

Jason Kocembo
Century Architectural Hardware
248-348-6500
29220 Lyon Oaks Dr.
Wixom, MI 48393
2/24/2021

Tom Carlson
Elevator Penthouse
E & L Construction
66 Adelaide Ave
Detroit, MI

Dear Tom

We have enclosed (1) electronic copy of our hollow metal, wood door and door hardware schedule for your approval. We have also included (1) copy of our hardware cut sheets/ shop drawings prepared from drawings dated 12/23/2020. Please return (1) approved shop drawing. Please provide accurate material need dates so we can plan accordingly.

Leadtimes after approval and answers to all questions.

Century lead times

Hollow Metal Frames 4-5 Weeks
Hollow Metal Doors 5-6 Weeks
Hardware 4-5 Weeks

GC NEED DATES

Sincerely,

Jason Kocembo
Century Architectural Hardware
248-348-6500



Commercial Doors, Frames & Hardware , Toilet Partitions & Accessories

Attention: Architect, Designer, Specification Writer, Contractor and Installer

The purpose of this door, frame and hardware submittal is to detail the manufacturers and products that we plan to include in the contract or purchase order. The detail that is scheduled for each opening is Century Architectural Hardware's interpretation of the designers intended use for that opening. We base our interpretations on the architectural specifications and plans.

Century Architectural Hardware strives for perfection when detailing, errors and or omission can and will occur. Century Architectural Hardware will take responsibility for clear errors and or omissions from the architectural plans and specification. If errors are created by others or errors caused by incomplete or missing information in the architectural plans and specification will be the responsibility of the architect or specifier. If additional cost occurs it is to be paid by the architect, designer or contractor.

If items are added, deleted or changed during or after the submittal process may result in a change in value from the purchase order or contract amount. We must receive written permission to process these changes.

Century Architectural Hardware will deliver material F.O.B tailgate only. Additional delivery charges may occur if return trips are required because of lack of labor to unload the material or if it is not done in a timely manner.

No back-charges for work done or material furnished by others will be accepted with out prior written approval from Century Architectural Hardware.

Approval to proceed with ordering material has been given when returned stamped by the architect. Frames and doors require preparation for hardware. doors and frames are unable to be ordered until hardware is reviewed and approved.

DOOR FRAME & HARDWARE

February 24, 2021

PROJECT

Name: ELEVATOR PENTHOUSE

Address: 66 ADELAIDE

DETROIT MI 48201

Phone:

Superintendent: TOM CARLSON

810-845-4854 TOM.CARLSON@EANDLGROUP.COM

Engineer:

CONTRACTOR

Name: E & L CONSTRUCTION GROUP

Address: P.O. BOX 418

FLINT MI 48501

Phone: 810-744-4300

Contact: TODD FINLEY

Project Manager:

ARCHITECT

Name: WAH YEE ASSOCIATES & PLANNERS

Address: 42400 GRAND RIVER AVE STE #200

NOVI MI 48375

Phone: 248-489-9160

Project Number: 5122

Date Schedule Submitted: February 23, 2021

Date H/W Schedule Approved:

Date D/F Schedule Approved:

Plans Dated

December 23, 2020

Addendums Noted: 0



CENTURY ARCHITECTURAL HARDWARE

29220 LYON OAKS DR.

WIXOM

MI

48393

Tel: 248-348-6500

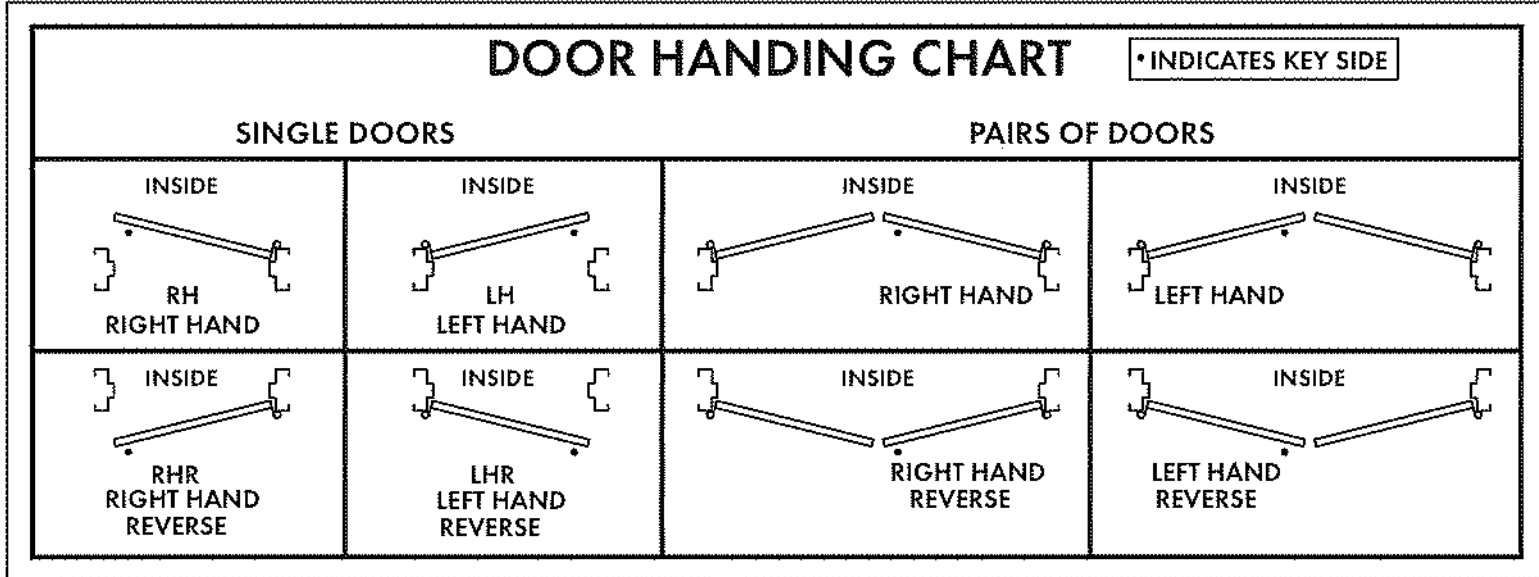
Fax:

ELEVATOR PENTHOUSE

Control No.1145

1145

Submitted By: JASON KOCEMBO



CENTURY ARCHITECTURAL HARDWARE

ELEVATOR PENTHOUSE

29220 LYON OAKS DR.

Control No. 1145

WIXOM MI 48393


1145

Tel: 248-348-6500

Submitted By: JASON KOCEMBO

Manufacturers


Abbreviation	Name
NAT	NATIONAL GUARD
REP	REPUBLIC
SAR	SARGENT
STA	STANLEY

 — EST. 1984 — Century Architectural Hardware	CENTURY ARCHITECTURAL HARDWARE	ELEVATOR PENTHOUSE
	29220 LYON OAKS DR.	Control No. 1145
	WIXOM MI 48393	1145
	Tel: 248-348-6500	Submitted By: JASON KOCEMBO

February 24, 2021

Hardware Finishes

Finish	Description
26D	CHROMIUM PLATED, SATIN
A	MILL FINISH ALUMINUM
B	BROWN
EN	ALUMINUM ENAMEL
MILL	MILL FINISH ALUMINUM
US26D	SATIN CHROMIUM PLATED

 <p>— EST. 1984 —</p>	CENTURY ARCHITECTURAL HARDWARE	ELEVATOR PENTHOUSE
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February 24, 2021

DOOR INDEX

Mark

Heading #

1

1

Mark

Heading #

Mark

Heading #



CENTURY ARCHITECTURAL HARDWARE

ELEVATOR PENTHOUSE

29220 LYON OAKS DR.

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Tel: 248-348-6500

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Door and Frame Schedule

Mark # / Arch Mk	Location	Qty	Opng	Hand	Opng Width	Opng Height	Rating	Frame Information							Door Information							UC/	Hw Hdg		
								Constr	Series	Ga	Anchor	Depth	Type	Mat'l	Fin	Size	Series	Style	Core	Mat'l	Fin			Type	Edge
1/1	PENTHOUSE FROM ELEVATOR	1	SGL	LHR	3-0	7-0		STDWE LD	ME	16	WM	5 3/4	HMF F1	A60	PRI	3-0	DP	F	PS	18	PRI	HMD F	3/4	1 3/4	1
								Fr Note:							7-0	Dr Note:									



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Abbreviations Used

Abb	Description
A60	GALVANNEALED, HOT DIPPED, HEAT TREATED, 6OZ ZINC COATED STEEL
DP	HONEYCOMB CORE
F	FLUSH
HMD	HOLLOW METAL DOOR
HMF	HOLLOW METAL FRAME
ME	MASONRY FRAME (MITERED CORNER), 3 SIDED
PRI	PRIME
PS	POLYSTYRENE CORE
REP	REPUBLIC
SGL	SINGLE DOOR
STDWELD	WELDED, STANDARD
WM	WIRE MASONRY ANCHOR



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Tel: 248-348-6500 Fax:

Submitted By: JASON KOCEMBO

February 24, 2021

Headings

Headings: 1

1 Marks:
1

Each Opening To Have:

3	HINGE, 4 1/2, HVY WT	FBB168 4-1/2 X 4-1/2 X NRP	26D	STA
1	MORTISE LOCK	8243 X LNJ X KD	US26D	SAR
1	CLOSER, PARALLEL ARM	1431-RUO	EN	SAR
1	SEAL	5050B X 17'	B	NAT
1	DOOR SWEEP	100V X 36	MILL	NAT
1	THRESHOLD	513 X 36	MILL	NAT
1	DRIP CAP	16A X 40	A	NAT

Total # Marks: 1



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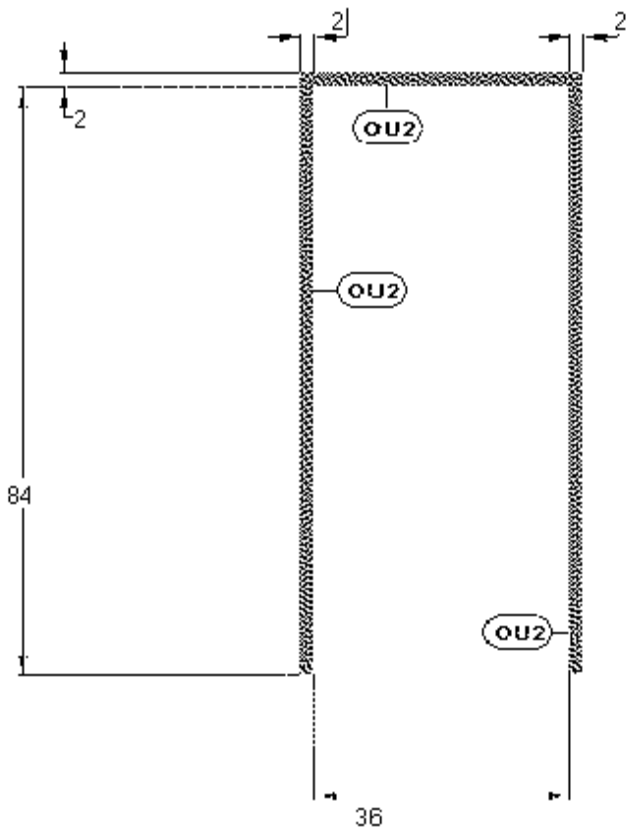
Tel: 248-348-6500

Fax:

Submitted By: JASON KOCEMBO

February 24, 2021

Page 1 of 1



Arch Fr Type:

Fr Template:

Qty:

F1

1

ALL DIMENSIONS EXPRESSED IN INCHES

1(1-LHR)



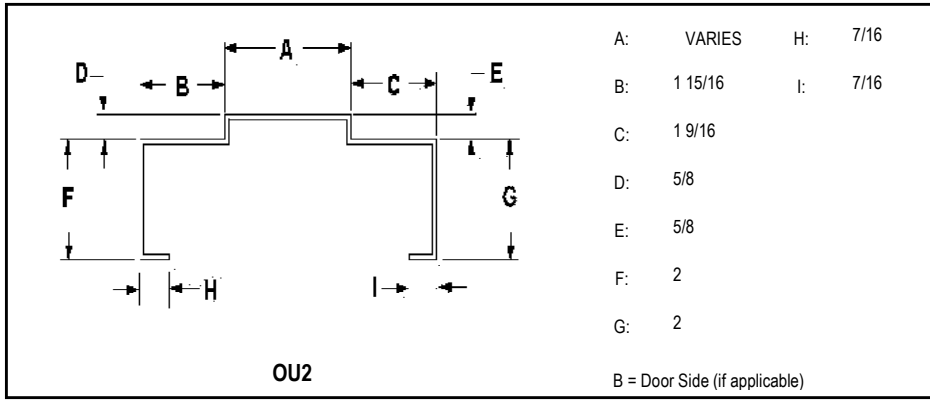
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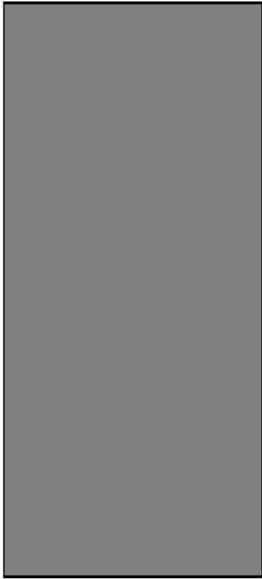
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	29220 LYON OAKS DR.	Control No. 1145
	WIXOM MI 48393	1145
	Tel: 248-348-6500	Submitted By: JASON KOCEMBO

February 24, 2021



U/C: 3/4



F Arch Dr Type

1



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WIXOM

MI

48393

Tel: 248-348-6500

Fax:

ELEVATOR PENTHOUSE

Control No.1145

1145

Submitted By: JASON KOCEMBO

Schedule Of Doors and Frames

N/A/N/A

February 24, 2021

PROJECT

Name: ELEVATOR PENTHOUSE

Address: 66 ADELAIDE
DETROIT MI 48201

Phone:

Superintendent: TOM CARLSON
810-845-4854 TOM.CARLSON@EANDLGROUP.COM

Engineer:

CONTRACTOR

Name: E & L CONSTRUCTION GROUP

Address: P.O. BOX 418
FLINT MI 48501

Phone: 810-744-4300

Contact: TODD FINLEY

Project Manager:

ARCHITECT

Name: WAH YEE ASSOCIATES & PLANNERS

Address: 42400 GRAND RIVER AVE STE #200
NOVI MI 48375

Phone: 248-489-9160

Project Number: 5122



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Control No.1145

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Submitted By: JASON KOCEMBO

DOORS - DP SERIES

DP Series Doors as manufactured or furnished by Republic Doors and Frames, McKenzie, Tennessee 38201.

