



WEAVER CONSTRUCTION MANAGEMENT, INC.
 3679 S. Huron St., Suite 404
 Englewood, CO 80110
 Phone: (303) 789-4111 FAX: (303) 789-4310

SUBMITTAL TRANSMITTAL

January 27, 2012

WGC Submittal No: 08710-002
(Includes 08100)

PROJECT: **Harold Thompson Regional WRF**
 Birdsell Rd.
 Fountain, CO 80817
 Job No. 2908

ENGINEER: **GMS, Inc.**
 611 No. Weber St., #300
 Colorado Springs, CO 80903
 719-475-2935 Roger Sams

OWNER: **Lower Fountain Metropolitan
 Sewage Disposal District**
 901 S. Santa Fe Ave.
 Fountain, CO 80817
 719-382-5303 James Heckman

CONTRACTOR: **Newco Door & Hardware, Inc.**
 6606 E. 47th Ave
 Denver, CO 80216
 303-579-0558 rickbradley@gmail.com

SUBJECT: Submittal for Hollow Metal Doors/Frames (08100) and for Finish Hardware (08710) at the Equipment & Maintenance Building

SPEC SECTION: 15800

PREVIOUS SUBMISSION DATES:

DEVIATIONS FROM SPEC: ___ YES X NO

CONTRACTOR'S STAMP: This submittal has been reviewed by Weaver General Construction and approved with respect to the means, methods, techniques, & safety precautions & programs incidental thereto. Weaver General Construction also warrants that this submittal complies with contracted documents and comprises on deviations thereto:

<p>Contractor's Stamp:</p> <p>Date: 1/27/12 Reviewed by: Chuck Berry () Reviewed Without Comments (X) Reviewed With Comments</p> <p>ENGINEER'S COMMENTS:</p>	<p>Engineer's Stamp:</p>
---	--------------------------



Project: HDTWRF

Location: Fountain, CO

Supplier: Newco Door and Hardware, LLC

Date: 1/27/12

Submittal No: 08710-002 (Includes Section 08100)

WCM Submittal Review Comments:

- 1. Paragraph 2.1, A, 1. calls for heavy weight hinges and in 2.1, A, 4. calls for Hager BB1199 hinges. Hager BB1199 hinges are Standard Weight per the Hager product data.**
- 2. On page 3 of the hardware schedule portion of the submittal, the supplier has several questions for the architect.**
- 3. There are several items in part 2 of the hardware specifications referred to by manufacturer name and model number or equivalent. The supplier has submitted an equivalent on several of the items.**
- 4. Metal building shop drawing review will have to include girt elevations relative to the exterior door frame head elevations.**
- 5. Door supplier has submitted Pioneer as an equivalent to the spec listed manufacturers of doors and frames.**
- 6. On the Newco door elevation drawings for doors EM1, EM2 and EM3, is the vision lite toward the hinge side or the latch side of the door? The Pioneer door elevation NG, which seems to be most similar to the contract drawing type A, shows the lite toward the latch side. The project contract drawings require the lite to be toward the hinge side.**

Cover - Job / Ticket #: NC1199

Delivery Date: January 16, 2012

Newco Door & Hardware, LLC

Email address: rickbradley@gmail.com

6606 East 47TH Avenue

P: 303.576.0558 F: 303.576.0565

Denver, Co. 802216

Cell Phone: 303.903.3947

Weaver Construction Management
3679 South Huron Street, Suite 404
Englewood, Colorado 80110-3498

Phone: 303.789.4111 Fax: 303.789.4310

Reference Job Name: Harold D. Thompson Water Reclamation Facility
Fountain, State: Colorado Zip: 80817

Attention: John Jacobs

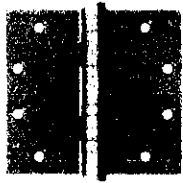
<u>Quantity</u>	<u>Description</u>
1 st Attachment	Finish Hardware Catalog Cuts - Section 8710
2 nd Attachment	Finish Hardware Catalog Cuts - Section 8710
3 rd Attachment	Hollow Metal Door and Frame Elevations - Section 8100
4 th Attachment	Hollow Metal Doors - Section 8100 - Part 2.3, A
5 th Attachment	Hollow Metal frames - Section 8100 - Part 2.1, A-1
6 th Attachment	Hardware Schedule Section - 8700

