

STANLEY®



D-4550 / D-4551 SERIES: DOOR CLOSERS

D-4550 / D-4551 Series

Door Closers

dormakaba 

Trusted experts. Proven reliability. Simply STANLEY.

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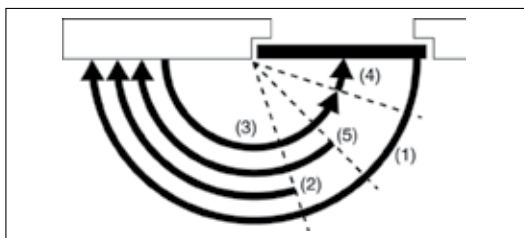
General Information

Introduction

The model D4550 Series is Stanley's best performing Heavy Duty Closer. The cylinder body is manufactured using R-14 Silicon Aluminum Alloy providing superior strength and durability on institutional applications. Available in a variety of standard and heavy-duty arm configurations accommodating a broader range of today's growing architectural application requirements.

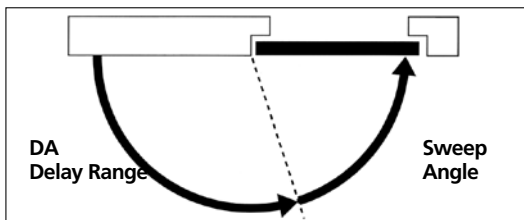
Features

Fully Hydraulic Checking Controls the door through the entire opening and closing cycles by providing adjustable backcheck upon opening and adjusting general and latch speeds through the closing cycle.



- (1) opening swing, no checking
- (2) backcheck
- (3) general speed
- (4) latch speed
- (5) advanced variable backcheck

Delayed Action – Optional – The D-4550DA / D-4551DA Series Door Closers are equipped with a separate hydraulic valve adjustment to delay the closing speed from 180 to 70 degrees of door opening range. To order add suffix DA to closer number.



Adjustable Spring Power – The D-4550 / D-4551 Series Door Closers are designed to have the widest range of spring power adjustment available to meet the broadest range of application requirements.

Advanced Variable Backcheck (AVB) optional – Cylinder starts backcheck at approximately 45° instead of the normal 75°. Add suffix "AVB" to selected cylinder. When combined with Delayed Action consult factory for special template. (Heavy Duty Arm applications).

All Season Fluid – All season fluid eliminates the need for seasonal adjustment.

Closing Power Adjustment

D-4550* –

Size 2 – 6 with 50% spring power adjustment over size 6.

* Meets ADA 5lb opening force requirements on all applications except pull-side regular arm mount.

The D-4550 Series is adjusted to size 3 before leaving the factory.

D-4551** –

Size 1 – 5 With 35% spring power adjustment over size 5.

** Meets ADA 5lb opening force requirements.

The D-4551 Series is adjusted to size 2 before leaving the factory.

Delayed Action – A delayed action feature is available with this series for all applications and arms. The feature permits the door to close very slowly through the delayed action cycle range.

Forged Arms – Heavy duty forged arms are interchangeable between the D-4550 and D-3550 Series door closers.

High Impact Cover – All D-4550 / D-4551 Series door closers are shipped with a high impact self-extinguishing decorative cover.

Latching Power Adjustment – The D-4550 / D-4551 Series door closers have the provision to adjust the leverage of the arms by changing the pivot position of the arm in the shoe. The shoe itself does not have to be removed from the door or jamb.

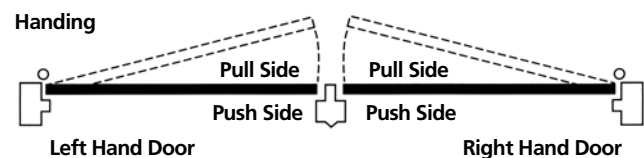
Maintenance Free – Door closers mounted in accordance with the provided installation instructions are maintenance free from periodic inspection and adjustment.

Metal Cover - Optional – Optional stainless steel, brushed finish metal cover is available.

Non-Handed – Can be used on both RH and LH doors for both push side and pull side mounting.

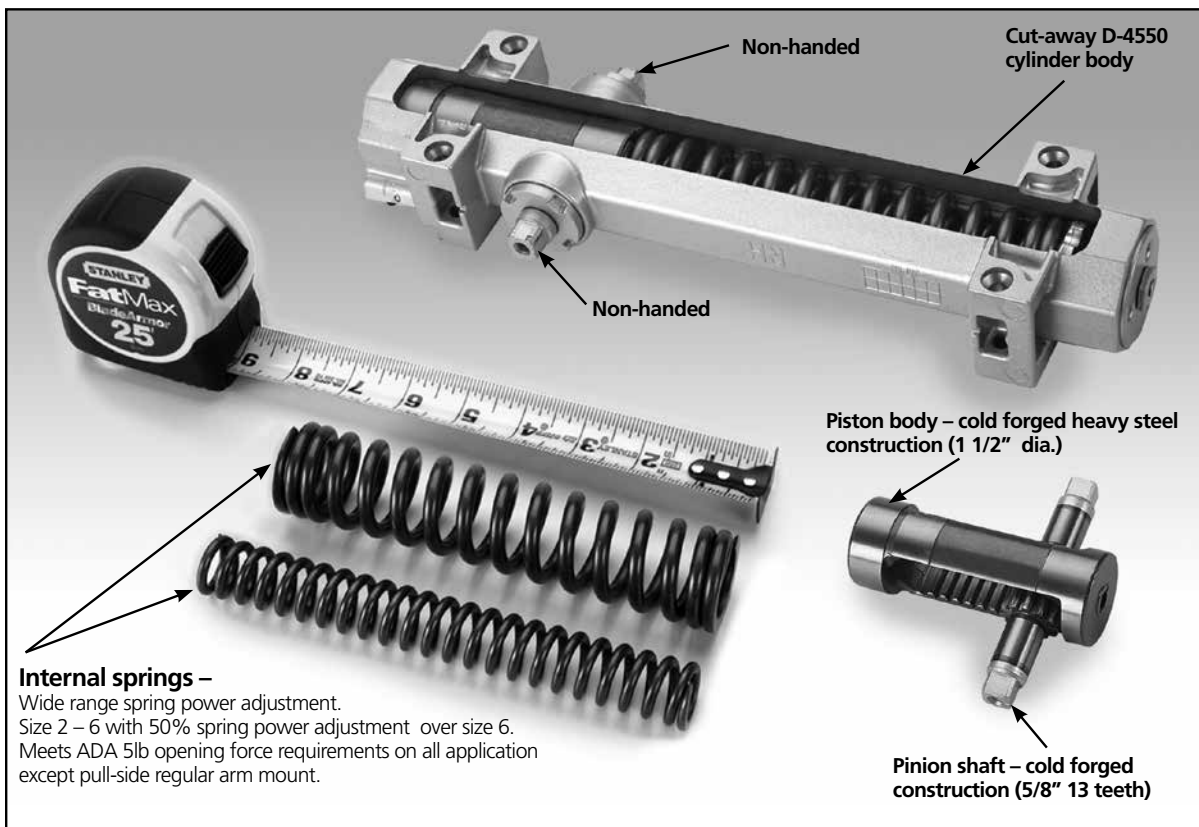
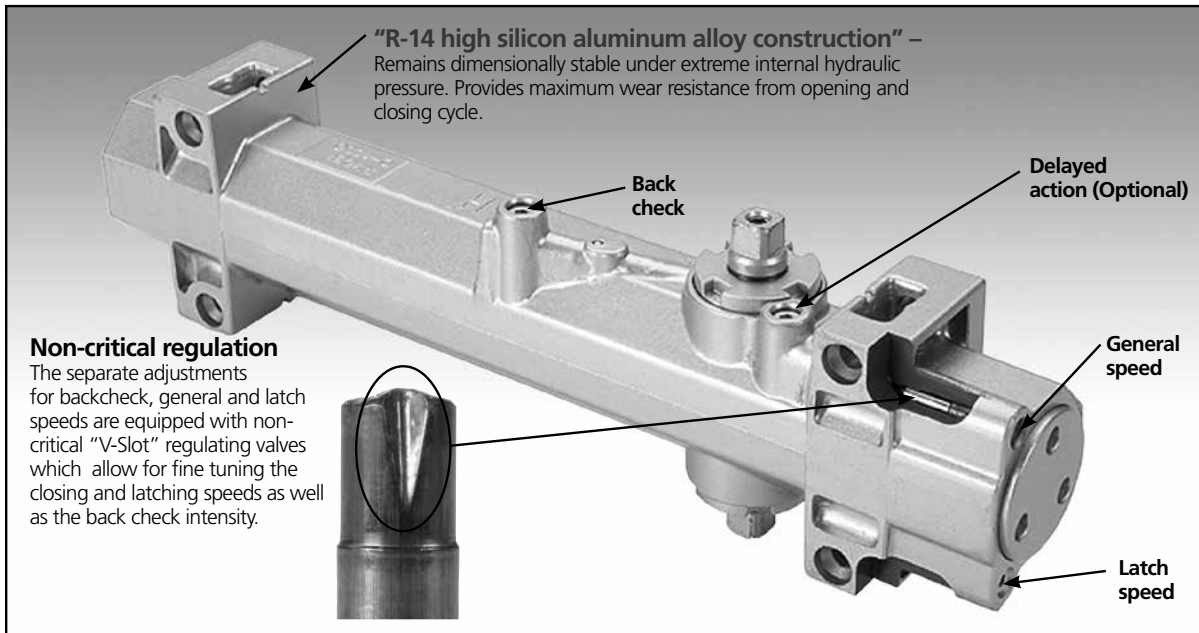
Special High Silicon Aluminum Alloy Housing – All D-4550 / D-4551 Series door closers are constructed of "Stanley's" R14 high silicon aluminum alloy to exceed the ANSI/BHMA 156.4 Grade 1 requirements.