Thickness - 1-3/4"

Actual Door Size - Door undersized from nominal by 7/32" in width and 7/8" in height. Standard undercut is 3/4".

Hinge Rail & Reinforcement - Hinge edge is non-beveled with 1/4" standard hinge backset. 7 gage Universal standard / heavy weight reinforcements.

Lock Rail - Lock edge is beveled. 14 gage reinforcement for mortise lock, 16 gage for cylindrical locks are of an integral type in accordance with ANSI A115 Standards. (Beveled lock edge 1/8" in 2" standard.)

Edge Seams - Visible seam

Top Channel - Flush, 16 gage channel, projection welded at a maximum 2-1/2" on center. (Optional - Inverted)

Bottom Channel - Inverted 16 gage channel, projection welded at a maximum 2-1/2" on center.

Cores Available - Honeycomb or Polystyrene.

Face Skins - 20 gage or 18 gage, cold rolled or galvanized steel.

Closer Reinforcement (Option) - 14 gage standard / 12 gage optional. (18" x 6")

Size Availability - Minimum 2'6" x 6'8", Maximum 4'0" x 8'0"

SDI 100 Level/Model - Level 1 Model 1 (Standard Duty, minimum 20 gage, hollow steel composite)
Level 2 Model 1 or 2 (Heavy Duty, minimum 18 gage, hollow steel composite)

Handing Design - Handed

Revised 7/15

DP SERIES - SPECIFICATIONS**TECHNICAL DATA
SHEET No. 101a**

- I. DP Series Doors as manufactured by Republic Doors and Frames, McKenzie, TN 38201 have been tested or adhere to the criteria set forth by the following published standards:
- A. ANSI A250.8-1998 (SDI 100) - Recommended Specifications -Standard Steel Doors & Frames; Steel Door Institute.
 - B. ANSI A250.4 - Test Procedure & Acceptance Criteria for Physical Endurance for Steel Doors & Hardware Reinforcings.
 - C. SDI 111 - Recommended Standard Details - Steel Doors & Frames. D. SDI 112 - Zinc Coated Standard Steel Doors and Frames.
 - E. SDI 113 - Test Procedure and Acceptance Criteria for Acoustical Performance for Steel Door and Frame Assemblies.
 - F. ASTM A366/A366M - Standard Specification for Steel, Sheet, Carbon, and High Strength, Low Alloy, Hot Rolled and Cold Rolled, General Requirements.
 - G. ASTM A568/A568M - Standard Specification for Steel, Sheet, Carbon and High Strength, Low-Alloy, Hot Rolled and Cold Rolled, General Requirements For.
 - H. ASTM A569/A569M - Standard Steel Specification for Steel, Carbon (0.15 Maximum Percent), Hot Rolled Sheet and Strip Commercial Quality.
 - I. ASTM A591/A591M - Standard Steel Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Mass Applications.
 - J. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvanized) by Hot Dipped Process.
 - K. ANSI A151.1 - Performance Test for Steel Doors, Hinge, Lock and Exit Device Reinforcing.
- II. Door Construction
- A. Doors are either 20 or 18 gage steel. Door design is a pan and lid construction. The lid has a flattened hemmed edge that is projection welded to the pan.
 - B. Top Channel will be 16 gage, flush with the top of the door and will be projection welded on maximum 2-1/2" centers to each face sheet.
 - C. Bottom Channel will be 16 gage, inverted and will be projection welded on maximum 2-1/2" centers to each face sheet.
 - D. Hinge Side - Square edge design with cutouts in pan. 7 gage hinge reinforcements welded in at each cutout.
 - E. Lock Side - Beveled edge design. Mortise lock reinforcements are 14 gage. Cylindrical lock reinforcements are 16 gage.
 - F. Cores: (Per ASTM C1363)
 - 1. Standard - 3/4" cell honeycomb with a "U" factor of .59.
 - 2. Optional Cores- 1 lb. density expanded Polystyrene per with a "U" factor of .41.
- III. Door Finish
- Doors will be cleaned and phosphatized with one coat of force-cured grey primer applied in accordance with ANSI A224.1-1990 or ASTM specification B117 for finishes capable of passing 120 hour salt spray test and a 240 hour humidity test in compliance with ASTM D1735.

SDI Classifications:

- Level 1 Model 1 (Standard Duty, minimum 20 gage, hollow steel composite)
- Level 2 Model 1 or 2 (Heavy Duty, minimum 18 gage, hollow steel composite)

Revised 7/15



Beveled 1/8" in 2"
(lock side only)

NOTE:
See Details on
back of page.

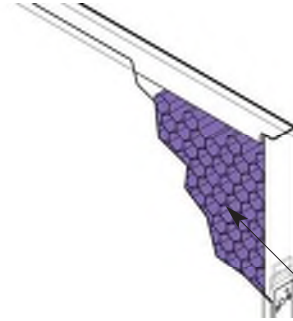
Revised 7/15

HINGE EDGE OF PAN

A



7 gage reinforcement at hinge locations
Shown: 4-1/12" hinges on 1-3/4" doors



3/4" Cell
Honeycomb Core
U Factor of .59
(Per ASTM C1363)

Other cores available
please specify.

C

LOCK EDGE OF PAN



14 gage mortise lock reinforcement
with provisions for Gov't Series 86
mortise lockset and ANSI A115.1
lock front (1-1/4" x 8")

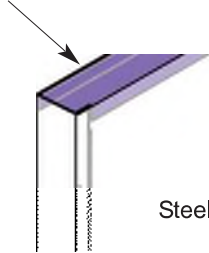


16 gage steel
cylindrical lock
reinforcement with
provisions for
Gov't Series 160
or 161 cylindrical
lock sets (2-3/4"
backset) and
ANSI A115.2 lock
front (1-1/8" x 2-1/4")

D

Continuous 16 gage
steel channel
(standard flush)

TOP CHANNEL



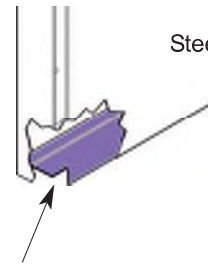
Steel Panel

14 gage closer reinforcement when requested;
12 gage optional

E

BOTTOM CHANNEL

Steel Panel



Continuous 16 gage
steel channel
(standard inverted)

Approximate depth 9/16"

UNIVERSAL FRAMES - ME SERIES/MITERED

ME Series Mitered Frames shall be as manufactured or furnished by Republic Doors and Frames, McKenzie, Tennessee 38201.

Thickness - Made for two basic door thicknesses: 1-3/8" or 1-3/4"

Gages - 16 or 14 (12 gage available with coped bolted corner connections)

Faces - 1" to 4"

Standard Rabbets - 1-3/8" (actual dimension 1-9/16"); 1-3/4" (actual dimension 1-15/16"). Rabbet dimension is 3/16" greater than the door thickness.

Stop - 5/8" standard - (3/4" available)

Closer Reinforcement (Optional) - 1-3/8" x 14" x 12 gage plate; 12 gage Snap-In, or 12" long x 12 gage sleeve.

Size Availability - Maximum Size 5'0" x 10'0" Single; Maximum Size 10'0" x 10'0" Double.

Label Range - Consult Label Section. (Embossed UL Listing Marks shall be provided on all stock frames.)

Universal Standard/Heavy Weight Hinge - Frames for 1-3/4" doors shall have a 9 gage steel hinge reinforcement plate, projection welded with provisions for 4-1/2" x 4-1/2" template hinges. Hinge plate is designed to be modified to accept a heavy weight hinge by removing four projections. Frames for 1-3/8" doors shall have a 11 gage steel hinge reinforcement plate, projection welded with provisions for 3-1/2" x 3-1/2" standard weight template hinges. (Optional - 8" or 10", 7 gage reinforcement)

Strike Prep - Frames for 1-3/4" doors shall have a 14 gage steel strike reinforcement plate, extruded and formed to the equivalent of 10 gage, projection welded with provisions for Universal ANSI A115.1 or ANSI A115.2 strike (4-7/8"). Frames for 1-3/8" doors shall have a 14 gage steel strike reinforcement plate, extruded and formed to the equivalent of 10 gage projection welded with provision for Universal ANSI A115.3 strike (2-3/4".)

Hinge Backset - 5/16"

Backbend - 7/16"

Anchors - Sill anchors are included with all ME frames (either integral or welded on sill anchor). All other anchors must be ordered separately.

Silencer Prep - 9/32" dia. holes shall be provided as standard on strike jambs and double headers, (3 per strike jamb and 2 per double head). Mutes are not supplied and must be ordered separately.

Double Heads - Double heads are undersized 1/16" (except for cased open heads, which are nominal).

Mortar Guards - Mortar guards of 26 gage steel shall be welded to each hinge and strike reinforcement plate.

Profiles - Equal Rabbet, Unequal Rabbet, Single Rabbet, Double Egress, Cased Opening.

Shipping - Frames are shipped as components, bundled as one pair of jambs (hinge & strike for single openings or 2 hinge jambs for double openings). Heads are packaged separately.

Handing - Frames are handed.

Revised 8/09

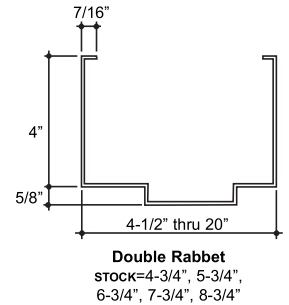
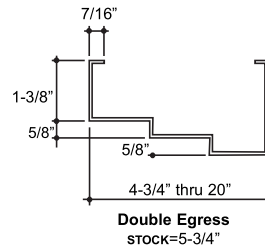
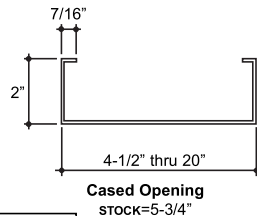
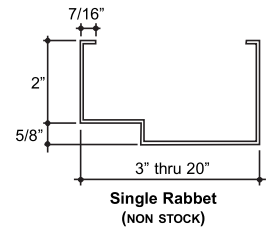
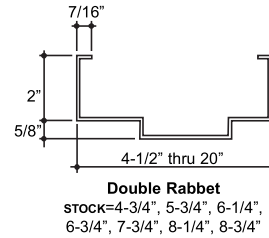
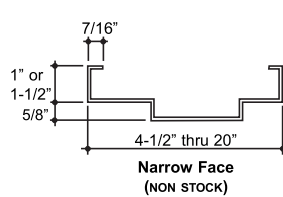
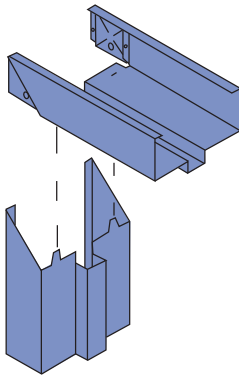
ME SERIES - SPECIFICATIONS

- I. ME Series Mitered Frames as manufactured by Republic Doors and Frames, McKenzie, TN 38201 have been tested or adhere to the criteria set forth by the following published standards:
- A. ANSI A250.8-1998 (SDI 100) - Recommended Specifications -Standard Steel Doors & Frames; Steel Door Institute.
 - B. SDI 111 - Recommended Standard Details - Steel Doors & Frames.
 - C. SDI 112-97 - Zinc Coated Standard Steel Doors and Frames.
 - D. SDI 113-79 - Test Procedure and Acceptance Criteria for Acoustical Performance for Steel Door and Frame Assemblies.
 - E. ASTM A 366/A 366M - Standard Specification for Steel, Sheet, Carbon, and High Strength, Low Alloy, Hot Rolled and Cold Rolled, General Requirements.
 - F. ASTM A 568/A 568M - Standard Specification for Steel, Sheet, Carbon and High Strength, Low-Alloy, Hot Rolled and Cold Rolled, General Requirements.
 - G. ASTM A 569/A 569M - Standard Steel Specification for Steel, Carbon (0.15 Maximum Percent), Hot Rolled Sheet and Strip Commercial Quality.
 - H. ASTM A 591/A 591M - Standard Steel Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Mass Applications.
 - I. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvanized) by Hot Dipped Process.
 - J. NFPA 80 - Standard for Fire Doors and Windows.
 - K. A250.4 1994 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcings.
- II. Frame Construction
- A. Frames shall be formed from 18,16,14 or 12 gage cold-rolled, hot-rolled or galvanized steel. (A60 galvanealed standard)
 - B. Frames shall be either knocked-down or have corners welded and ground smooth. Corners shall have aligning tabs and slots for secure and easy interlocking of jambs to head. (12 gage frames shall have coped bolted corner connections.)
 - C. Frames shall be provided with 9/32" silencer preparation, (3) per strike jamb and (2) per head for double openings, for field application after finish painting.
 - D. Frames for 1-3/4" doors shall have 9 gage steel universal hinge tap plate, projection welded, with provisions for 4-1/2" x 4-1/2" template hinges, and 14 gage steel strike reinforcement plate, extruded and formed to the equivalent of 10 gage, projection welded, with provision for Universal ANSI A115.1 or ANSI A115.2 strike. Mortar guards of 26 gage steel shall be welded to each hinge or strike reinforcing plate.
 - E. Frames for 1-3/8" doors shall have 11 gage steel hinge reinforcement plates, projection welded, with provisions for 3-1/2" x 3-1/2" template hinges, and 14 gage steel strike reinforcement plate, projection welded, with provision for cylindrical ANSI A115.3 strike.
 - F. Reinforcement for surface closer shall be 12 gage steel. Proper reinforcement shall be provided for other hardware when required.
- III. Frame Finish
- Frames will be cleaned and phosphatized with one coat of force-cured grey primer, that meets or exceeds ANSI A224.1-1990 and ASTM specification B117 for finishes. (Capable of passing 120 hour salt spray test and a 240 hour humidity test in compliance with ASTM D1735.)