Thank you



ARCHITECTURAL HINGES

FIVE KNUCKLE HINGES (CONTINUED)



BB1168
Ball Bearing - Heavy Weight
 Steel with steel pin (ANSI A8111)

BB1199 ★
Ball Bearing - Standard Weight
 Brass with stainless steel pin
 (ANSI A2111) or stainless steel with
 stainless steel pin (ANSI A5111)

- Four ball bearings
- Non-rising removable pin with button tip and plug
- 5" x 5" (127 mm x 127 mm) and 4-1/2" x 4-1/2" (114 mm x 114 mm) BB1168 available with two different leaf sizes
- For use on heavy weight doors or doors requiring high frequency service



WTBB1168
Ball Bearing - Heavy Weight - Wide Throw
 Steel with steel pin (ANSI A8111)

WTBB1199
Ball Bearing - Heavy Weight - Wide Throw
 Brass with stainless steel pin
 (ANSI A2111) or stainless steel with
 stainless steel pin (ANSI A5111)

- Wide throw
- Four ball bearings
- Non-rising removable pin with button tip and plug
- For use on heavy weight doors or doors requiring high frequency service










Hinge Size		Gauge of Metal	Hole Count	Screw Size	
Inches	mm			Machine	Wood
4-1/2 x 4	114 x 102	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12
5 x 4	127 x 102	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.190	8	1/2 x 12-24	1-1/4 x 12
6 x 4-1/2	152 x 114	0.203	10	1/2 x 1/4-20	1-1/2 x 14
6 x 5	152 x 127	0.203	10	1/2 x 1/4-20	1-1/2 x 14
6 x 6	152 x 152	0.203	10	1/2 x 1/4-20	1-1/2 x 14
8 x 6	203 x 152	0.203	16	1/2 x 1/4-20	1-1/2 x 14
8 x 8	203 x 203	0.203	16	1/2 x 1/4-20	1-1/2 x 14

Hinge Size		Gauge of Metal	Hole Count	Screw Size	
Inches	mm			Machine	Wood
4-1/2 x 5	114 x 127	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 6	114 x 152	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 7	114 x 178	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 8	114 x 203	0.180	8	1/2 x 12-24	1-1/4 x 12
5 x 6	127 x 152	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 7	127 x 178	0.190	8	1/2 x 12-24	1-1/4 x 12
5 x 8	127 x 203	0.190	8	1/2 x 12-24	1-1/4 x 12





3400 SERIES FUNCTION CHART

Function	Function No.	Function Description	ANSI No.	
Non-Keyed				
	Passage	10	Latchbolt operated by lever from either side at all times.	F75
	Dummy	17	Pull one side, no mechanical operation.	-
	Privacy	40	Latchbolt operated by lever from either side. Outside lever is locked by push button and unlocked by emergency release outside, operating inside lever or closing door.	F76A
Keyed				
	Office	50	Push-button locking. Push-button locks outside lever until unlocked with key or by rotating inside lever.	F82
	Entry	53	Deadlocking latchbolt by lever either side, except when turn button locks outside lever. Pushing turn button in locks outside lever, requiring use of key outside to unlock. (Lever handle is freewheeling in locked position.) Turning inside lever unlocks outside lever. Pushing in and turning button locks outside lever, requiring key at all times. Turning inside lever does not unlock outside lever until button is manually turned to unlocked position. Inside lever always free.	F109
	Classroom	70	Deadlocking latchbolt operated by lever from either side except when outside lever is locked from outside by key. When outside lever is locked, latchbolt is operated by inside lever.	F84
	Corridor	73	Deadlocking latchbolt operated by lever from either side except when outside lever is locked by key in outside lever or by push button or other locking device on inside. Key in outside lever locks or unlocks outside lever. Operating inside lever releases push button or other locking device placed in a locked position. Closing door releases push button or other inside locking device. Inside lever always operates latchbolt.	F90
	Storeroom	80	Deadlocking latchbolt operated by key in outside lever, or by operating inside lever. Outside lever is always locked. Inside lever is always unlocked.	F86
	Intruder Classroom*	95	Deadlocking latchbolt operated by lever from either side. Key either inside or outside locks or unlocks outside lever. Inside lever always operates latchbolt.	F110