Special Rust Inhibitor (SRI) - Optional – For installations where a higher level of corrosive resistance is required.



General Information

Non-handed feature is available in a variety of finishes wide range of spring power adjustment. Standard packaging with tri-pack: regular, top-jamb and parallel arm arrangement. Can be ordered with heavy duty arm assembly. ANSI/BHMA A156.4 Grade 1, U.L. listed U.S. & Canada. The cylinder body is made from R-14 die cast aluminum. This alloy provides wear resistance from contact with the piston during the opening and closing cycle. R-14 wear characteristics are similar to that of cast iron. In addition the R-14 aluminum alloy holds the cylinder body dimensionally stable under extreme internal hydraulic pressures.



General Information

Arm Options Suffix Description		Page
L	Long Rod Forearm (Top Jams only)	10
H	Standard Hold Open	5
PH	Parallel Hold Open	6
EH	Electronic Hold Open	13, 14
H-EDA	Heavy Duty Arm w/Hold Open	8
S	Heavy Duty Arm w/Stop	8
CS	Heavy Duty Arm w/Compression Stop	8
HS	Heavy Duty Arm w/Hold Open and Stop	8
HCS	Heavy Duty Arm w/Hold Open & Comp. Stop	8
T	Track Mount	10
HT	Track Mount w/Hold Open	10
TCS	Track Compression Stop	10

Packaging Information – All D-4550 / D-4551 Series Door Closers with standard arm sets are packed for mounting on standard, parallel arm or top jamb applications. All closer assemblies are packed 4 per carton. Tracks for track mounted closers are packed separately.

Through Bolts and Sex Nuts – When through bolting is ordered, factory will furnish sex nuts for use with the machine screws furnished with the closer. Nuts are sized to accommodate 1-3/8" or 1-3/4" thick doors. Mounting screw thread size 12/24.

Finishes –

- 689– Aluminum painted
- 690– Dark bronze painted
- 691– Light bronze painted
- 693– Black painted
- 695– Dark bronze painted
- 696– Satin brass painted

ANSI and U.L. Specifications:



The D-4550/D-4551 Series Door Closers have been Certified to the requirements of the ANSI/BHMA Standard A156.4 - 2000 Grade 1. Available in a variety of ANSI/BHMA finishes. The Stanley Door Closer electro-static finishes surpassed over 100 hours of salt spray exposure.

UL listed with Underwriters' Laboratories, Inc. and Underwriters' Laboratories of Canada for "Self Closing Doors Without Hold-Open Feature". (File number 7525R).

UL10C – UBC 7.2

D-4550/D-4550 closers have been tested and certified to meet the positive pressure criterion of UL10C & UBC 7.2 (1997)

How To Order: D-4550/D-4551

D-455	0	DA	EDA	689	SN
Model. No.	Size	Options	Arm Type	Finishes	Fasteners
D-455	0– See Closing Power Adjustment page 2 1– See Closing Power Adjustment page 2	AVB – advanced variable backcheck (optional) DA – Delayed Action (optional) MC – Metal Cover (optional)	L– Long Rod Forearm (TJ only) H – Standard Hold Open PH – Parallel Hold Open EDA – Heavy Duty Arm EH – Electronic Hold Open H-EDA – Heavy Duty Arm w/Hold Open S – Heavy Duty Arm w/ Stop CS – Heavy Duty Arm w/Compression Stop HS – Heavy Duty Arm w/ Hold Open & Stop HCS – Heavy Duty Arm w/ Hold Open & Compression Stop Std. Packaging – See packaging above T – Track Mount HT – Track Mount w/ Hold Open TCS – Track Compression Stop	689 690 691 693 695 696	SN – Sex Nuts & Bolts Wood & Machine Screws furnished standard SEC – Security Screws

Standard (Pull) Application

D-4550 / D-4551 Series Door Closer Specifications

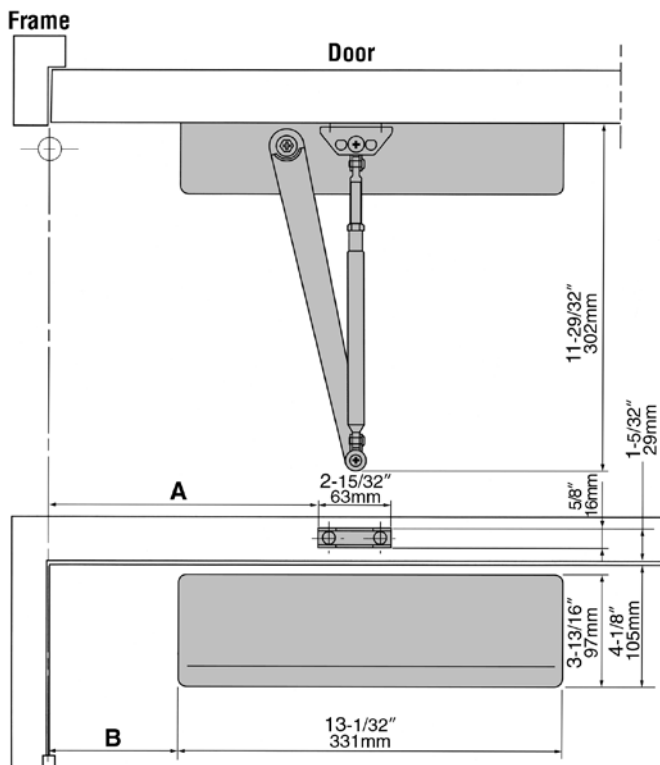
- Can be templated for either 120° or 180° (when butt, frame and wall conditions permit.)
- Custom installation template may be available for unusual installation conditions. Contact dormakaba for assistance.