Revised 8/08

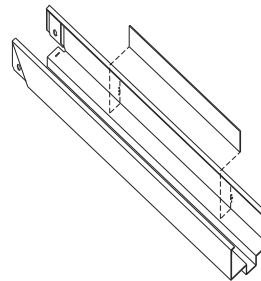
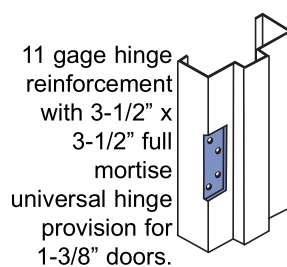
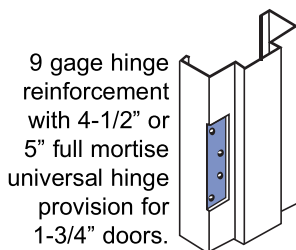


ME SERIES - FRAME CONSTRUCTION

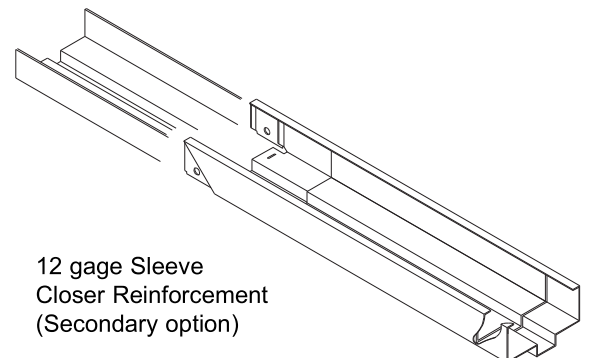
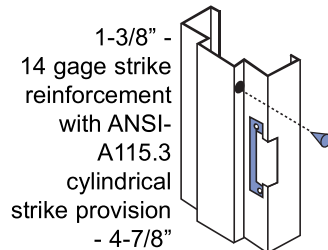
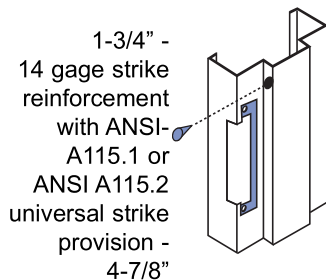
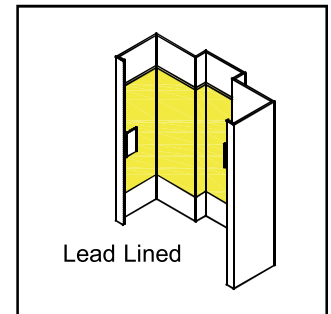


Rough Opening Required for
Butted Universal Frame
Door Width Opening + 2 Times Face Dimension + 1/2"
Door Height Opening + Face Dimension + 1/4"

HARDWARE PREPARATION



12 gage Flat Plate Closer Reinforcement (Primary option)



12 gage Sleeve Closer Reinforcement (Secondary option)

Revised 8/09

ME SERIES - BULLET RESISTANT FRAME - LEVELS 1 THRU 8

ME Series Bullet Resistant Mitered Frames shall be as manufactured or furnished by Republic Doors and Frames, McKenzie, Tennessee 38201.

Thickness - Made for standard door thickness 1-3/4"

Gages - 14 gage only

Faces - 1" to 4"

Standard Rabbits - 1-3/8" (actual dimension 1-9/16"); 1-3/4" (actual dimension 1-15/16"). Rabbet dimension is 3/16" greater than the door thickness.

Stop - 5/8" standard

Closer Reinforcement (Optional)- 1-3/8" x 14" x 12 gage plate; 12 gage Snap-In, or 12" long x 12 gage sleeve.

Size Availability - Maximum Size 5'0" x 10'0" Single; Maximum Size 10'0" x 10'0" Double.

Universal Standard/Heavy Weight Hinge - Frames shall have 9 gage steel hinge reinforcement plate, projection welded for provisions for 4-1/2" x 4-1/2" and 5" template hinges or reinforced for continuous hinges.

Strike Prep - Frames shall have a 14 gage steel strike reinforcement plate, extruded and formed to the equivalent of 10 gage, projection welded with provisions for Universal ANSI A115.1 or ANSI A115.2 strike (4-7/8").

Hinge Backset - 5/16"

Backbend - 7/16"

Anchors - Masonry wire, tee and existing opening punch and dimple. Sill anchors are included with all ME frames (either integral or welded on sill anchor).

Silencer Prep - 9/32" dia. holes shall be provided as standard on strike jambs and double headers, (3 per strike jamb and 2 per double head). Mutes are not supplied and must be ordered separately.

Double Heads - Double heads are undersized 1/16".

Mortar Guards - Mortar guards of 26 gage steel shall be welded to each hinge and strike reinforcement plate.

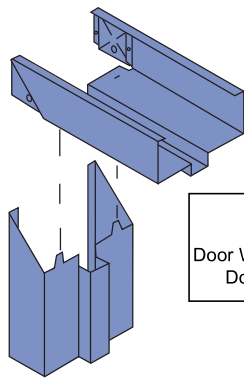
Profiles - Equal Rabbet, Unequal Rabbet, Single Rabbet.

Handing - Frames are handed.

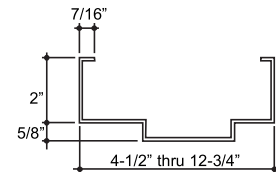
Special Requirements - Frames must be welded - Masonry frames fully grouted do not require armor plating.

Revised 8/09

ME SERIES - BULLET RESISTANT FRAME - LEVEL 1 CONSTRUCTION



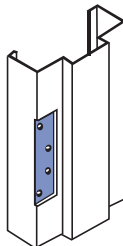
Rough Opening Required for
Butted Universal Frame
Door Width Opening + 2 Times Face Dimension + 1/2"
Door Height Opening + Face Dimension + 1/4"



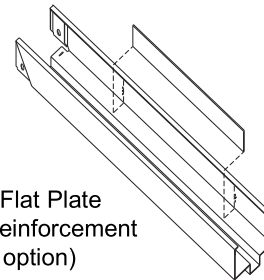
Double Rabbet
Stock=4-3/4", 5-3/4", 6-1/4",
6-3/4", 7-3/4", 8-1/4", 8-3/4"

HARDWARE PREPARATION

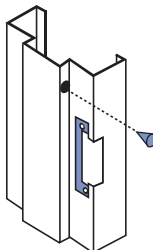
9 gage hinge
reinforcement
with 4-1/2" or
5" full mortise
universal hinge
provision for
1-3/4" doors.



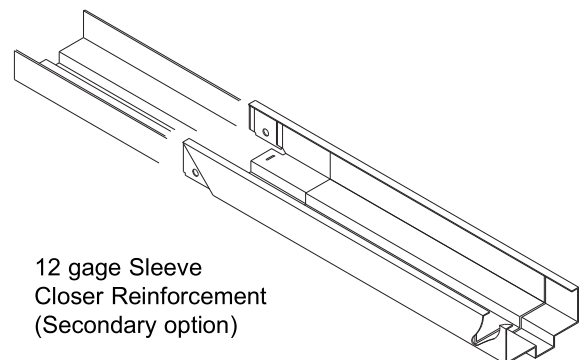
12 gage Flat Plate
Closer Reinforcement
(Primary option)



1-3/8" -
14 gage strike
reinforcement
with ANSI-
A115.3
cylindrical
strike provision
- 4-7/8"

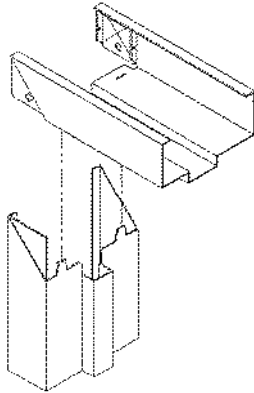


12 gage Sleeve
Closer Reinforcement
(Secondary option)

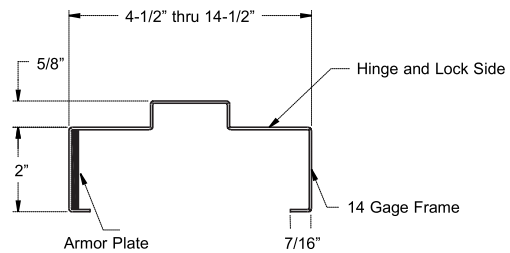


Revised 6/05

ME SERIES - BULLET RESISTANT FRAME - LEVEL 2 & 3 CONSTRUCTION



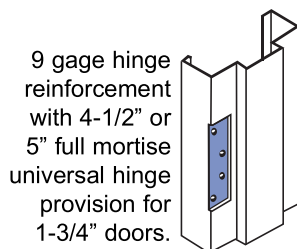
Rough Opening Required for
Butted Universal Frame
Door Width Opening + 2 Times Face Dimension + 1/2"
Door Height Opening + Face Dimension + 1/4"



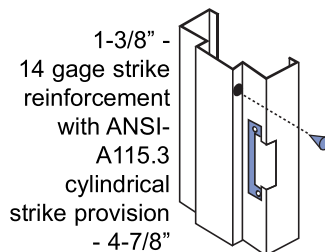
Double Rabbet

Note: Masonry frames fully grouted
do not require armor plating.

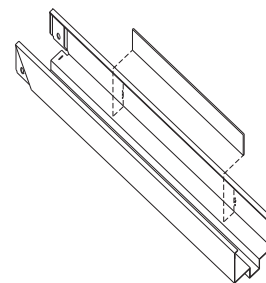
HARDWARE PREPARATION



9 gage hinge
reinforcement
with 4-1/2" or
5" full mortise
universal hinge
provision for
1-3/4" doors.



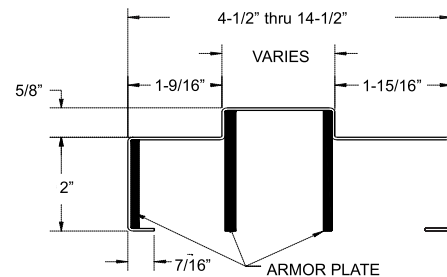
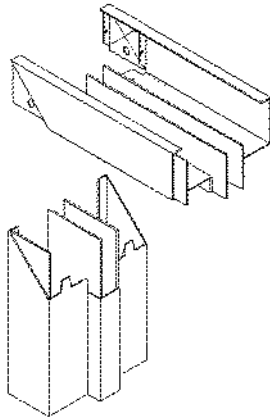
1-3/8" -
14 gage strike
reinforcement
with ANSI-
A115.3
cylindrical
strike provision
- 4-7/8"



12 gage Flat Plate
Closer Reinforcement
(Optional)

Revised 8/09

ME SERIES - BULLET RESISTANT FRAME - LEVEL 4 THRU 8 CONSTRUCTION

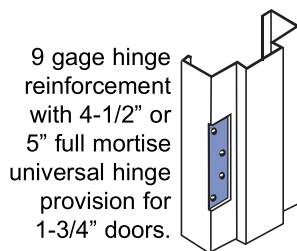


Double Rabbet

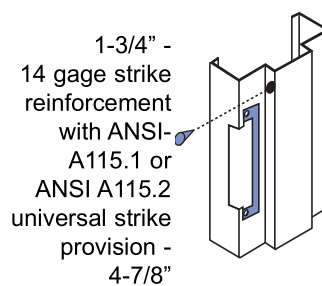
Rough Opening Required for
Butted Universal Frame
Door Width Opening + 2 Times Face Dimension + 1/2"
Door Height Opening + Face Dimension + 1/4"

NOTE: Masonry frames fully grouted do not require
armor plating.

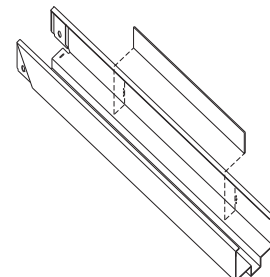
HARDWARE PREPARATION



9 gage hinge
reinforcement
with 4-1/2" or
5" full mortise
universal hinge
provision for
1-3/4" doors.