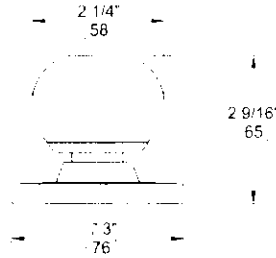
*Intruder Classroom is available with an indicator. Specify IND on order.



LOCKS

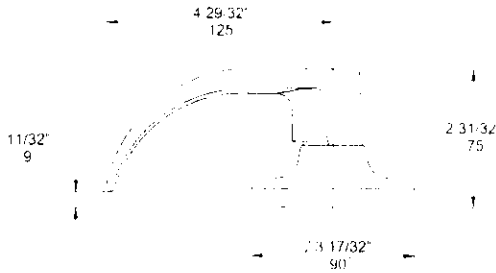
3400 SERIES LEVER OPTIONS

APOLLO KNOB

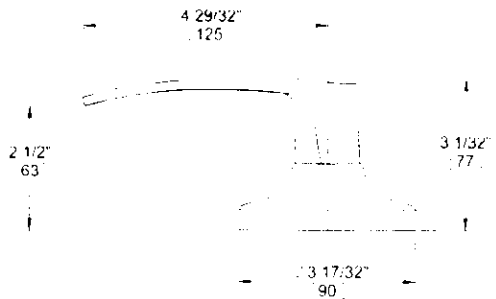


ARCHER LEVER

Suggested

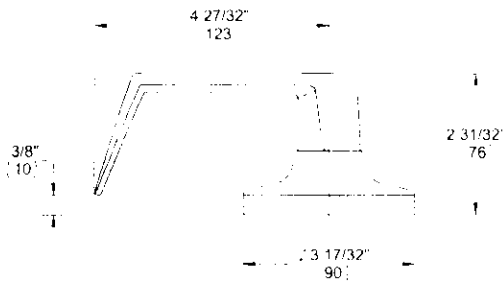


AUGUST LEVER



WITHNELL LEVER

Recommended



Optional tactile warning available on all lever styles (only outside lever will be dimpled unless otherwise specified).





3400 Series
Grade 1 Cylindrical
Extra heavy duty commercial, industrial, institutional

- Lifetime warranty
- No exposed mounting screws
- Non-handed
- Conventional cylinder or Small Format Interchangeable Core housing available