Hold-open points up to maximum door opening with hold open arm.

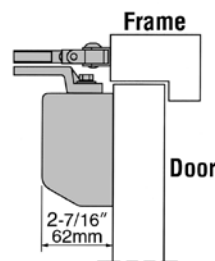


D-4550/D-4551 Standard Application

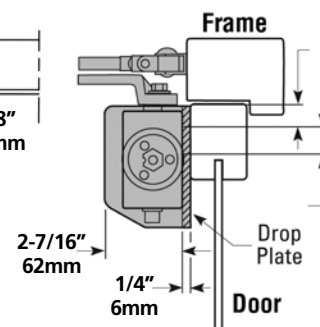
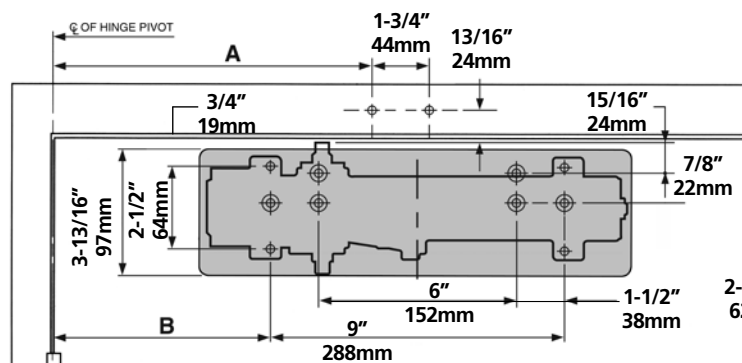
Standard Installation



Standard Maximum Door Opening	
120° Opening	180° Opening
A = 11-1/4" (286mm)	A = 9-1/4" (235mm)
B = 6-1/2" (165mm)	B = 4-1/2" (114mm)



Drop Plate Installation P45-180 (For drop plate dimensions see page 13.)



Standard Maximum Door Opening	
120° Opening	180° Opening
A = 11-5/8" (295mm)	A = 9-5/8" (238mm)
B = 8-1/2" (216mm)	B = 6-1/2" (165mm)

Parallel Arm (Push) Application

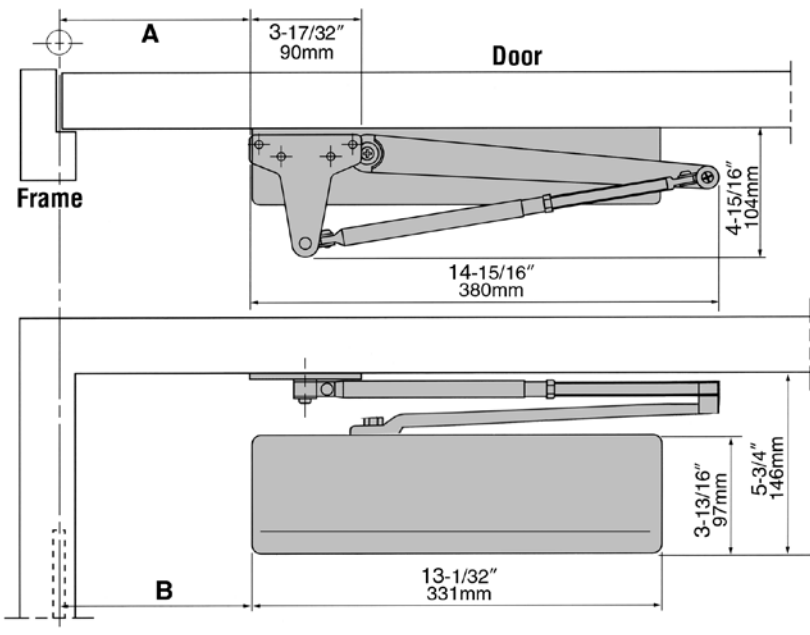
D-4550 / D-4551 Series Door Closer Specifications

- Can be templated for either 120° or 180° (when butt, frame and wall conditions permit.)
 - Custom installation template may be available for unusual installation conditions. Contact dormakaba for assistance.
- Hold-open points up to maximum door opening with hold open arm.

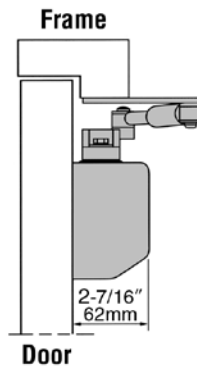


D-4550/D4551 Parallel Arm Application

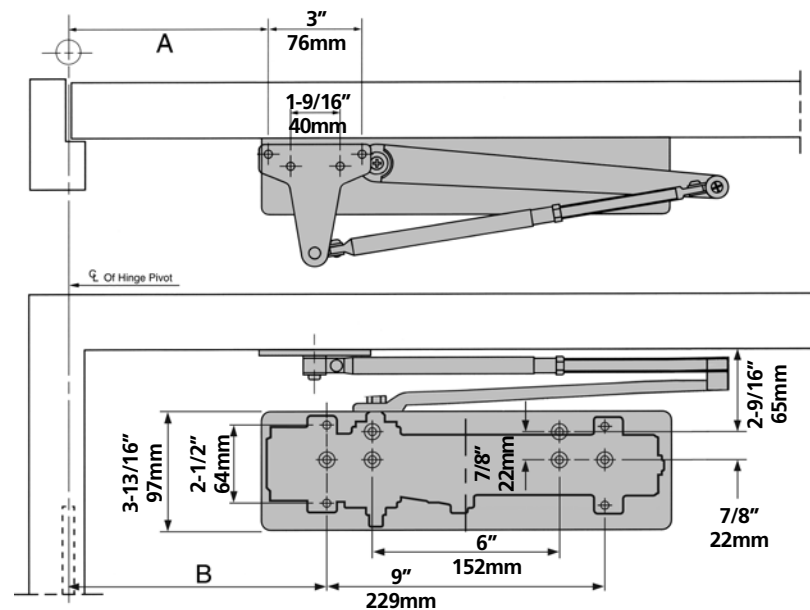
Standard Installation



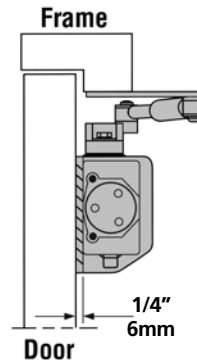
Standard Maximum Door Opening	
120° Opening	180° Opening
A = 8-23/32" (222mm)	A = 6-3/32" (155mm)
B = 8-27/32" (224mm)	B = 6-7/32" (158mm)



Drop Plate Installation P45-180 (For drop plate dimensions see page 13.)