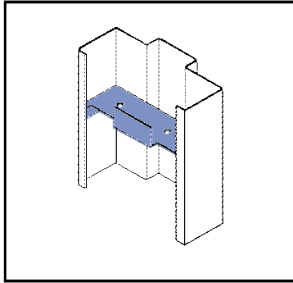
1-3/4" -
14 gage strike
reinforcement
with ANSI-
A115.1 or
ANSI A115.2
universal strike
provision -
4-7/8"



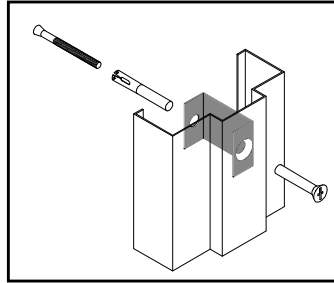
12 gage Flat Plate
Closer Reinforcement
(Optional)

Revised 8/09

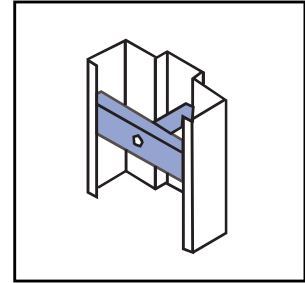
ME SERIES - ANCHOR DETAILS



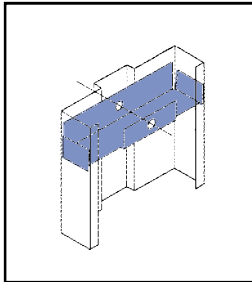
Steel Stud
Anchor



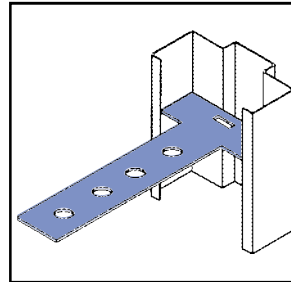
Prepared Opening
Anchor



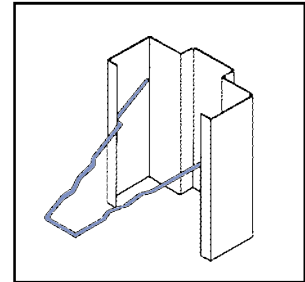
Twist in Prepared
Opening Anchor



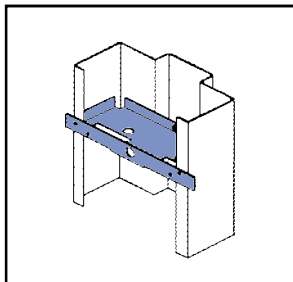
Snap-in Prepared
Opening Anchor



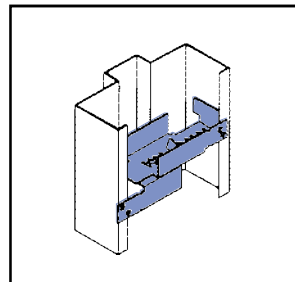
Tee Masonry
Anchor



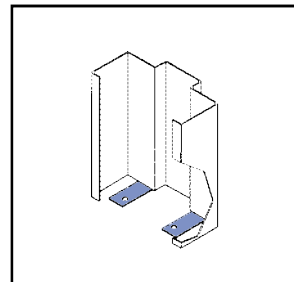
Wire Masonry
Anchor



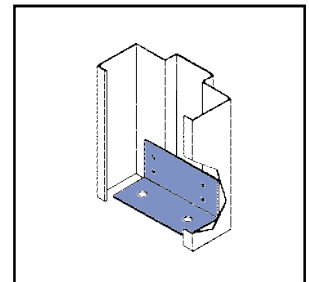
Wood Stud
Anchor



Adjustable Wood/Steel Stud
Anchor (Assembled)



Integral Sill Anchor
(5-3/4 Stock Only)



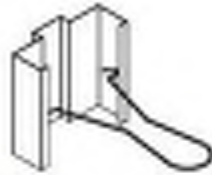
One Piece Sill Anchor
Welded On

Revised 8/08

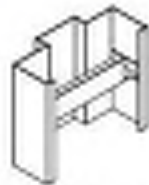
Manufacturer's Installation Instructions for Correct Location and Attachment of Anchors



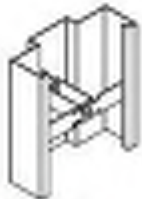
Masonry "T"



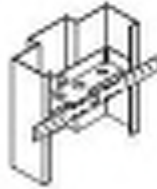
Masonry Wire



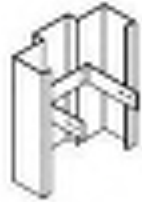
Steel Stud



Existing Wall



Multi-purpose (CSA)



Wood Stud

A slip-in anchor must be used for each 30 inches of jamb height or fraction thereof. On the hinge jamb, each anchor must be located immediately above or below each hinge reinforcement. On the strike jamb, anchors must be located directly opposite the anchors on the hinge jamb.

Base anchors are not required on frames provided with expansion shell (existing wall) anchors. All other frame-anchor combinations must have a welded-in base anchor.

An additional jamb anchor must be added to frames using expansion shell anchors.

Anchor attachment methods may be slip-in force fit, spot welded, or arc welded to frame in proper locations.



CENTURY ARCHITECTURAL HARDWARE

29220 LYON OAKS DR.

WIXOM

MI

48393

Tel: 248-348-6500

ELEVATOR PENTHOUSE

Control No.1145

1145

Submitted By: JASON KOCEMBO

Finish Hardware Catalog Cuts

Section 087100

February 24, 2021

PROJECT

Name: ELEVATOR PENTHOUSE
Address: 66 ADELAIDE
DETROIT MI 48201
Phone:
Superintendent: TOM CARLSON Engineer:
810-845-4854 TOM.CARLSON@EANDLGROUP.COM

CONTRACTOR

Name: E & L CONSTRUCTION GROUP
Address: P.O. BOX 418
FLINT MI 48501
Phone: 810-744-4300
Contact: TODD FINLEY

ARCHITECT

Name: WAH YEE ASSOCIATES & PLANNERS
Address: 42400 GRAND RIVER AVE STE #200
NOVI MI 48375
Phone: 248-489-9160
Project Number: 5122

HARDWARE SUPPLIER

Project Manager: JASON KOCEMBO

ELEVATOR PENTHOUSE



CENTURY ARCHITECTURAL HARDWARE
29220 LYON OAKS DR.

WIXOM MI 48393
248-348-6500 Fax:

Control No.1145
1145

Submitted By: JASON KOCEMBO

February 24, 2021

5 Knuckle Full Mortise Hinges

Heavy Weight Ball Bearing

FBB168 – (ANSI A8111) Steel – polished and plated or phosphated and prime coated for painting

FBB199 – (ANSI A2111) Brass or bronze – polished and plated or painted

FBB199 (32) – (ANSI A5111) Stainless steel – highly polished

FBB199 (32D) – (ANSI A5111) Stainless steel – satin finish



- For use on heavy doors or doors where high frequency is expected such as entrance doors to office buildings, stores, public buildings and corridor entrance doors to offices
- All hinges have template screw hole location for use on either wood or hollow metal doors and frames
- Equipped with four Stanley permanently lubricated non-detachable ball bearings
- Pins in non-ferrous hinges are stainless steel
- Hole in bottom tip for easy pin removal
- Reversible flush tips and pins
- Hinges can be furnished as follows:
 - with raised barrel (RB)
 - with electric wires and/or switches (CE and/or CS)
 - with hospital tips (HT)
 - with decorative tips
 - with security studs
 - with non-removable pins (NRP)



Size Open		Gauge of Metal		Flat Head Screws Per Piece		Quantity Per Box	Quantity Per Case	Case Weight			
Inches	(mm)	Inches	(mm)	Machine	Wood			Bronze		Steel	
						Lbs.	(Kg)	Lbs.	(Kg)		
4 1/2 x 4 1/2	(114 x 114)	.180	(4.6)	8 - 12-24 x 1/2	8-12 x 1 1/4	3 ea.	30 ea.	45	(21)	42	(19)
5 x 4 1/2	(127 x 114)	.190	(4.8)	8 - 12-24 x 1/2	8-12 x 1 1/2	3 ea.	24 ea.	46	(21)	40	(18)
5 x 5	(127 x 127)	.190	(4.8)	8 - 12-24 x 1/2	8-12 x 1 1/2	3 ea.	24 ea.	50	(23)	46	(21)
6 x 4 1/2	(152 x 114)	.203	(5.2)	10 - 1/4 -20 x 1/2	10-14 x 1 1/2	3 ea.	24 ea.	63	(29)	53	(24)
6 x 5	(152 x 127)	.203	(5.2)	10 - 1/4 -20 x 1/2	10-14 x 1 1/2	3 ea.	24 ea.	65	(30)	55	(25)
6 x 6	(152 x 152)	.203	(5.2)	10 - 1/4 -20 x 1/2	10-14 x 1 1/2	3 ea.	24 ea.	76	(35)	61	(28)
8 x 6"	(203 x 152)	.203	(5.2)	16 - 1/4 -20 x 1/2	16-14 x 1 1/2	3 ea.	12 ea.	57	(26)	51	(23)
8 x 8"	(203 x 203)	.203	(5.2)	16 - 1/4 -20 x 1/2	16-14 x 1 1/2	3 ea.	12 ea.	68	(31)	61	(28)

* Available in Steel only

Consult factory for other sizes not listed


Specifications & Certifications

8200/R8200/7800 Mortise Locks

SARGENT®

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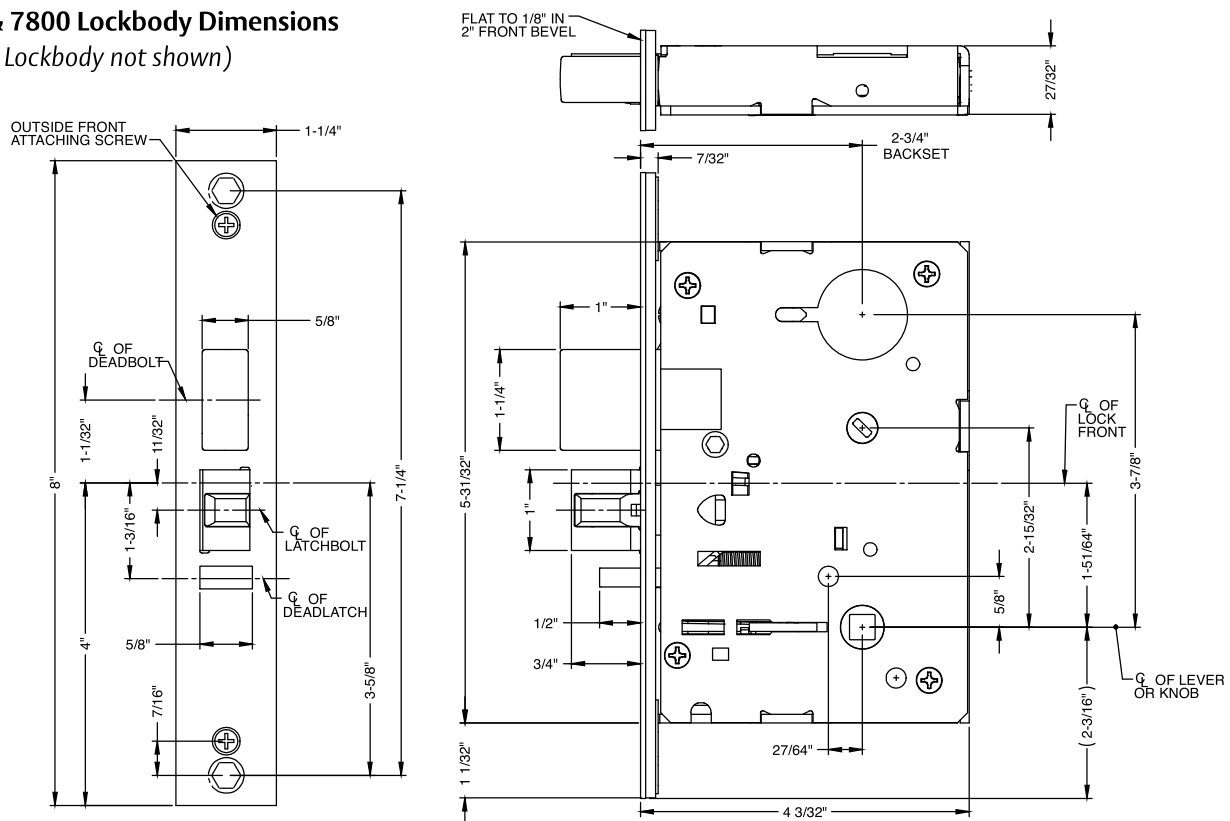
Certification Compliance

ANSI/BHMA	Certified to ANSI/BHMA A156.13 Series 1000 Operational Grade 1 and Security Grade 1 with all standard trims. ANSI/ASTM F476-84 Grade 40 with concealed mortise cylinder. Note: LFIC (Removable) Cylinders and SFIC Cylinders do not meet Security Grade 1 requirements.
ADA 	Meets A117.1 Accessibility Code. Meets BOMA International 4.13.8 Complies with American Disability Act; Consult local authorities
UL-cUL	UL and cUL Listed to US and Canadian safety standards for A label 4 x 10 single and 8 x 10 double (3 hour fire door) and lesser class doors, stamped letter F and UL symbol on armored front indicate listing
Positive Pressure	Meets ANSI/UL 10C, Positive Pressure Fire Test of Door Assemblies
California	California State Reference Code (Formerly Title 19, California State Fire Marshal Standard) All levers with returns comply; levers return to within 1/2" (13mm) of door face
Tornado and Hurricane Codes	See page 4

Any retrofit or other field modification to a fire rated opening can potentially impact the fire rating of the opening, and Sargent Manufacturing Company makes no representations or warranties concerning what such impact may be in any specific situation. When retrofitting any portion of an existing fire rated opening, or specifying and installing a new fire-rated opening, please consult with a code specialist or local code official (Authority Having Jurisdiction) to ensure compliance with all applicable codes and ratings.

8200 & 7800 Lockbody Dimensions

(R8200 Lockbody not shown)



Note: R8200 and 8200 lockbodies are dimensionally the same except for the through-bolt locations

Explanation of the 8200/7800 Lockbody types:

Lockbody Type ¹	Trim Available x Lockbody type	Standard 8200 Door Prep	Through Bolted Trim	Multi-function lockbody available	How to order lockbody only
8200	Lever x Rose/Escutcheon	Yes	Yes	Yes	82 x Function x Finish ³
7800	Knob x Rose/Escutcheon	Yes	Yes	Yes	78 x Function x Finish ³
R8200	Simpli™ roseless trim	No	Yes ²	Yes	R82 x Function x Finish ³
8200 for ALP	ALP Push/Pull Trim	Yes	Yes	Yes	Six Digit Part # determined by function*
7800 PT	PT Push/Pull Trim	Yes	Yes	Yes	Six Digit Part # determined by function*

¹ Lockbodies can only be used with the specified trim

² Through Bolt locations are different from standard trim, special door prep required

³ **Note:** Cylinder and trim not included. Outside front, strike and screw pack are included

* See Price book; **Note:** Outside Fronts, Strikes, Cylinders and Trim are NOT included

Features

8200/R8200/7800 Mortise Locks

SARGENT®

ASSA ABLOY

The patented SARGENT Mortise Locks are designed and constructed with high quality components to provide maximum security, performance and durability. These locks represent over a century of innovation and experience in manufacturing hardware and are the industry's benchmark for mortise locks: strong, durable, flexible, innovative and secure.