- Standard Door Prep: • 2-1/8" (54 mm) diameter (cross bore)
 • Latch hole: 1" (25 mm) diameter (edge bore)
- Certifications: • BHMA Certified ANSI A156.2 Series 4000 Grade 1
 • ADA Compliant ANSI A117.1 Accessibility Code (levers only)
 • ANSI A250.13 Severe Windstorm Resistant Component
 • UL/cUL Listed for all functions up to 3 hours for "A" label doors
 • UL10C/UBC 7-2 (1997) Positive Pressure Rated
 • UL10B Neutral Pressure Rated
- Exposed Trim: • Knobs: Wrought brass or stainless steel
 • Levers: Cast zinc
 • Rose: Wrought brass or stainless steel
- Rose Diameter: 3-17/32" (90 mm) levers; 3" (76 mm) knobs
- Lock Chassis: • Heavy gauge steel, zinc dichromated for corrosion resistance
 • Free wheeling (levers only)
 • Thru-bolt mounting (levers only)
- Keys: Two operating keys supplied per lock
- Cylinders/Cores: • Brass 6-pin, keyed different - C Keyway
 • Drilled 6-pin, Keyed 5-pin - Standard
 • Other keying options, including keyed 6-pin, available from factory
 • Small Format Interchangeable Core housing available
 • SFIC uncombined or combined, brass 6- or 7-pin sold separately
- Door Thickness: • Knobs: 1-3/8" - 1-3/4" (35 mm - 45 mm)
 • Levers: 1-3/8" - 2" (35 mm - 51 mm)
- Backset: • 2-3/4" (70 mm) - Standard
 • 2-3/8" (60 mm) - Optional
 • 3-3/4" (94 mm) - Optional
 • 5" (128 mm) - Optional
- Latchbolt: • 1/2" (13 mm) throw, stainless steel
 • 1-1/8" x 2-1/4" (29 mm x 57 mm) faceplate
 • Square corner faceplates standard, round corner available
 • Deadlocking latchbolt prevents manipulation when door is closed; keyed functions only
 • 3/4" (18 mm) latch available
- Strike: 3935 ASA 1-1/4" x 4-7/8" (32 mm x 124 mm) strike - Standard
- Functions: 10 Passage, 17 Dummy, 40 Privacy, 50 Office, 53 Entry, 70 Classroom, 73 Corridor (levers only),
 80 Storeroom, 95 Intruder Classroom (levers only)
- Finishes: • US3, US4, US10, US10B, US26, US26D (levers only)
 • US3, US32D (knobs only)
- Lever Options: Apollo knob; Archer, August, Withnell levers
- Options: • Lead lined (levers only)
 • Tactile Warning (levers only)
 • Split finish
 • Additional latchbolts and strikes available
 • Intruder Classroom indicator available, specify IND (inside rose will have three indicator points for a guide reference for locking the door)



TRIM & AUXILIARY

280X

Dust Proof Strike

Certifications:

Face Plate:

Barrel Diameter:

Barrel Depth:

Plunger Diameter:

Materials:

Finishes:

Fasteners:

Notes:

Meets ANSI A156.16 for L04021

1-7/16" x 2-29/32" x 1/8" depth (37 mm x 74 mm x 3 mm)

1" (25 mm)

2-3/16" (56 mm)

3/4" (19 mm)

Brass

US3, US4, US9, US10, US10B, US15, US15A, US19, US26, US26D

Two (2) #8 x 1" FPHWS, two (2) plastic anchors, and spanner wrench

• Packed unassembled with plate, strike, fasteners, and spanner wrench

• May be used with carpet or threshold application by omitting face plate

• Designed for use with the bottom bolt of a flushbolt set

• Spring loaded plunger returns to floor or threshold level anytime flushbolt is retracted, eliminating the need to clean out the bottom strike



281D

Slide Flush Bolt

Certifications:

Faceplate:

Bolt Diameter:

Bolt Throw:

Bolt Backset:

Strike:

Materials:

Finishes:

Fasteners:

Notes:

Meets ANSI A156.16 for L04201

3/4" x 6" (19 mm x 153 mm)

1/2" (13 mm)

1" (25 mm)

7/16" (11 mm)

7/8" x 1-3/4" (22 mm x 45 mm)

Brass, bronze faceplate with steel components

US3, US4, US5, US10, US10B, US15, US15A, US19, US26, US26D

Four (4) #6 x 3/4" FPHWS

Double action spring design provides automatic holding of bolt in projected or retracted position



282D

Manual Flush Bolt

Certifications:

Face Plate:

Bolt Head:

Bolt Throw:

Standard Rod Length:

Bolt Backset:

Mortise Strike:

Materials:

Finishes:

Fasteners:

Notes:

• Fits ANSI A115 door and frame prep

• Meets ANSI A156.16 for L14251

1" x 6-3/4" (25 mm x 172 mm)

1/2" (13 mm) square

3/4" (19 mm)

12" (305 mm) (center of face to corner of door)

3/4" (19 mm)

15/16" x 2-1/4" (24 mm x 57 mm)

