS-BK, 302FS-D, 302FS-G, R3R164  
**BHMA CERTIFIED**

328FS



**Finishes:** AA, BK, D, G  
**Options:** S, SEC  
**ANSI/BHMA:** 328FS-AA, 328FS-BK, 328FS-D, 328FS-G, R3R164  
**BHMA CERTIFIED**

See Perimeter seals Accessories & options page for details.

Finishes:	Options:
<b>A</b> Aluminum mill finish	<b>FLO</b> Air flow/ sound block
<b>AA</b> Aluminum clear anodized	<b>PSA</b> Pressure-sensitive adhesive
<b>BK</b> Aluminum black anodized	<b>ZAG</b> Ligature resistant gasketing
<b>D</b> Aluminum dark bronze anodized	<b>S</b> Order as a set
<b>G</b> Aluminum gold anodized	<b>SEC</b> Security screws
<b>B</b> Bronze, architectural mill finish	
<b>B-ORB</b> Oil-rubbed aged bronze	

Note:

Perimeter seals



# Accessories and options



## Security thru sex bolt

Offered for models #43 SP and #43STST, this assembly consists of:

- 1/4-20 X .75" (25.4) FPHSMS
- 1/4-20 X 1.50" (25.4) sex bolt

It may be used with doors up to 1 3/4" thick.

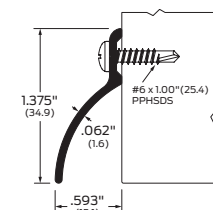
## Replacement rubber seals

Replacement seals are available for perimeter seal models containing rubber components. See appendix for replacement rubber seals. If viewing an interim version of the catalog, please contact Tech Support for replacement rubber information.

## Specialized perimeter seal accessories

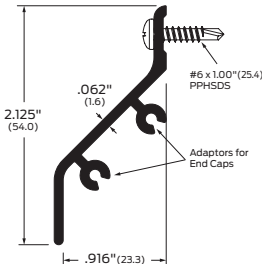
Specialty exterior protection – Rain drips water shed for outswing doors.

### 11 Rain drip



Finishes: AA, BK, D, G Options: SEC  
ANSI/BHMA: 11AA, 11BK, 11D, 11G R3Y936

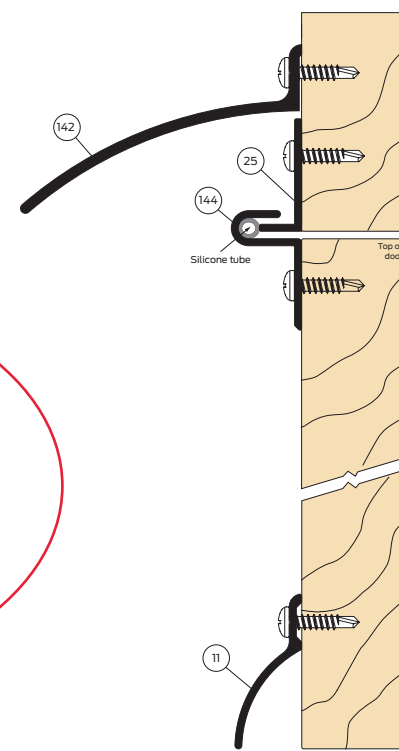
### 141 Rain drip



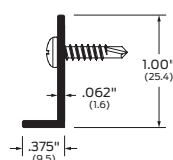
Finishes: AA, BK, D, G Options: SEC  
ANSI/BHMA: 141AA, 141BK, 141D, 141G R3Y936

### Application

Order components separately.

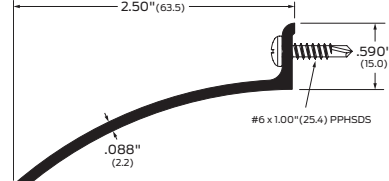


### 25 Interlocking angle



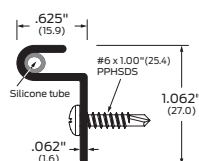
Finishes: AA, BK, D, G Options: SEC  
This accessory can be used interlocking with rain seal model #144 to impede water ingress through perimeter seals on out-swinging doors.

### 142 Rain drip



Finishes: AA, BK, D, G Options: SEC  
ANSI/BHMA: 142AA, 142BK, 142D, 142G R3Y976

### 144



Finishes: AA, BK, D, G Options: SEC

See Perimeter seals Accessories & options page for details.