Specifications

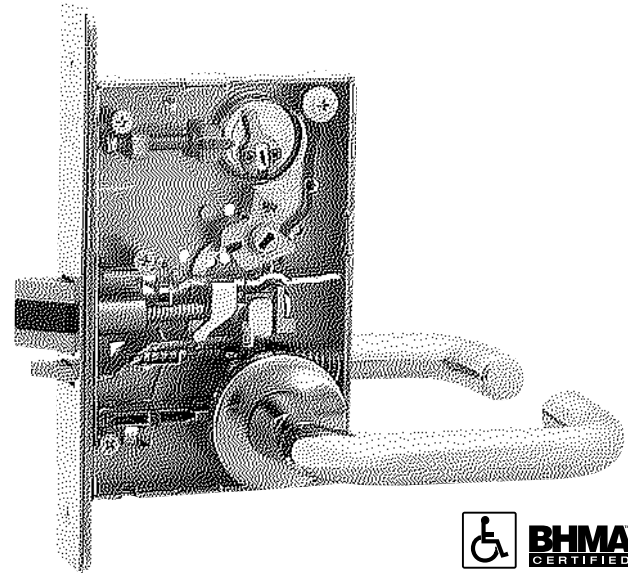
- For Doors 1-3/4" (44mm) thick standard
- Backset 2-3/4" (70mm) only
- Outside Front Plate Brass, bronze or stainless steel. 8" (203mm) x 1-1/4" (31mm), ANSI/BHMA Standard A156.115
- Front adjustable at any angle from flat to beveled 1/8" (3mm) in 2" (51mm)
- Hubs for Knobs/Levers
 - 7800: sintered iron copper infiltrated
 - 8200: cold forged steel
 - R8200: investment cast steel
- Auxiliary Deadlatch is stainless steel and non-handed
- Specify hand on order; easily field reversible (if no hand is specified RH will be provided)
- Strike: Brass, bronze or stainless steel; ANSI Standard; curved lip, non-handed (strike box optional)
- Keys: Two, nickel silver (control key or emergency key must be ordered when required)
- Cylinder: Brass, size #41 (1-1/8") standard (except for Freewheeling, size #46 (1-3/4"))
- Can be masterkeyed or grand masterkeyed. Construction keying available. LA standard keyway
- Stile: 4-1/2" (114mm) minimum stile for 7800/8200/R8200, 4-3/4" (121mm) minimum stile for electrical function locks
- Door Prep: ANSI/BHMA A156.115 or A156.115W modified per template (see template)
- Warranty: 10 year limited warranty, 2 year limited warranty on electrified locks. Warranty limited to replacement of lockbody and/or components

Maximum Strength & Durability

- Certified to and exceeds ANSI/BHMA A156.13, Series 1000, Operational Grade 1 and Security Grade 1 with all standard trims
- Exceeds cycle testing requirements by 14 times the ANSI/BHMA A156.13 Grade 1 standard
- Case: 12 gauge heavy duty wrought steel, zinc dichromate plated. Thickness 7/64" (3mm) (.109")
- 1/8" (.125") cold-rolled steel inside front holds lock securely in door
- Heavy duty wrought steel hubs and high carbon steel spring cartridge provide superior strength and cycle life for 8200 locks
- Latchbolt is stainless steel with 3/4" (19mm) projection one-piece, anti-friction reversible latch
- Deadbolt is one-piece hardened stainless steel with 1" (25mm) projection
- Optional 8200 stainless steel hubs for Institutional setting (specify 3- option)
- Patent pending and/or patent www.assaabloydss.com/patents

Maximum Flexibility

- Fast and easy installation. Lock is easily re-handed without removing parts or opening the lock case



- Aesthetic design. Many escutcheon and lever styles available to match a wide range of styles
- Many standard architectural grade finishes, including Polished Nickel (US14) & Satin Nickel (US15) finishes
- 53 functions including 4 electrical functions. The most in the industry for a broad range of applications
- Versatile. Offered for door thicknesses ranging from 1-3/8" (35mm) to 6" (152mm)
- Available with vandalism deterrent trim and/or secure fastener options Torx® and spanner screws for high abuse conditions
- Available with push/pull trim, perfect for hospital applications

Innovation

- First in the industry to offer a multi-functional lockbody that embodies 8 functions in 1 lockbody
- Easy operation. Only 30° of lever rotation required to retract latchbolt
- Lever springs contained inside of the lock case for easier installation
- SARGENT's revolutionary MicroShield® available. This antimicrobial silver-based finish coating permanently suppresses the growth of bacteria, algae, fungus, mold and mildew. EPA and NSF approved and FDA listed
- Broad offering of electro-mechanical configurations offer higher security for the most demanding access/egress control applications featuring ElectroLynx® quick connectors

Security

- Multiple security trim options available: free-wheeling, security escutcheon and anti-vandal pull trim (patent pending)
- Security key systems available (Degree, Signature, Keso, Keso F1, & XC)

Coastal Series™ & Standard Levers

8200 Mortise Locks

SARGENT®

ASSA ABLOY

Coastal Series (8200 & R8200 Series)

Features

- All levers meet ADA compliance for national codes
- Not available with CO and TO roses
- Levers are solid cast brass
- Finishes available – 3, 4, 9, 10, 10B, 10BE, 10BL, 14, 15, 20D, 26, 26D, BSP
- All lever height (+/- 1/16") measurements represent total distance from door face

<p>G - Gulfport™ (Handed)</p>			<p>S - Sanibel™ (Handed)</p>		
<p>R - Rockport™</p>			<p>Y - Yarmouth™ (Handed)</p>		

Standard Levers (8200 Series Only)

Features

- All levers meet ADA compliance for national codes
- Solid forged or cast
- Lever designs J, L and P have lever returns within 1/2" (13mm) or less of door face and meet California State Reference Fire Code
- All lever height (+/- 1/16") measurements represent total distance from door face

<p>A (Handed)</p>			<p>J</p>		
<p>B</p>			<p>L</p>		
<p>E</p>			<p>P</p>		
<p>F</p>			<p>W</p>		

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Coastal Series™ & Standard Trim

8200/R8200/7800 Mortise Locks

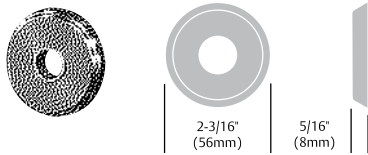
SARGENT®

ASSA ABLOY

Coastal Series Roses & Escutcheons

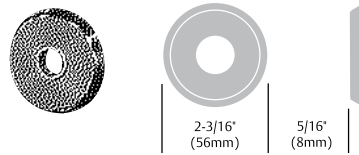
TR Traditional Rose

- Dual radii edge



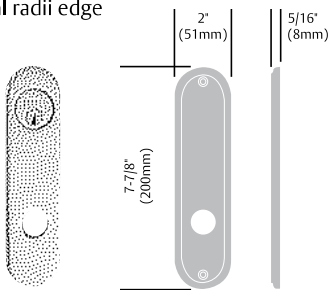
CR Contemporary Rose

- Beveled edge



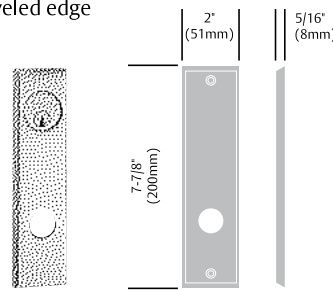
TE Traditional Escutcheon

- Dual radii edge



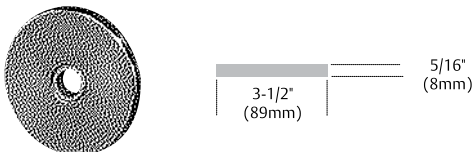
CE Contemporary Escutcheon

- Beveled edge

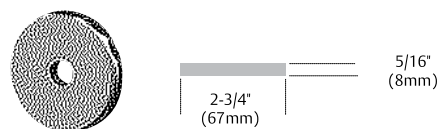


Standard Roses

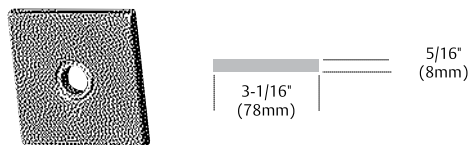
L Rose



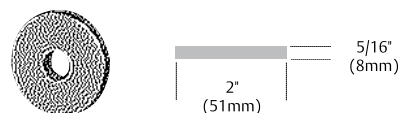
O Rose



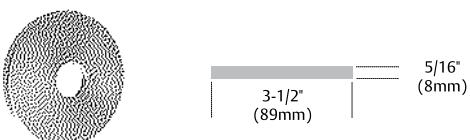
E Rose



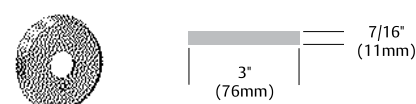
LN Rose



SL Rose



BH Rose



Functions & Descriptions

8200/R8200/7800 Mortise Locks

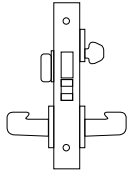
SARGENT®

ASSA ABLOY

Single Cylinder with Deadbolt

◆*‡24 Room Door

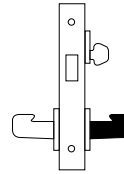
8200, R8200 & 7800



- Key outside or thumbturn inside retracts and projects deadbolt
- Trim either side retracts latchbolt
- Latchbolt & deadbolt operate independently of each other
- **ANSI F21**

30 Dummy Trim Deadlock

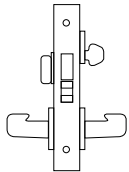
8200, R8200 & 7800



- Deadbolt operation only
- Key outside retracts and projects deadbolt
- Trim inside always retracts deadbolt
- Trim outside is always locked
- Same as 28 Function without a thumbturn

*25 Dormitory or Exit

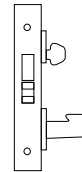
8200, R8200 & 7800



- Key outside or thumbturn inside retracts and projects deadbolt
- Trim from either side retracts latchbolt, when the deadbolt is in the retracted position
- Trim outside is locked, when the deadbolt is projected
- When deadbolt is projected, Trim inside retracts latchbolt and deadbolt simultaneously, unlocking outside trim
- **ANSI F13**

◆*35 Storeroom

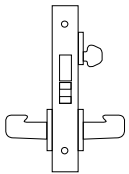
8200, R8200 & 7800



- Key outside retracts and projects deadbolt
- Trim outside retracts latchbolt, except when deadbolt is projected
- No inside trim or cylinder

◆27 Closet or Storeroom

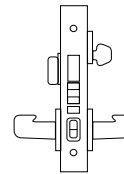
8200, R8200 & 7800



- Key outside retracts and projects deadbolt
- Trim from either side retracts latchbolt
- Same as 24 function without thumbturn
- Latchbolt & deadbolt operate independently of each other

‡43 Apartment Corridor Door

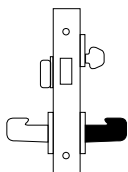
8200, R8200 & 7800



- Key and thumbturn both retract & project the deadbolt
- Trim outside is locked by toggle or projecting deadbolt
- Trim outside is unlocked by toggle only
- Key retracts both latchbolt and deadbolt, trim outside remains locked
- Trim inside always retracts latchbolt (and deadbolt simultaneously), trim outside remains locked
- Auxiliary deadlatch
- **ANSI F20**

28 Dummy Trim Deadlock

8200, R8200 & 7800



- Deadbolt operation only
- Key outside retracts and projects deadbolt
- Trim inside always retracts deadbolt
- Trim outside is always locked
- Thumbturn inside retracts and projects deadbolt

*8200 Available with Freewheeling Trim

‡ 7800 Available with Push/Pull Trim



If shaded, knob or lever rigid at all times

◆**CAUTION:** Not recommended for use on any door used for Life Safety egress

How To Order, Finishes, Packaging & Security Screw Chart

8200/R8200/7800 Mortise Locks

SARGENT®

ASSA ABLOY

How to Order 8200, R8200 & 7800 Mortise Locks

10- Options*	82 Series	71 Function	12VDC Voltage	TR Roses/ Escutcheons	MJ Trim	15 Finish	RHR Hand
For all available options see Pages 36-38	82 R82 78 Mortise Lock	Pages 21-27 for Details	12VDC 24VDC	Pages 9-14 (With R8200, specify "R" for roseless design)	Levers — Pages 7-8, 10 FW Trim — Page 15, Push/Pull Trim — Page 16-17, Knobs — Page 20	Page 41	RHR
			Must be specified for Functions 70, 71, 72 & 73				RH
							LHR
							LH

* Multiple options can be selected

Finishes

Standard Levers & Knobs	BHW Trim	BHL Trim	BHD Trim	Studio Collection Lever Trim	8200 Coastal Series™ Trim and 8200 Freewheeling Trim	7800 Push/Pull Trim	Description	ANSI/BHMA
03				03	03	03	Polished brass, clear coated	605
04				04	04	04	Satin brass, clear coated	606
09				09	09	09	Polished bronze, clear coated	611
10				10	10	10	Satin bronze, clear coated	612
10B				10B	10B	10B	Oxidized bronze, oil rubbed	613
10BE				10BE	10BE		Dark oxidized satin bronze, equivalent	(613E)
10BL				10BL	10BL		Oxidized satin, bronze, clear coated	614
14				14	14		Polished nickel, clear coated	618
15 *				15 *	15 *		Satin nickel, clear coated	619
20D				20D	20D		Statuary dark bronze, clear coated	624
26				26	26		Polished chrome	625
26D *				26D *	26D *		Satin chrome	626
32	32	32	32	32		32	Polished stainless steel	629
32D *	32D *	32D *	32D *	32D *		32D *	Satin stainless steel	630
BSP				BSP	BSP		Black Suede Powder Coat	—