Brass faceplate with steel components

US3, US4, US5, US9, US10, US10B, US15, US15A, US19, US26, US26D

Eight (8) #8 x 3/4" combo screws; eight (8) #8 x 1-1/2" combo screws

• For use on hollow metal/fire rated doors

• Non-handed

• Bolt head rods are adjustable

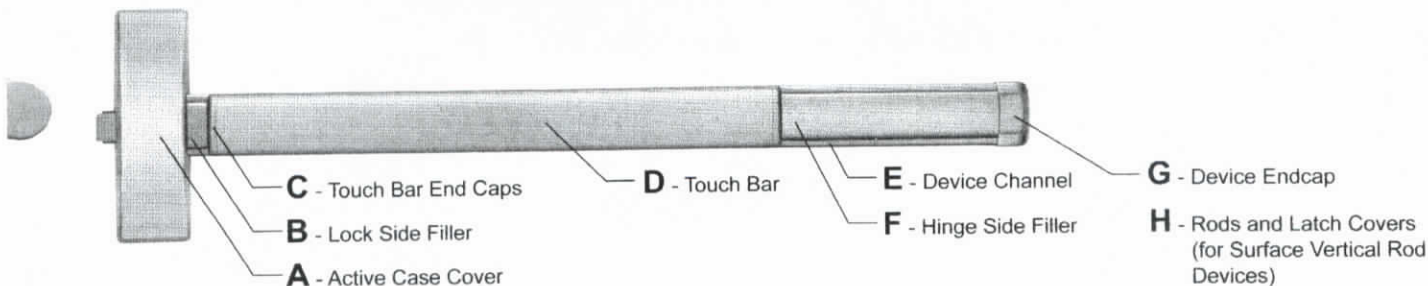
• Sold in increments of two.

• 3-Hr fire rating for metal doors up to 4 feet wide by 10 feet tall.

• 282S strike plate bag and 282P bolt head available

• Specify 282R for optional rod length of 18" (457 mm), 25" (635 mm), or 30" (762 mm) (bolt head not included)





Base Materials

Finishes	ANSI/BHMA	US	Aluminum	Brass	Bronze	Stainless Steel
Polished Brass, Clear Coated	605	US3	---	A,B,C,D,E,F,G,H	---	---
Satin Brass, Clear Coated	606	US4	---	A,B,C,D,E,F,G,H	---	---
Satin Bronze, Clear Coated	612	US10	---	---	A,B,C,D,E,F,G,H	---
Dark Oxidized Satin Bronze	613	US10B	---	---	A,B,C,D,E,F,G,H	---
Polished Chromium Plated	625	US26	---	C	A,B,D,E,F,G	H
Satin Chromium Plated	626	US26D	---	C	A,B,D,E,F,G	H
Satin Aluminum, Clear Anodized	628	US28	A,E,F	---	---	B,C,D,G,H
Satin Stainless Steel	630	US32D	---	---	---	A,B,C,D,E,F,G,H

Finishes

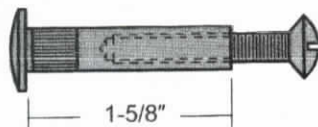
ANSI/BHMA	US	Description
600	USP	Primed for Paint
605	US3	Polished Brass, Clear Coated
606	US4	Satin Brass, Clear Coated
612	US10	Satin Bronze, Clear Coated
613	US10B	Dark Oxidized Satin Bronze
625	US26	Polished Chromium Plated
626	US26D	Satin Chromium Plated
628	US28	Satin Aluminum, Clear Anodized
630	US32D	Satin Stainless Steel
689		Aluminum Paint
695		Dark Bronze Paint

Fasteners

Furnished standard with machine screws and full thread wood/sheet metal screws. Specify Sex Nuts and Bolts (SNB) where recommended or required by the door manufacturer.

Sex Nuts & Bolts (not furnished std.)

Sex Nuts & Bolts are furnished with No. 10-24 x 1" OHMS (1-1/2" long screws required for guides).



Security Screws

All exposed screws will be a Torx pin in tamper resistant type, machine screws only. Specify (SEC) Security Screws. Cover Screws use a T20 driver, End Cap Screws use a T25 driver.