Drop Plate Maximum Door Opening	
120° Opening	180° Opening
A = 11-5/8" (295mm)	A = 9-3/8" (238mm)
B = 5-15/16" (150mm)	B = 4-15/16" (125mm)



Heavy Duty Arm (Push) Application

D-4550 / D-4551 Series Door Closer Specifications

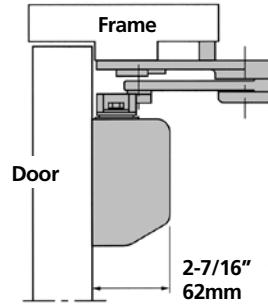
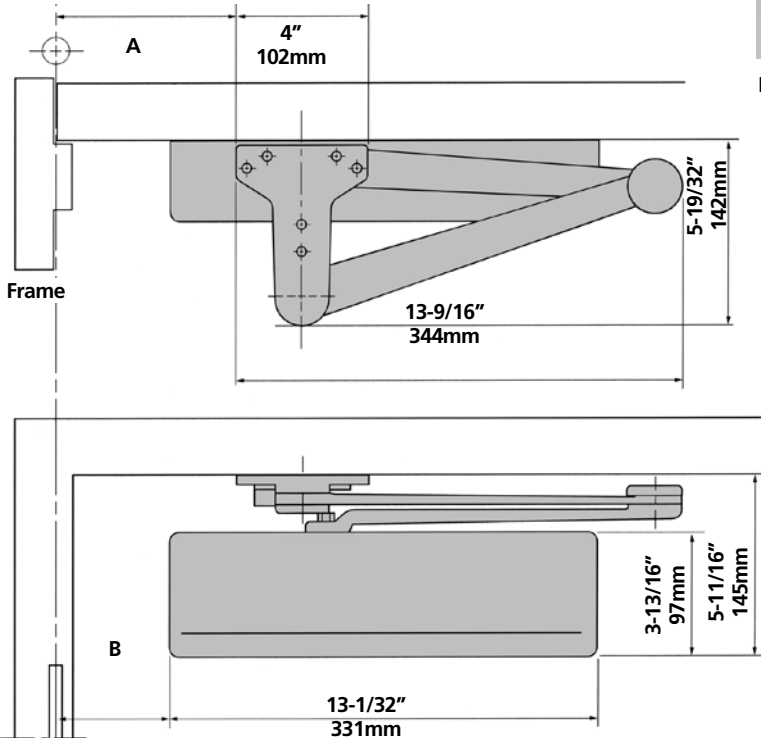
- EDA, H-EDA, S, CS, HS and HCS
- Can be templated for either 120° or 180° (when butt, frame and wall conditions permit.)
- Custom installation template may be available for unusual installation conditions. Contact dormakaba for assistance.

Hold-open is approximately 3° less than maximum door opening.



D-4550/D-4551 Heavy Duty Arm Application

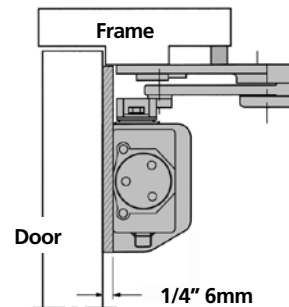
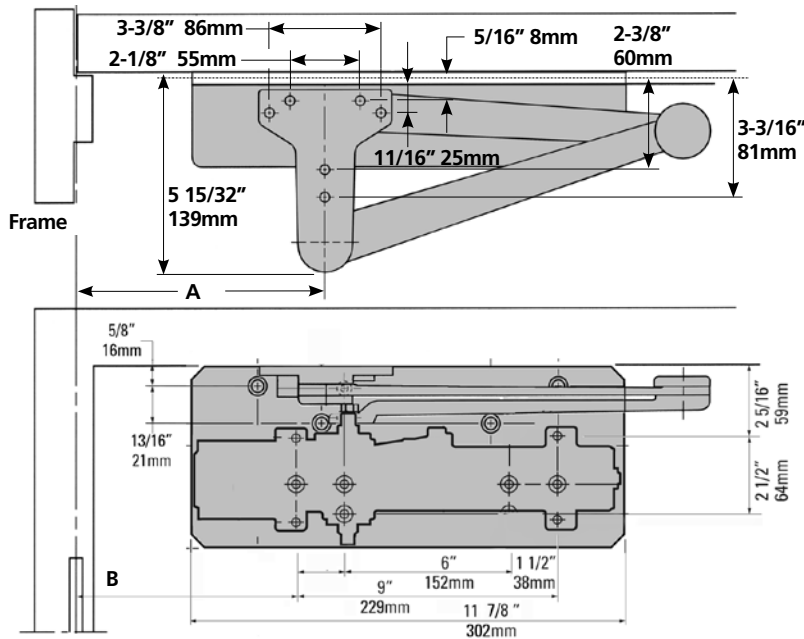
Heavy Duty Push Installation



Standard Maximum Door Opening

120° Opening	160° Opening	180° Opening
A = 7-3/8" (187mm)	A = 6-3/32" (155mm)	A = 4-5/8" (117mm)
B = 6-1/2" (165mm)	B = 5-11/32" (136mm)	B = 3-3/4" (95mm)

Drop Plate Installation P45-180-D (For drop plate dimensions see page 13.)



Drop Plate Maximum Door Opening

120° Opening	160° Opening	180° Opening
A = 9-3/8" (238mm)	A = 8-1/4" (210mm)	A = 6-5/8" (168mm)
B = 8-1/2" (216mm)	B = 7-3/8" (187mm)	B = 5-3/4" (146mm)

Track Rail Arm (Pull) Application

D-4550 / D-4551 Series Door Closer Specifications

- T, HT, TCS Application
- Custom installation template may be available for unusual installation conditions. Contact dormakaba for assistance.