* MicroShield® — optional designate SG- option (Available on 15, 26D, and 32D Finishes only)
Split Finishes — specify outside finish first, then inside finish example: US26D (outside) / US04 (inside)

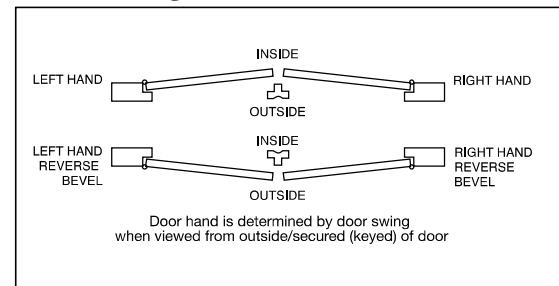
6 Lobe & Spanner Bit packs

Part Number	Descriptions
82-3855	6 Lobe Bit Pack 6 bits
82-3856	(sizes- T8, T9, T10, T15, T20, T25, T27) 9/32" Driver Spanner Bit Pack 5 bits (sizes- 6, 8, 10, 12, 14) 1/4" Driver

Packaging

8205 x LNL	approx. 6.1 lbs. (2.7kg)/box	6 boxes/case
8205 x WTL	approx. 7.2 lbs. (3.1kg)/box	6 boxes/case

Door Handing



* Multiple options available
Wrought Box Strike optional — must order with lockset as WBS- option

General Information

1431 Series Powerglide®

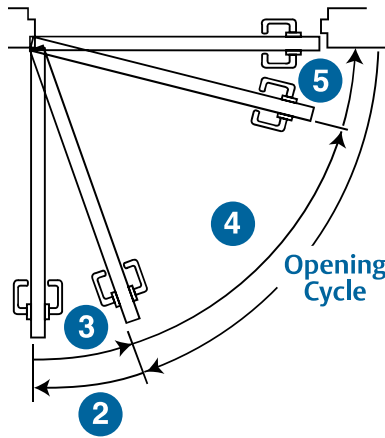
1 Closer Spring Adjustment (not shown)

- Effects the entire cycle of the door closer movement
- Used to size closer for application requirements
- Determines the amount of force with which the door closes and the amount of force required to open the door
- Adjustable to compensate for door size and draft conditions

2 Backcheck valve

- At approximately 70° of the open cycle, the Backcheck Valve begins to slow the door's motion
- Prevents the door from slamming into the door's stop
- Valve is used to control the intensity of the Backcheck
- **Note:** A Positive stop is required, Backcheck cannot be used as a stop

Door Closer Cycle



3 Delayed action valve (Optional)

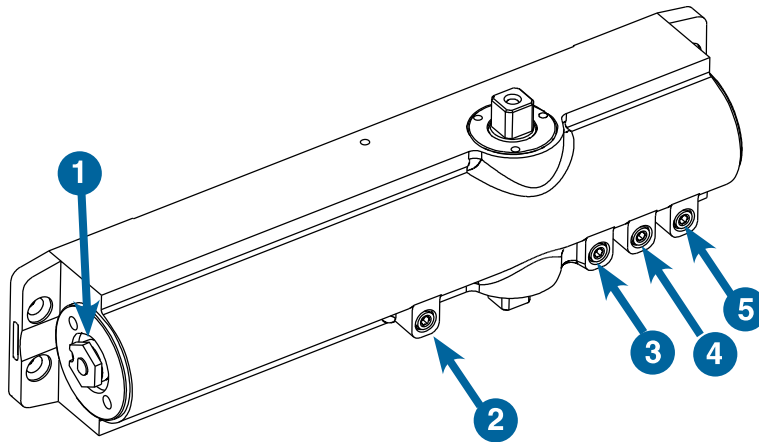
- Holds the door in the open position momentarily
- 20 second minimum hold open delay
- The feature is available for all applications and arms
- Beneficial when moving carts or objects thru door opening and ADA applications

4 Closing speed valve

- Controls how fast the door closes to approximately 8" from the closed position

5 Latching speed valve

- Controls the speed of the door during the final 8" of door swing
- The force the door closes with is controlled by the Closer spring
- **Note:** This adjustment is critical for door latching



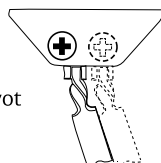
ANSI Standards

ARM	TYPE	ARM	TYPE
O	CO2011	PF9	CO2101
P9	CO2021	P10	CO2021
H	CO2051	PS/CPS	CO2021
PH9	CO2061	CPSH/PSH	CO2061

All are certified ANSI types including options PT4 A, B, D, E, F, G, H

Arm Leverage Adjustment

Closers using "O" arms have the provision to increase closing power by 15% by adjusting foot pivot



How to Select the Proper Closer

Things to Consider

1. Size and Weight of Door

The 1431 Door Closer is non-sized so that closing force can be adjusted in the field to accommodate various door sizes and weights.

2. Interior Application

The standard application is the most efficient in terms of power and control.

3. Exterior Application

The top jamb, parallel arm application should be used. Exterior doors require greater closing forces because of draft conditions. Always place the closers out of the weather.

4. Degree of Opening

Proper arm and position on the door is most important to permit the door to open far enough to allow adequate traffic flow.

5. Function

Closers are available with hold-open or positive stop arms.

6. Special Condition

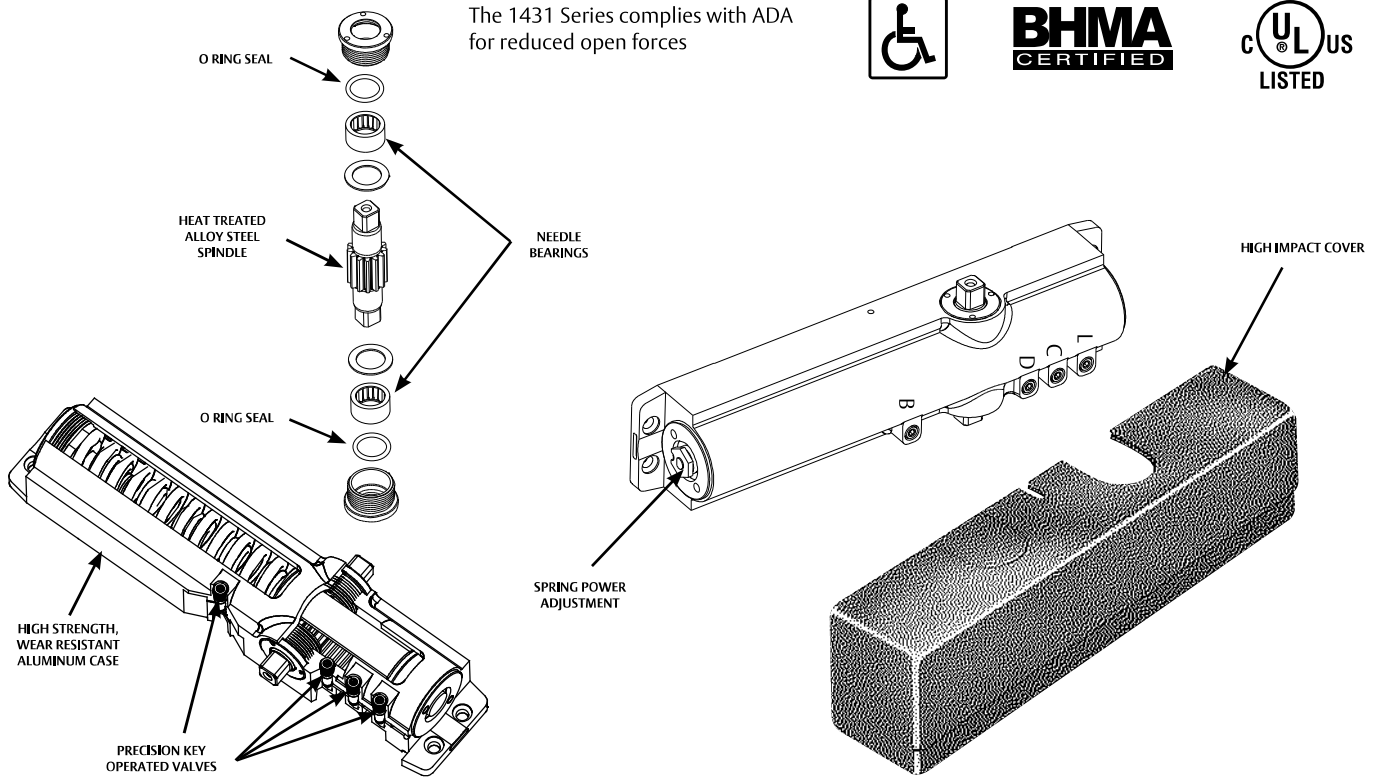
Consult factory when special hinges, overhead holders or other specialized hardware is used.

Features and Benefits

1431 Series Powerglide®

SARGENT®

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Features

- Exceeds 15 Million cycles
- Certified ANSI/BHMA A156.4 Grade 1
- UL 10C listed for positive pressure fire test
- UL / cUL listed for use on fire rated doors
- 25 year limited warranty
- User friendly versatile mounting applications permit standard, top jamb, parallel and track installations
- Self sticking templates supplied for most applications
- Adjustable spring power allows 1431 closers a size range of 1 through 6. They are adjusted to size 3 before leaving the factory
- One door closer body for all applications. All 1431 are non-handed
- Meets ADA requirements in all applications, except Push Side Track application (except track)
- High impact non-corrosive plastic covers with two machine screws standard, metal covers and lead lined are optional
- All weather fluid allows closer to operate effectively in extreme temperatures without readjustment
- 1-1/2" diameter piston for superior door control
- Standard pressure relief valves for both opening and closing cycles protect the door and frame from damage caused by abuse
- Retrofits existing SARGENT 1230/1231 Series Closer installations

Heavy Duty Construction

- Heat treated full rack and pinion for high strength and wear resistance
- Heavy duty one piece high silicon content aluminum alloy body provides corrosion resistance, superior strength and wear resistance
- 1/2" arm engagement over a 7/16 square spindle ensures a wear-resistant tight joint

Fasteners

- Machine Screws and self tapping screws provided for closer and arm
- In addition, wood screws supplied when installed on wood doors with through bolts

Valves

- Separate brass low sensitivity control valves offer ability to separately regulate door speed, latching, backcheck and optional delayed action
- All valves are captured to prevent accidental removal, adjustable with an 1/8" Allen wrench
- Adjustable backcheck protects the door and hardware from damage during the opening cycle
- Adjustable delayed action (optional) permits easy access for physically impaired individuals

Full Complement of Arm Types

- Standard and parallel arms
- Push and pull track arms
- Heavy duty forged steel arms are finely finished and interchangeable between SARGENT 281 and 1431, and 351 Series. The cold formed arms (RO/RP9) are unique to the 1431 series and not interchangeable with other SARGENT closers

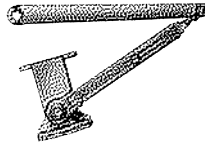
Regular Duty Parallel Arms

1431 Series Powerglide®

Hold Open Arms

PH4 - Flush frame, Friction Hold Open Arm

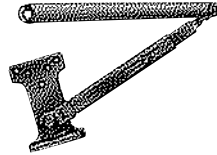
- Forged Steel Arm 11-1/4" (286mm) long
- Holds open from 75° – 180°
- Easily adjusted by wrench
- Non-handed
- Use on frames where stop or soffit is too narrow to mount the standard hold open foot bracket



For arm only, order as 25-PH4 x finish
Includes: 63-2229 - Main arm and link assembly
61-2303 - Foot assembly
64-0050 - Foot bracket
64-2407 & 63-2391 - Screw packs

PH9 - Friction Hold Open Arm

- Forged Steel Arm 11-1/4" (286mm) long
- Holds open from 75° – 180°
- Easily adjusted by wrench
- Non-handed

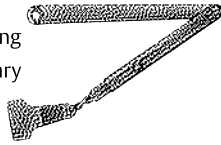


For arm only, order as 25-PH9 x finish
Includes: 63-2229 - Main arm and link assembly
61-2303 - Foot assembly
64-0039 - Foot bracket (125 PH9)
64-2407 & 63-2391 - Screw packs

Offset Bracket Arms

P3 - 1" Offset Bracket for use with Auxiliary Holder/Stop

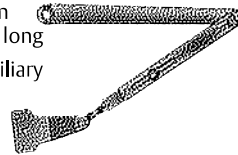
- Forged Steel Arm 11-1/4" (286mm) long
- For use with auxiliary surface overhead stops and holders
- Foot bracket is offset 1" more than P-9, allowing door closer to be lowered on door face
- Non-handed



For arm only, order as 25-P3 x finish
Includes: 63-2607 - Main arm and link assembly
63-2270 - Foot assembly
64-2407 & 63-2391 - Screw packs

P3A - 1-3/4" Offset Bracket for use with Auxiliary Holder/Stop

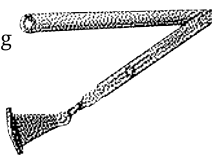
- Forged Steel Arm 11-1/4" (286mm) long
- For use with auxiliary surface overhead stops and door coordinators
- Foot bracket lowers door closer an additional 3/4" below P3 bracket
- Non-handed



For arm only, order as 25-P3A x finish
Includes: 63-2607 - Main arm and link assembly
63-2274 - Foot assembly
64-2407 & 63-2391 - Screw packs

P4 - Parallel Flush frame Arm

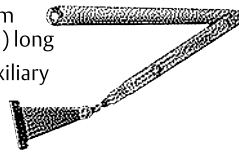
- Forged Steel Arm 11-1/4" (286mm) long
- Foot bracket is attached to frame or transom face
- For use where stop or soffit is too narrow for the standard P9
- Permits 120° opening with standard mounting
- Permits 180° opening with alternate mounting
- Non-handed