#### Finishes:

- A Aluminum mill finish
- AA Aluminum clear anodized
- BK Aluminum black anodized
- D Aluminum dark bronze anodized
- G Aluminum gold anodized
- B Bronze, architectural mill finish
- B-ORB Oil-rubbed aged bronze

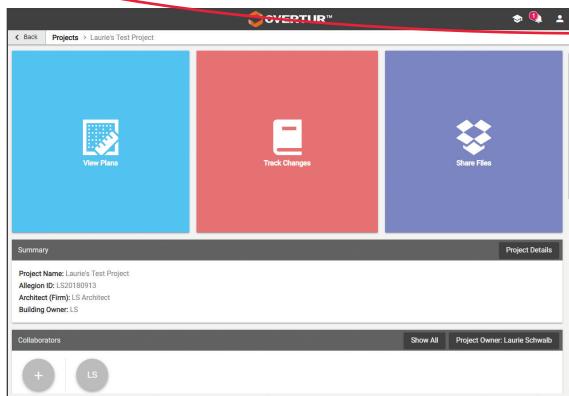
#### Options:

- FLO Air flow/ sound block
- PSA Pressure-sensitive adhesive
- ZAG Ligature resistant gasketing
- S Order as a set
- SEC Security screws

#### Note:



Allegion's Overtur™ is a cloud-based suite of tools that streamlines the process of coordinating door hardware, including access control, between Divisions 8 and 28. It serves as a central hub of access control hardware information that allows team members to collaborate on a project in a single platform.



### Capabilities

Allows easy communication and coordination with all project team members

Cloud-based platform allows easy access to data without the need for specialized software

Reduces the time required for project meetings with owners and general contractors

### Key areas of functionality

1

Click on an opening and view the associated hardware sets, product information, cut sheets and door history

2

Track and review changes to openings and hardware selections

3

Filter and sort door data and attributes, such as fire rated doors

4

Stay connected on the job site and create punch lists with Overtur mobile

The screenshot displays the Overtur software interface. At the top, the breadcrumb navigation shows: **Projects > RQAW HQ (Integrator) > Plans > Rqaw Office Hq\_2019 Rev\_1**. The main area shows a floor plan with various rooms labeled, including OFFICE, LOBBY, STORAGE, HALL, KITCHEN, and CONFERENCE. A red arrow points to a door in the plan with the text: "Info about this door including hardware sets". Another red arrow points to the "Filter" button in the "Plan Tools" panel on the right, with the text: "Apply filters to sort opening information". The "Filter" panel shows a list of filters, with "Electrified" highlighted. On the left, the "Information" panel shows details for Door # 16, including SGL, Width, Door Matl, Frame Matl, and Rating. Below this, the "Hardware Set 13" panel shows a table of hardware items:

Mass Assign	UoM	Qty	Desc	Catalog #
EA	3	HINGE	5BB1 4.5 X 4.1	
EA	1	ELEC OFFICE LOCK	AD-400-CY-50-I	
EA	1	WAKE-UP RADIO	WS401/402CCV	
EA	3	SILENCER	SR64	

A red arrow points from the "ELEC OFFICE LOCK" row to a pop-up window titled "Reliable communications" and "Wake-Up on Radio". The pop-up window contains the following information:

**Reliable communications**  
Secure and reliable wireless communication with the Panel Interface Module (PIM) is accomplished using 900 MHz frequency. 900 MHz band enables longer transmission ranges because signal propagation with longer wavelengths travel a greater distance and better penetrate typical building construction – allowing for simplified system design.

**Wake-Up on Radio**  
This feature enables implementation of wireless locks in applications where centralized lockdown or unlock is required. "Wake Up on Radio" utilizes patent-pending technology to enable real-time activation at a remote battery-powered wireless lock. The technology is configurable from 10 to 1 second increments. When Wake-Up on Radio is used in critical applications Dynamic

**AD-400 electronic lock specifications**

Modulation	900 MHz spread spectrum, direct sequence, 10 channels
Frequency range	902-928 MHz
Transmission/encryption	AES-128 bit key
Credential verification time	< 1 second
Wake-Up on Radio	Responds to lock/unlock command from host in less than 10 seconds in battery powered applications (per field configuration)
Communication range	Up to 200 ft with obstructions (normal building construction), up to 1000 ft clear line of sight
RF interference avoidance	Configurable dynamic channel switching
Data rate	RF: 40 kbps
Visual/audible communications	Tri-colored LED's and audible indicators (field configurable)
System interface	RS-485, Wiegand, or Clock & Data via PIM400 to host
Power supply	4AA, BAA, 12 VDC or 24 VDC
Voltage range	4 VDC to 26 VDC
Max current requirement	Up to 250 mA
Battery life	Up to 2 yrs with 4AA

A red arrow points from the "Link to catalog cut" text to the "ELEC OFFICE LOCK" row in the hardware set table.

Improved time management and better customer service. Overtur can simplify the process of managing access control hardware on your next project.

[Learn more or sign-up at discover-overtur.allegion.com](https://discover-overtur.allegion.com).

## About Allegion

Allegion (NYSE: ALLE) is a global pioneer in safety and security, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion produces a range of solutions for homes, businesses, schools and other institutions. Allegion is a \$2 billion company, with products sold in almost 130 countries. For more, visit [www.allegion.com](https://www.allegion.com).