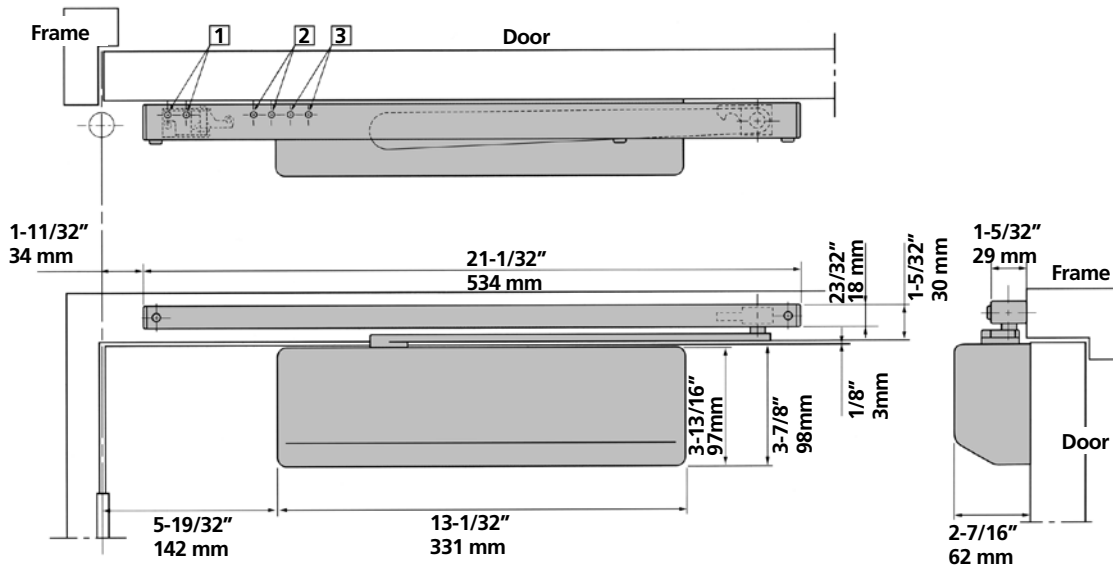
Maximum Door Opening 120° Opening

Hold Open Device	1	2	3
Hold Open Angle	106°	86°	80°

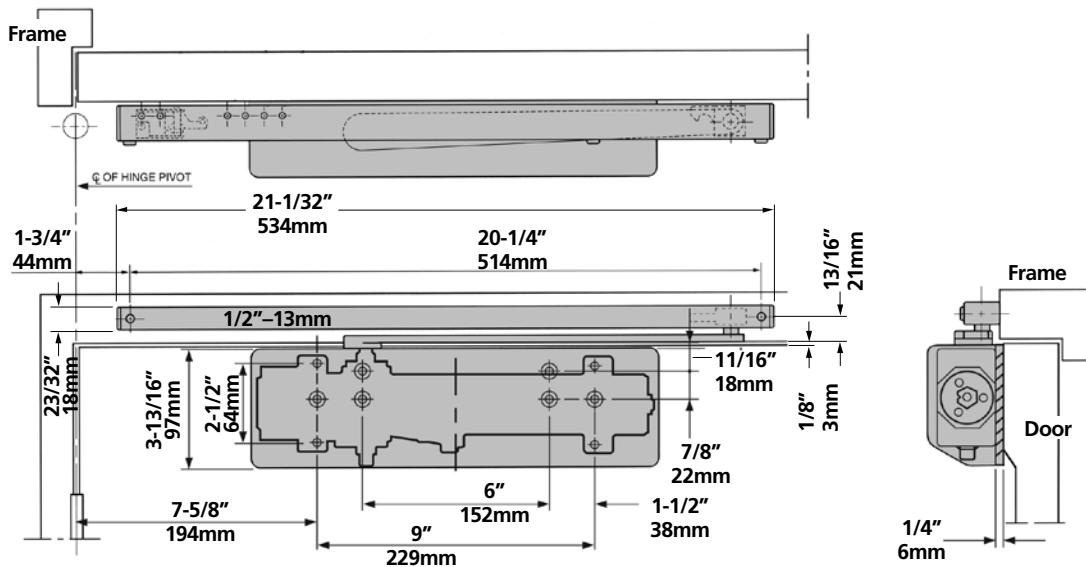


D-4550/D-4551 Track Rail Arm Application

Track Rail Arm Pull Installation



Drop Plate Installation P45-180 (For drop plate dimensions see page 13.)



Single Point Hold-Open (Pull) Application

D-4550EH Electronic Hold-Open Series Door Closer

The D-4550EH Easy-Set Series provides convenient electronic hold-open features for a variety of swing door applications. When energized, the unit is held at a field selectable degree of hold-open incorporating a 24VDC solenoid located in the track-arm.

Features

- Field adjustable degree of hold-open
- Non-handed
- Available in six standard finishes
- Smooth safe manual engagement/disengagement
- Convenient system check switch
- Field adjustable hold-open force

Listings

- UL Listed for smoke barrier or labeled fire doors
- UL Listed for self closing doors without hold-open
- ANSI/BHMA A156.15
- NFPA 101



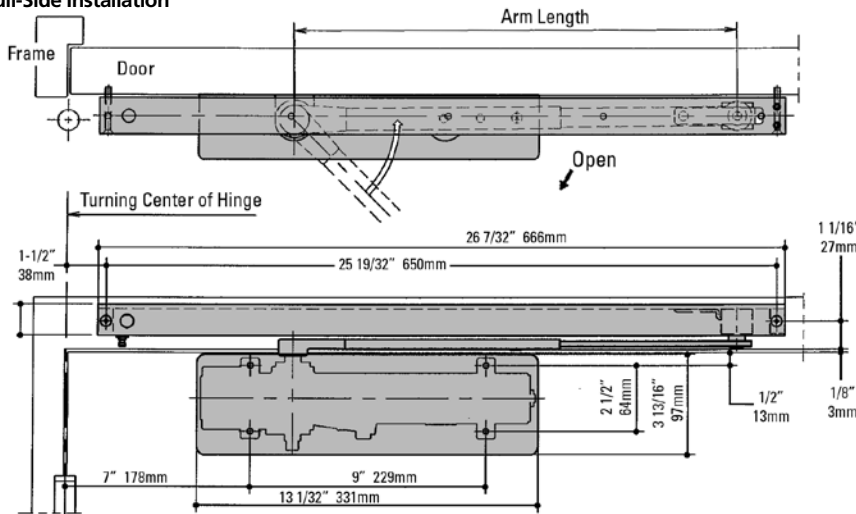
D-4550EH Hold Open (Pull) Application

Electrical Specifications

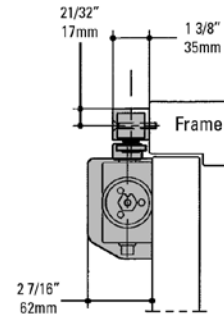
Voltage: 24VDC Ampere: 0.15 ampere

Arm Length	12 23/32" 323mm	13 1/16" 332mm	13 7/16" 341mm	13 25/32" 350mm	14 1/8" 359mm	14 1/2" 368mm	14 27/32" 377mm	15 3/16" 386mm	15 9/16" 395mm	15 29/32" 404mm	16 1/4" 413mm	16 5/8" 422mm	16 31/32" 431mm
Hold Open Angle	93°	97°	100°	104°	108°	112°	116°	121°	126°	131°	137°	144°	153°

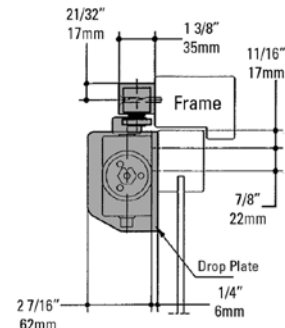
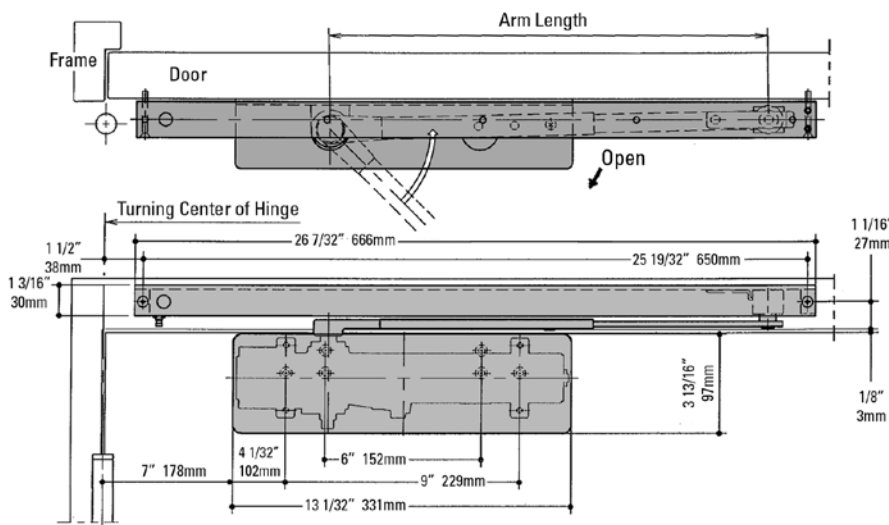
Pull-Side Installation



Recommended: Install an auxillary stop at the hold-open angle.
(see arm adjustment chart above)



Drop Plate Installation P45-180 (For drop plate dimensions see page 13.)



Single Point Hold-Open (Push) Application

D-4550EH Electronic Hold-Open Series Door Closer

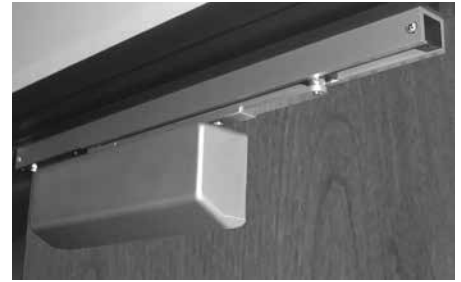
The D-4550EH Easy-Set Series provides convenient electronic hold-open features for a variety of swing door applications. When energized, the unit is held at a field selectable degree of hold-open incorporating a 24VDC solenoid located in the track-arm.