For arm only, order as 25-P4 x finish
Includes: 63-2607 - Main arm and link assembly
63-2295 - Foot assembly
64-2407 & 63-2391 - Screw pack

P4A - Flush Frame Arm for use with Auxiliary Holder/Stop

- Forged Steel Arm 11-1/4" (286mm) long
- For use with auxiliary surface overhead stops and holders
- Foot bracket is attached to frame or transom face
- Foot bracket lowers door closer an additional 3/4" below P4 bracket
- Non-handed



For arm only, order as 25-P4A x finish
Includes: 63-2607 - Main arm and link assembly
63-2272 - Foot assembly
64-2407 & 63-2391 - Screw packs

RP9 Regular Arm

- Cold Formed Steel Arm 11-1/4" (286mm) long
- Arm is not handed
- Permits 120° opening with standard mounting
- Permits 180° opening with alternate mounting



For arm only, order
Includes: 63-3396 - Main arm and link assembly
63-2271 - Foot assembly
64-2407 & 63-2391 - Screw Packs

P9 - Standard Parallel Arm

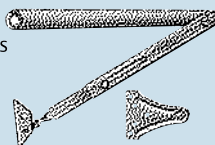
- Forged Steel Arm 11-1/4" (286mm) long
- Non-handed



For arm only, order as 25-P9 x finish
Includes: 63-2607 - Main arm and link assembly
63-3405 - Foot assembly
64-2407 & 63-2391 - Screw packs

UO/RUO Packages

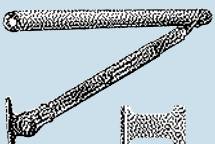
- Universal arm package provides arms and brackets to install closer in standard top jamb or parallel application



Screw packs 64-2407 & 63-2391 125-P9

UH Package

- Universal hold open arm package provides brackets and arms to install closer in top jamb, standard or parallel applications



Screw packs 64-2407 & 63-2391 125-PH9

How to Order

1431 Series Powerglide®



Packing

All closer assemblies are packaged 4 per carton. On request, door closers will be packed 2 per carton.

How To Order

Options	Series	Closer Arm	Finish	Hand
CPC-DA	1431	P4H	26	LH
31-36-74-CPC-DA-MC-SG-SRI-TB-	1431	Standard Page 6 Top Jamb Page 8 Parallel Pages 10 & 11 Track Type Page 13	EB ED EN EP EAB 03* 04* 09* 10* 10B* 10BE 10BL* 14* 15* 20D* 26* 26D* BSP	LH RH

* These finishes are automatically provided with a metal cover

How To Order

Accessories	Example
Arm only	Specify 25-, arm required and finish 25-PSH EN
Body only	Specify CB-1431 (Option DA- available) CB-1431
Arm conversion Units	Specify unit and finish 125-P9 EB
Cover Only (Standard)	1431-C x finish 1431-C x EN
Cover Only (Metal)	1431-CMC x finish and hand & arm type 1431-CMC x 26D x LH X P-10
Accessories	Specify accessory and finish See applicable catalog section 1431-D EB

When complete closer assembly is ordered with an accessory, order accessory as a separate item

Finishes

Finishes	ANSI/BHMA	Description
EB	695	Bronze powder coated to match finish 10B
EN	689	Aluminum powder coated
ED	693	Black powder coated to match finish 20D
EAB	696	Brass powder coated
EP	691	Bronze powder coated to match finish 10
03	605	Bright brass, clear coated
04	606	Satin brass, clear coated
09	611	Bright bronze, clear coated
10	612	Satin bronze, clear coated
10B	613	Dark oxidized satin bronze, oil rubbed
10BE	613E	Dark oxidized satin bronze - equivalent
10BL	614	Oxidized satin, bronze, clear coated
14	618	Bright nickel plated, clear coated
15	619	Satin nickel, clear coated
20D	624	Statuary dark bronze, clear coated
26	625	Bright chromium plated
26D	626	Satin chromium plated
BSP	—	Black Suede Powder Coat

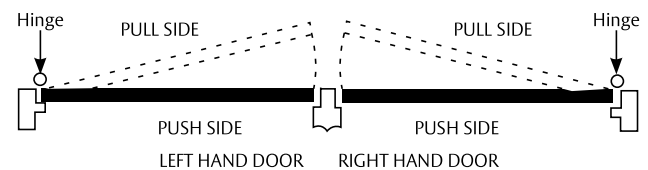
Series	Number per Carton	Approx. wt per Carton
1431	4-Standard (2 upon request)	19 lbs. per 4

Options Available

Specify	Detailed Description
31-	For doors 1-7/8" – 2-1/4" thick, specify door thickness, doors over 2-1/4" thick contact factory
36-	Security Torx Screws supplied for all exposed fasteners
74-	Lead lined cover
CPC-	Clear Powder Coat (available on 26 & 26D)
DA-	Delayed Action
MC-	Handed Metal Cover
SRI-	Special Rust Inhibitor finish for powder coated finishes only (arm)
TB-	Through Bolt (1-3/4" Std) For others, specify 31-TB- & door thickness

Note:

- The MC- option is used when a metal cover is desired on a powder coated finish
- When MC- is added to a plated finish, the MC- option indicates that only the cover is to be plated, the arms will be powder coated to match
- Do not specify the MC option if both the cover and arms are to be plated



Special Rust Inhibitor Process (SRI)

Additional process available for bracket and arms provides an extra layer of protection for extreme corrosive environments. Available with powder coated finishes only, specify SRI- as an option when ordering.

Materials

Metal retainers for gasketing are Aluminum Alloy 6063, T5 temper, unless noted.

Architectural Bronze gasketing is Alloy CDA 385 (Copper Alloy No. C38500), Architectural Bronze.

Stainless steel gasketing is Type 304; known for its excellent corrosion resistance, high tensile strength and resistance to oxidation.

NGP utilizes a variety of gasketing materials including Vinyl, Neoprene, Silicone, Nylon Brush, Thermo-Plastic Elastomers (TPE), Thermo-Plastic Vulcanizates (TPV), Polypropylene Pile, Ethylene-Propylene-Diene-Monomer (EPDM), Polyurethane, and Intumescent Fire Seals. Product illustrations indicate the Gasketing material. Properties of many primary gasket materials are listed on the perimeter seal catalog pages.

Adhesive mounted gasketing utilizes a pressure sensitive modified acrylic adhesive protected by a release liner. Once installed it provides a permanent bond in exterior or interior locations. End use temperature range is -30°F up to 250°F. Shelf life of adhesive prior to installation is one year when stored at 75°F and 50% relative humidity or less.

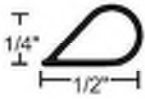
Gasketing Finishes

				<u>NGP Suffix:</u>
Aluminum:	Mill Finish	ANSI/BHMA 719	US27	None
	Anodized Aluminum	ANSI/BHMA 628	US28	A
	Dark Bronze			DKB
	Gold Powder Coat			B
	Polished	ANSI/BHMA 717		POL
	Powder Coated Colors – See Page L2 for details			
Architectural Bronze:	Satin Finish	ANSI/BHMA 728	US4	BR
	Dark Bronze Oil Rubbed	ANSI/BHMA 722	US10B	BR-DKB
	Polished	ANSI/BHMA 721	US3	BR-POL
Stainless Steel:	Brushed (#4)	ANSI/BHMA 630	US32D	None
Gasket Materials:	Neoprene is Black			N
	NGP-TPV is Black			N
	Polyurethane is Black			U
	Vinyl is Gray, except where noted as Black			V
	Silicone colors: Black, Brown, Clear, Gray, Tan, White			S
	Thermoplastic is Brown			T, T6
	Nylon Brush colors: Black, Gray			
	TPF colors: Brown, Charcoal, Clear, White			
Polypropylene Pile is Gray				
EPDM is Gray				

Powder Coat Finish

Powder Coat finish is available on most metal gasketing retainers upon request. Refer to page L2 for standard color options. Consult factory for custom color matching.

Self-Adhesive Silicone Gasketing



- 5050B** Brown
- 5050C** Charcoal
- 5050W** White
- 5050T** Tan
- 5050CL** Clear

Available in 17', 20', 21', 25' and 300' rolls

*Clear not available in 21'

Silicone Bulb Fire and Smoke Seal



Edge Sealing System - Category "G" for 20 minute rated category B wood doors perimeter application up to:

- single swing 4'0 x 8'0
- pairs 8'0 x 8'0
- use 9550 at the meeting edge of pairs

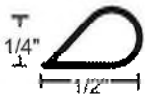
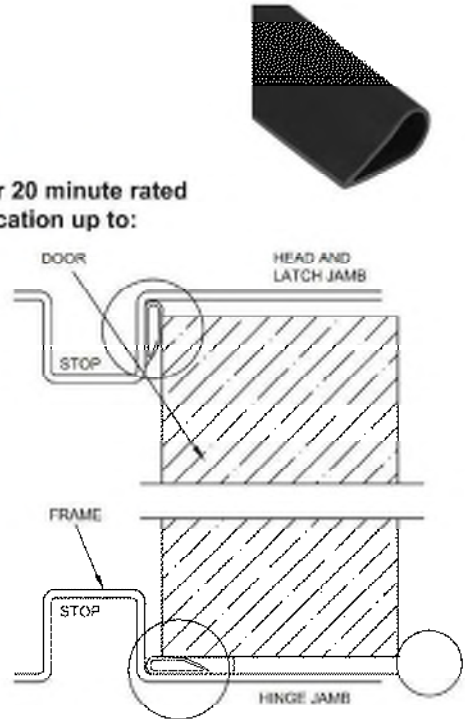


Smoke and Draft Control - Category "H"
Up to 3 hours Hollow Metal fire doors
Up to 90 minutes Wood fire doors



Meets requirements of RoHS Directive

See adhesive specifications on page G9



- ANTI-LIG 5050B** Brown
- ANTI-LIG 5050C** Charcoal
- ANTI-LIG 5050W** White
- ANTI-LIG 5050CL** Clear

Available per foot (bulk) or in stock length 300' rolls.

Anti-ligature Silicone Bulb Fire and Smoke Seal

Anti-ligature feature has serrations every 8" designed to break apart preventing it from being used to hang or strangle.

Applications include psychiatric facilities, prisons and other treatment facilities.

Installs as a continuous length providing the same sealing properties for light, sound, air and smoke as our original 5050.



Edge Sealing System - Category "G" for 20 minute rated category B wood doors perimeter application up to:

- single swing 4'0 x 8'0
- pairs 8'0 x 8'0
- use 9550 at the meeting edge of pairs



Smoke and Draft Control - Category "H"
Up to 3 hours Hollow Metal fire doors
Up to 90 minutes Wood fire doors



Meets requirements of RoHS Directive

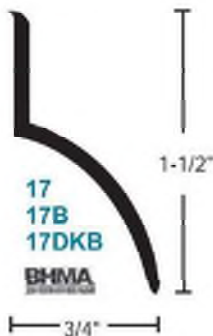
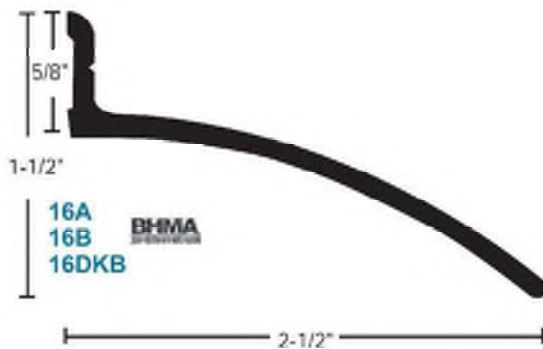
See adhesive specifications on page G9



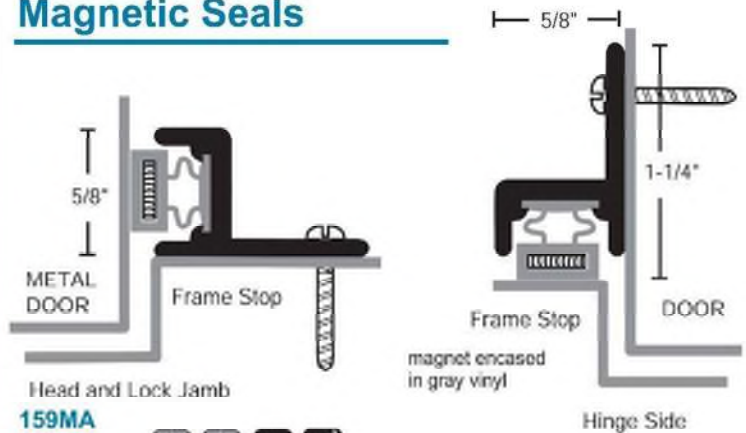
Rain Drip Guards

#6 x 3/4" Stainless Steel
SMS furnished

A - anodized aluminum
B - gold
DKB - dark bronze
No Suffix - mill aluminum



Magnetic Seals

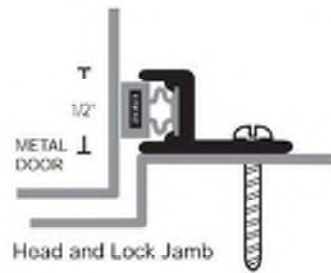


Head and Lock Jamb

159MA
159MB
159MDKB



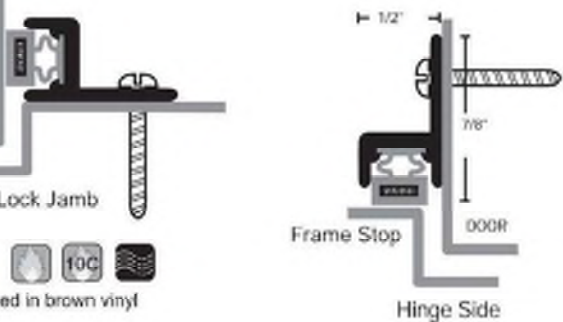
#6 x 3/4" Stainless Steel SMS furnished.
Screw holes slotted for adjustment.
Maximum length 144"



Head and Lock Jamb

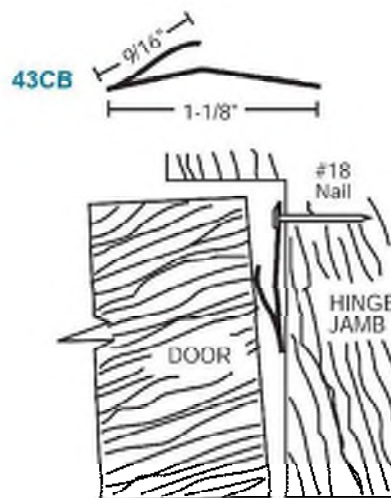
157MA
157MDKB

magnet encased in brown vinyl



Cushion Bronze Weatherstrip

Cushion material will not coil. Specify lengths required (36", 48", 72", 86", and 96".) Nails not included. Normal installation requires 3/4 lb. of nails per 100 ft. of weatherstrip; install 2" o.c. Zinc plated bronze finish nails available in 1 lb. bags. Wafer head pilot point drive nails make excellent applications for metal jambs, normal installation requires 6 per foot. Install using #41 drill bit. Available with Fast Attach Tape - Specify x "FATT".



Vinyl Sweeps

#6 x 3/4" Stainless Steel SMS furnished.
Screw holes slotted for adjustment.

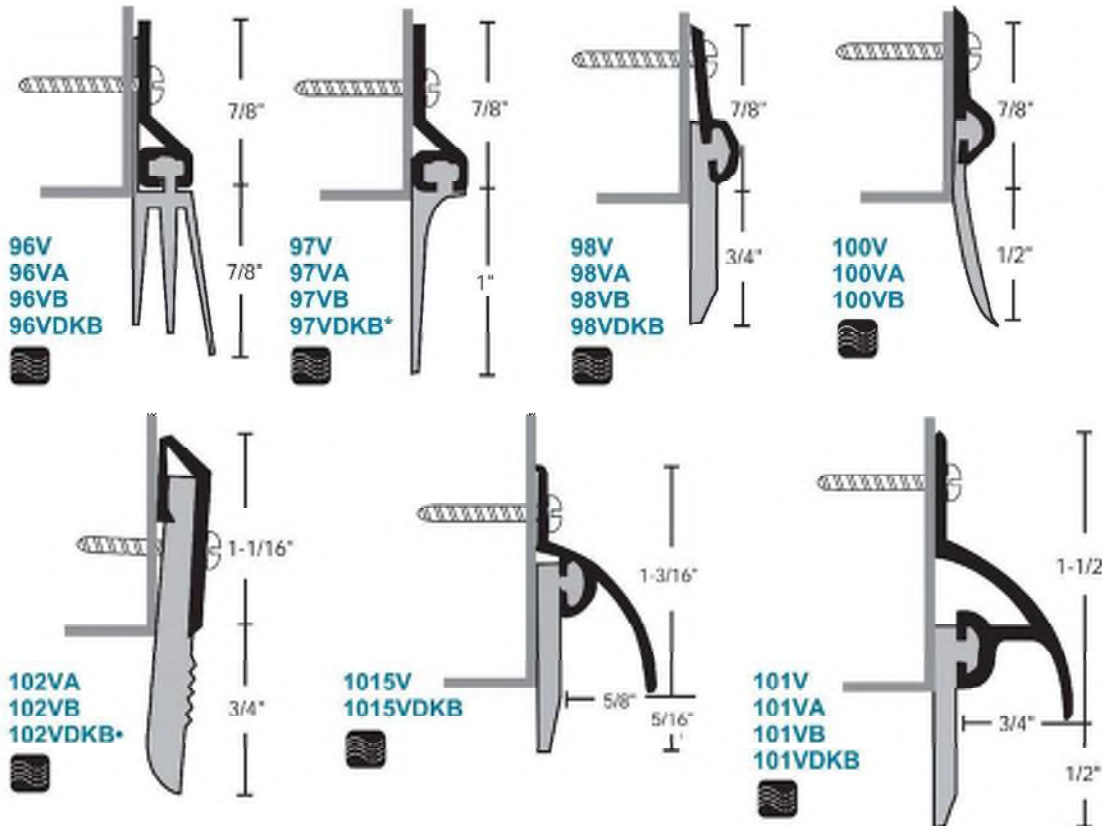
All products this page



A - anodized aluminum
B - gold
DKB - dark bronze
no suffix - mill aluminum

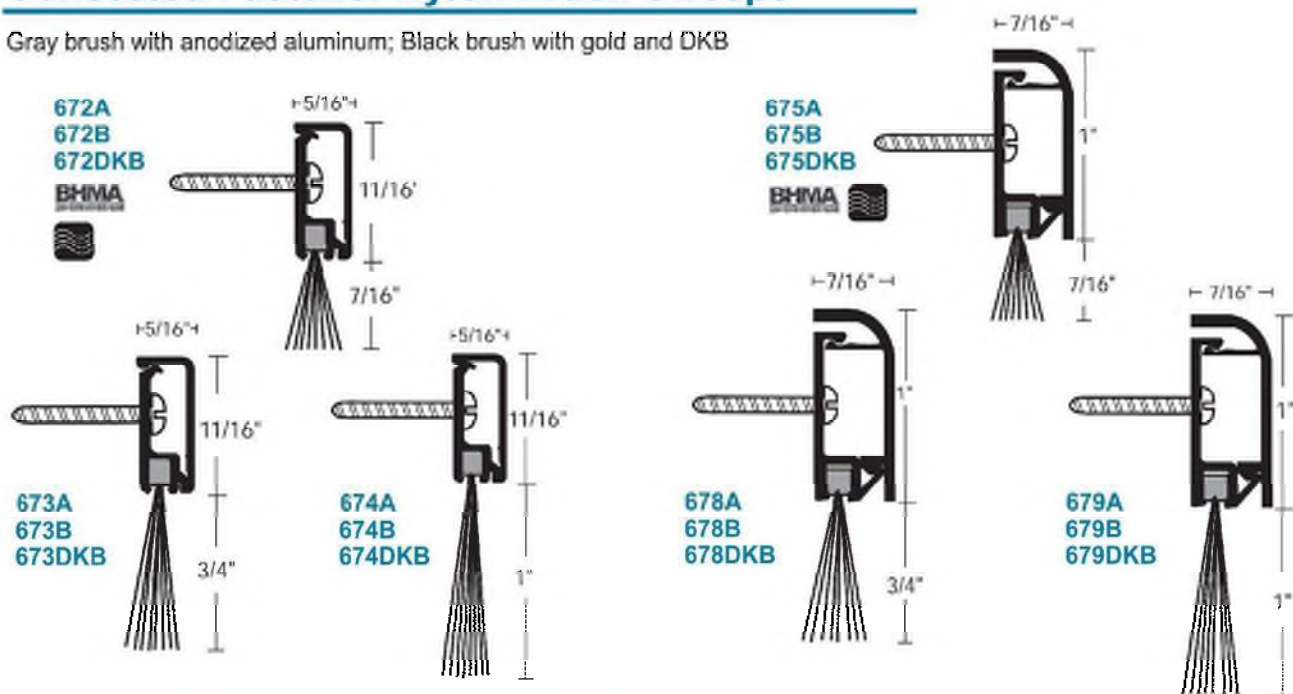
vinyl is gray

Exceptions:
•vinyl is black



Concealed Fastener Nylon Brush Sweeps

Gray brush with anodized aluminum; Black brush with gold and DKB



Materials

Thresholds are Aluminum Alloy 6063, T5 temper, unless noted.
 Cover Plates 818, 814 and 828 are Aluminum Alloy 3003, H14 hardness.
 Cover Plate 838 is Aluminum Alloy 5052, H32 hardness.

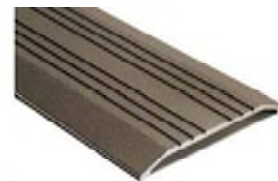
Architectural Bronze Thresholds are Alloy CDA 385 (Copper Alloy No. C38500), Architectural Bronze.
 Brass Cover Plate 818BR is Alloy CDA 260 (Copper Alloy No. C26000) cold formed Cartridge Brass.

Stainless Steel Thresholds and Cover Plates are Type 304; known for its excellent corrosion resistance, high tensile strength and resistance to oxidation.

Threshold Finishes

				NGP Suffix:
Aluminum:	Mill Finish	ANSI/BHMA 719	US27	None
	Dark Bronze			DKB
	Polished	ANSI/BHMA 717		POL
	Slip Resistant			SIA
Architectural Bronze:	Satin Finish	ANSI/BHMA 728	US4	BR
	Dark Bronze Oil Rubbed	ANSI/BHMA 722	US10B	BR-DKB
	Polished	ANSI/BHMA 721	US3	BR-POL
	Slip Resistant			BR-SIA
Stainless Steel:	Mill Finish			SS
	Brushed (#4)	ANSI/BHMA 630	US32D	SS-Brushed
	Polished	ANSI/BHMA 629	US32	SS-POL
	Slip Resistant			SS-SIA

Slip Resistant Finish



SIA (Slick It Ain't) finish is our slip resistant textured surface, available on all thresholds up to 24" wide and on 818 aluminum and brass cover plates up to 10" wide.

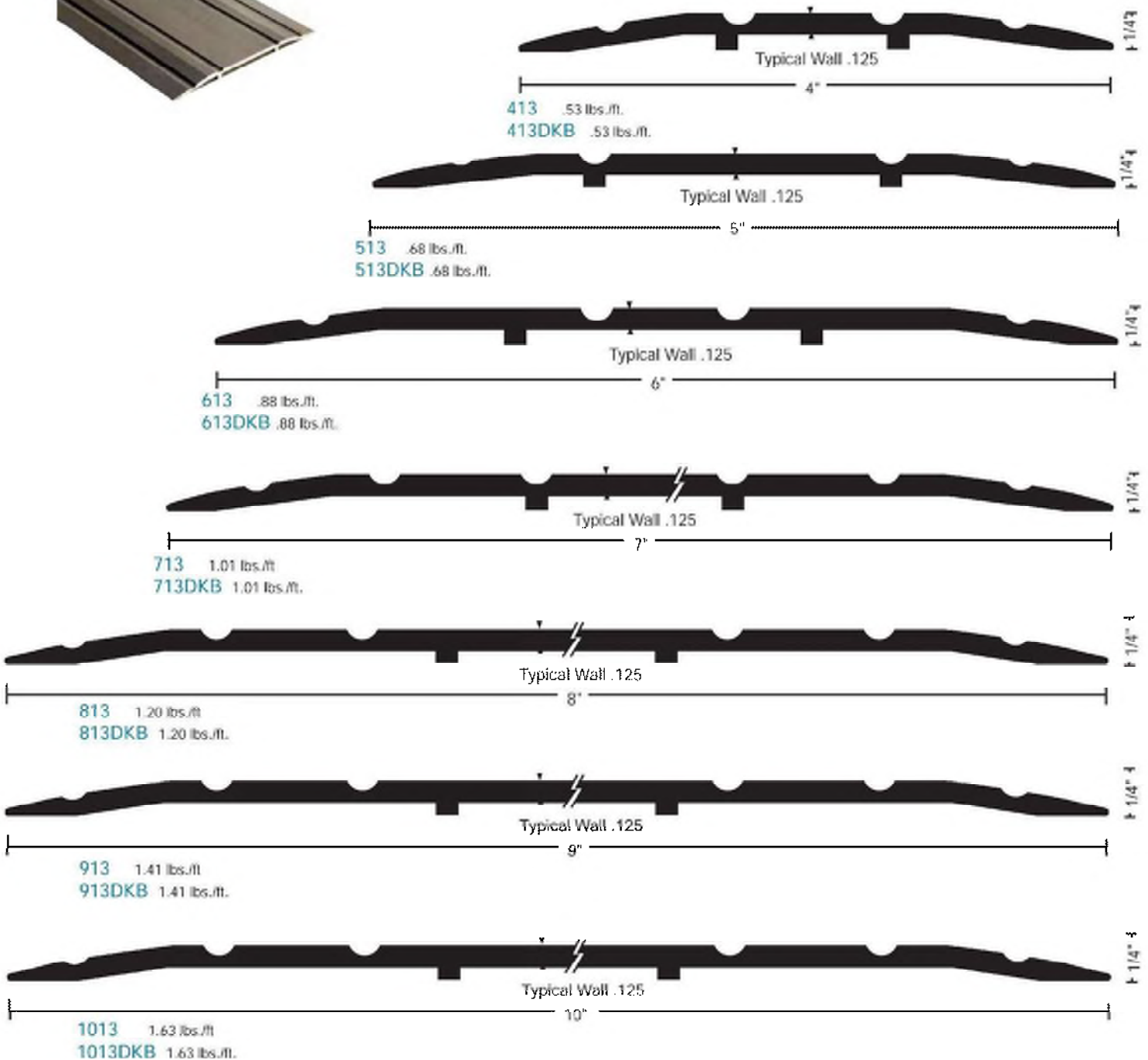
Our SIA technology embeds bits of hot nickel and titanium into the surface of the threshold using a high pressure thermo-electrostatic process. It was originally developed for use on aircraft carrier decks. SIA finish is very durable and will not wear off.

This results in a slip resistant surface that is similar to high grit sandpaper.

Aluminum and Stainless Steel SIA finish thresholds are a pewter color.
 Architectural Bronze SIA finish thresholds are a brass color.

Saddle Thresholds

All thresholds this page



MATERIALS & FINISHES

- Aluminum mill finish
- DKB - Aluminum dark bronze finish



• Optional: Slip Resistant SIA Finish

FASTENERS

#10 x 1-1/2" FH zinc plated wood screws furnished. Dark bronze supplied with DKB thresholds.