Features

- Field adjustable degree of hold-open
- Non-handed
- Available in six standard finishes
- Smooth safe manual engagement/disengagement
- Convenient system check switch
- Field adjustable hold-open force

Listings

- UL Listed for smoke barrier or labeled fire doors
- UL Listed for self closing doors without hold-open
- ANSI/BHMA A156.15
- NFPA 101



D-4550EH Hold Open (Push) Application

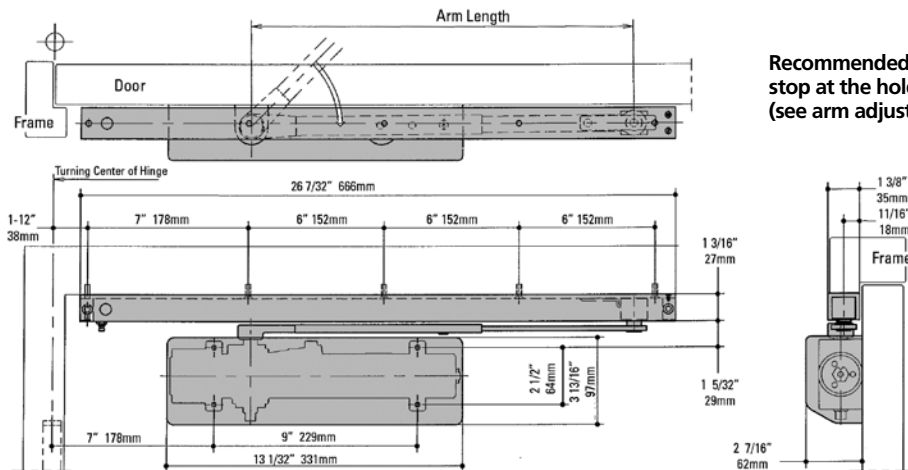


Electrical Specifications

Voltage: 24VDC Ampere: 0.15 ampere

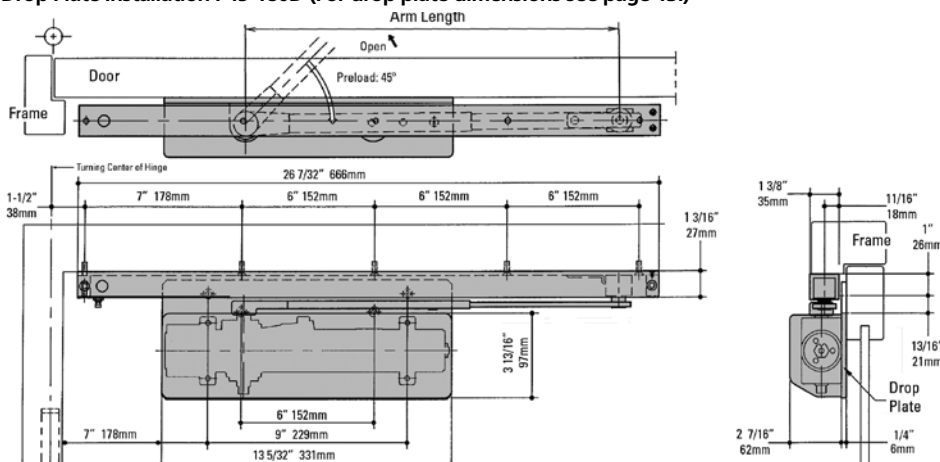
Arm Length	12 23/32"	13 1/16"	13 7/16"	13 25/32"	14 1/8"	14 1/2"	14 27/32"	15 3/16"	15 9/16"	15 55/64"	16 1/4"	16 5/8"	16 31/32"
	323mm	332mm	341mm	350mm	359mm	368mm	377mm	386mm	395mm	404mm	413mm	422mm	431mm
Hold Open Angle	86°	90°	92°	95°	98°	101°	105°	108°	112°	116°	120°	126°	129°

Push-Side Installation



Recommended: Install an auxiliary stop at the hold-open angle.
(see arm adjustment chart above)

Drop Plate Installation P45-180D (For drop plate dimensions see page 13.)



Accessories

Standard Arm Set A45-501

Standard Arm Set with Long Rod and Shoe Set A45-501L

- For reveals from 2-1/2" to 8"



Note: Long Rod used on PUSH side

Standard Hold-Open Arm Set A45-501H

Standard Hold-Open Arm with Long Rod and Shoe Set

A45-501HL

- For reveals from 3-3/16" to 4-13/16"

A45-501HXL

- For reveals from 4-7/8"

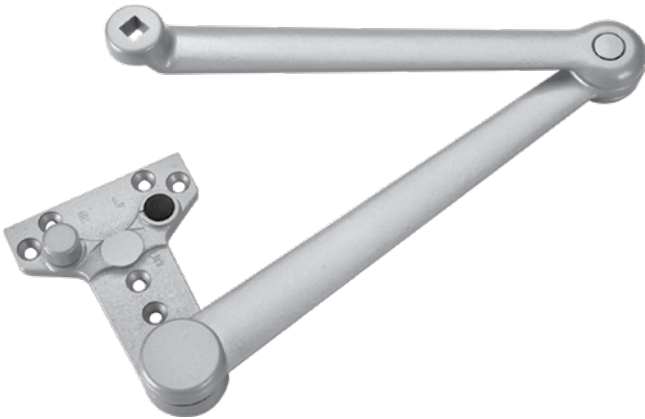


Note: Long Rod used on PUSH side

Heavy Duty Parallel Arm Set A45-505

Heavy Duty Parallel Arm Set with Stop A45-505S

Heavy Duty Parallel Arm Set with Compression Stop A45-505CS

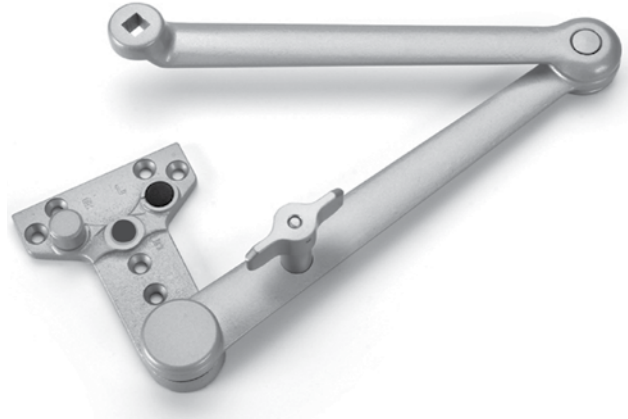


A45-505S
Heavy Duty Parallel Arm Set with Stop

Heavy Duty Parallel Arm Set with Hold Open A45-505H

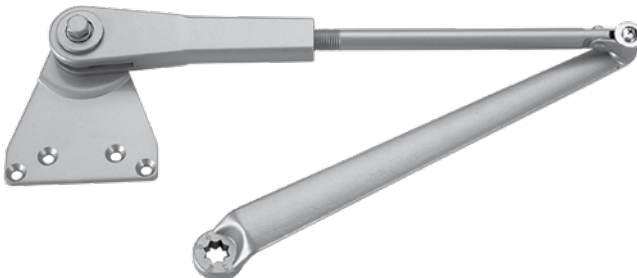
Heavy Duty Parallel Arm Set with Stop and Hold Open A45-505HS

Heavy Duty Parallel Arm Set with Compression Stop and Hold Open A45-505HCS



A45-505HS
Heavy Duty Parallel Arm Set with Stop and Hold Open

Parallel Hold-Open Arm Set A45-503H

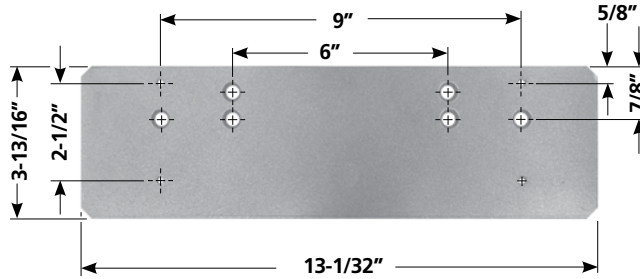


EH Arm Hold-Open A45-507EH

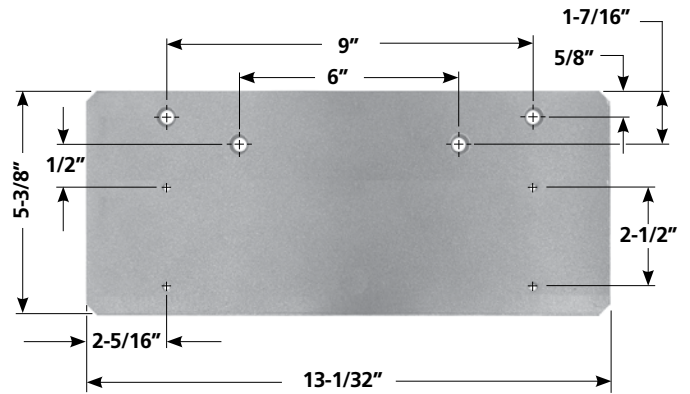


Accessories

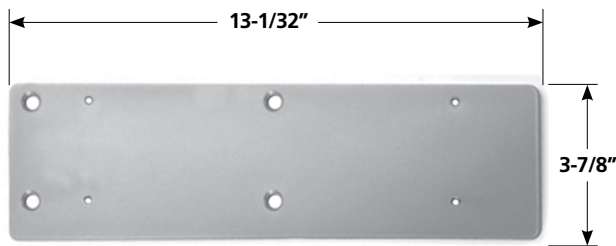
Drop Plate – P45-180



Drop Plate – P45-180-D

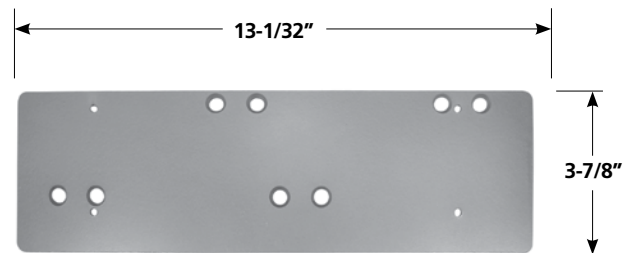


Retrofit Plate to mount to LCN 4111 Hole Pattern (Heavy Duty Arm) – P45-4110 (Non-handed)

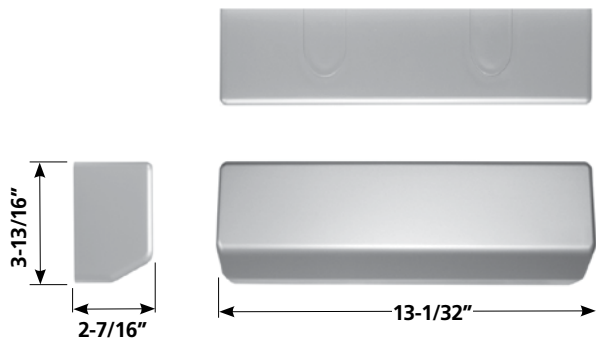


Material Thickness: 3/16"

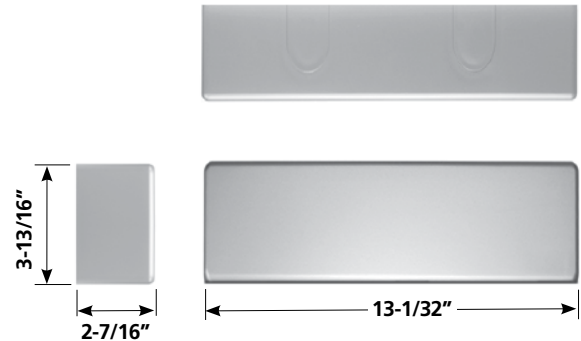
Retrofit Plate to mount to LCN 4040 Hole Pattern (Heavy Duty Arm) – P45-4040 (Non-handed)



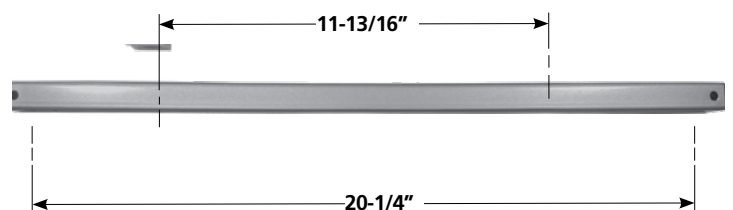
C-455 – Full Plastic Cover



MC-455 – Full Metal Cover (Optional)



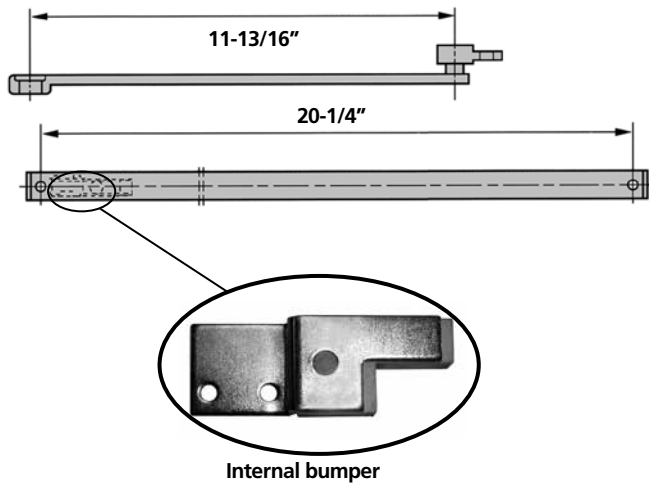
Track Rail Arm Set A45-507T



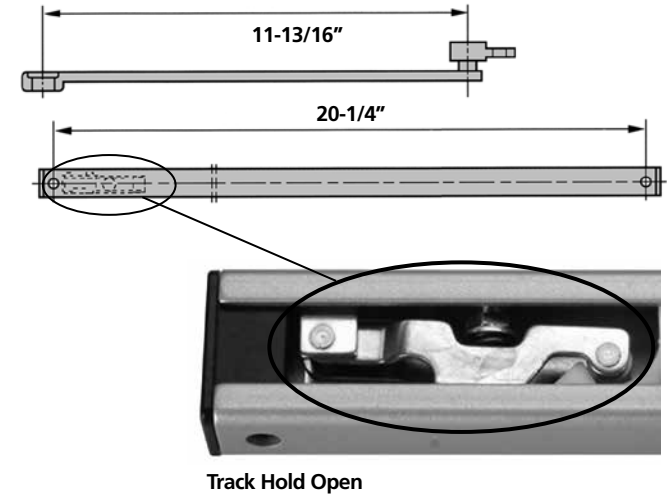
Accessories

Track Rail Arm Set A45-507TCS

- Includes internal bumper for compression stop



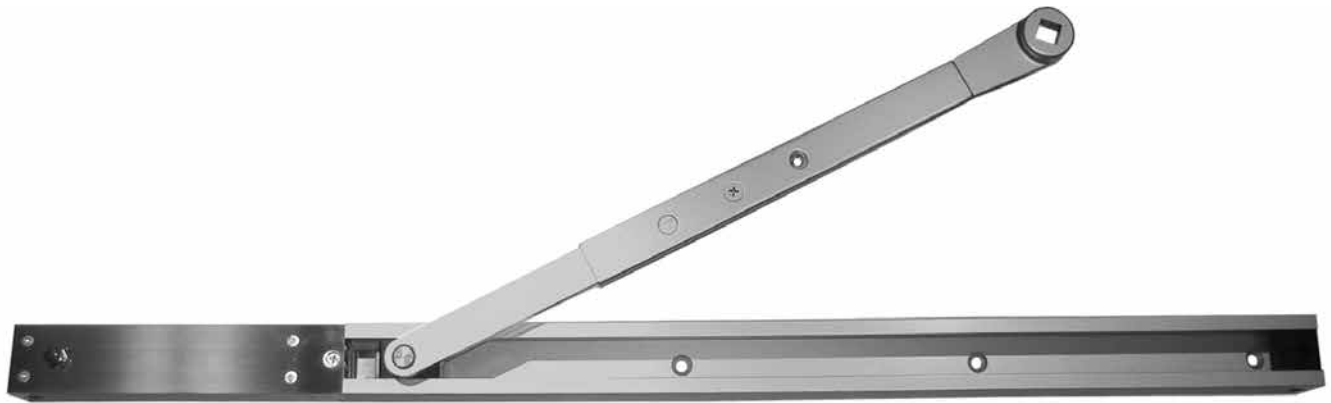
Track Rail Hold-Open Arm Set A45-507HT



Track Rail Electronic Hold-Open Arm Set A45-507EH

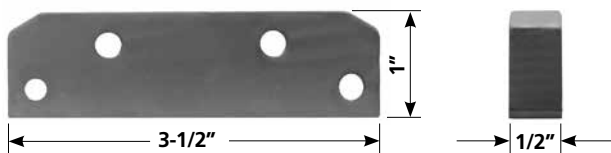


Electronic Hold Open – Side view

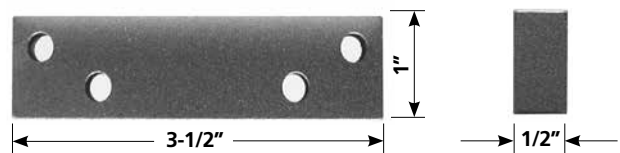


Electronic Hold Open – Top view

Spacer Block for Standard Arm Mounting PA Bracket on Rabbet – P45-110

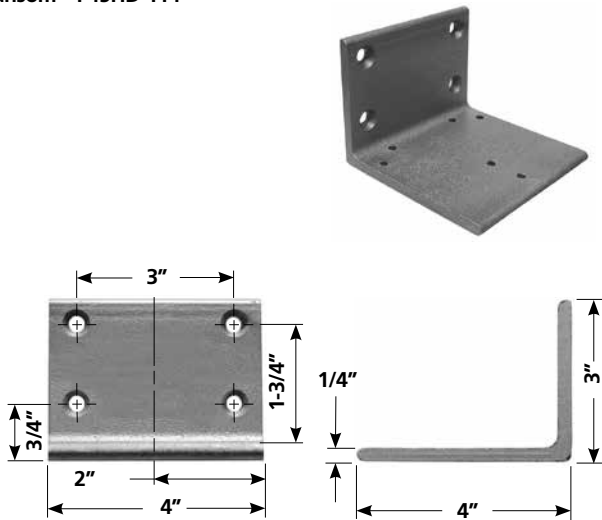


Spacer Block for Mounting HD PA Bracket on Rabbet – P45HD-110HL

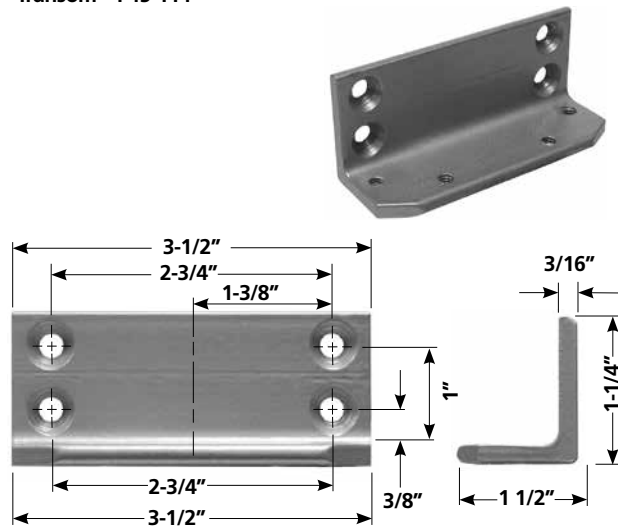


Accessories

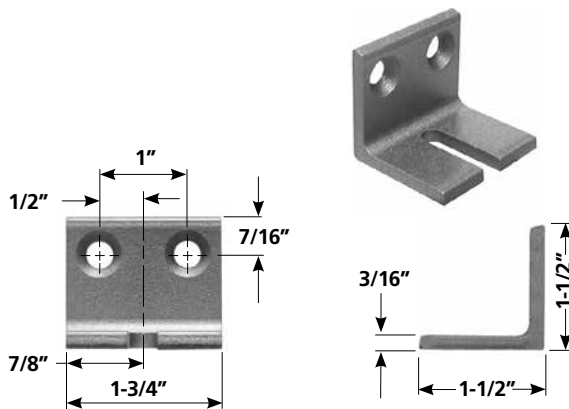
Angle Bracket for Mounting HD PA Bracket on Flush Transom – P45HD-114



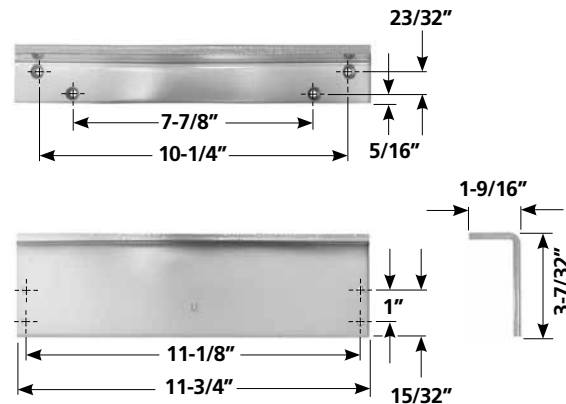
Angle Bracket for Mounting Standard PA Bracket on Flush Transom – P45-114



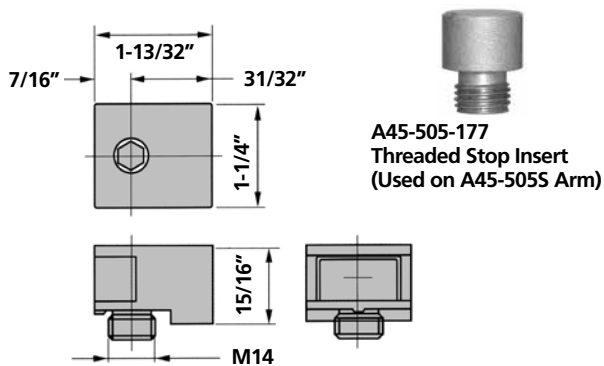
Angle Bracket for Shoe Support on HD Arms – P45HD-112, used as 5th screw on narrow rabbets



Angle Bracket - P45-190 used on top jamb applications without any top jamb

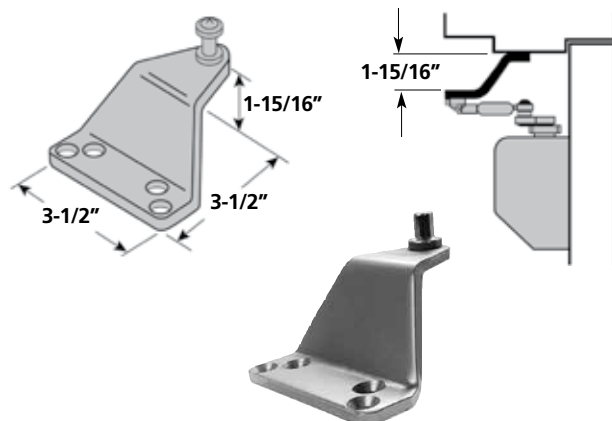


Compression & Threaded Stop



A45-507TCS – Compression Stop
(Used on A45-505CS Arm)

Extra-Clearance Offset Soffit Plate – P45-113



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