Door Sizes

Stock sizes for door widths and heights are listed below. If required, cut to size in the field.

Door Widths Stock Sizes

2'-1" to 2'-6"	2'-6" *
2'-7" to 3'-0"	3'-0"
3'-1" to 4'-0"	4'-0"

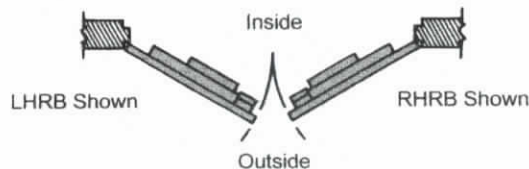
* Not available for Narrow Stile Devices.

Vertical Rod Devices

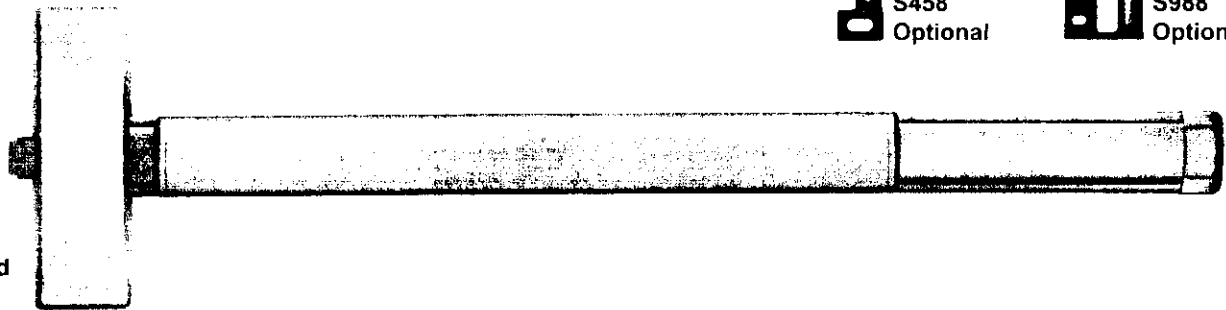
Device	Door Heights	Stock Sizes
Surface Vertical Rod Device*	up to 7'-0"	7'-0"
	7'-1" to 8'-0"	8'-0"
	8'-1" to 10'-0"	10'-0"
Concealed Vertical Rod Device	6'-8" to 8'-0"	8'-0"
	8'-1" to 10'-0"	10'-0"

* Surface Vertical Rods are furnished of the same material as the device. Stainless steel rods are furnished for 625, 626, 628 and 630 devices.

Hand of Doors



RIM EXIT DEVICES



Apex 2100 Series - Reversible Apex FL2100 Fire Exit Series - Reversible

DOORS - For all types of single and double doors with a mullion. For mullions, see page 18. Available for 1-3/4" to 2-1/4" thick, up to 4'-0" wide opening. For thicker doors, consult factory. Furnished standard for 1-3/4" thick, 3'-0" wide opening.

DEVICE - Covers ANSI A115.2 (Type 161), A115.18 cylinder lock and A115.1 (Type 86) Mortise Lock preparation.

FUNCTIONS - Functions are field selectable except for the Double Cylinder option. The device is furnished for a desired function if specified. If not specified the "03" function is furnished standard.

DOUBLE CYLINDER - Handed, "10" Function available. Requires two rim type cylinders, not furnished standard. See page 5 and 19.

BASE MATERIAL - The Cover, Touchbar, Device Channel, Lock/Hinge Side Filler and End Cap are furnished of heavy wrought Brass, Bronze or Stainless Steel. 628 Devices are furnished with Aluminum, Brass, Bronze and Stainless Steel components. See "Finish & Base Material" chart on page 3.

CHASSIS - Investment Cast Steel, Zinc Dichromated.

LATCHBOLT - Stainless Steel, Deadlocking, 3/4" throw.

STRIKES - No. S300, Investment Cast Stainless Steel, Black Powder Coated furnished standard. No. S988, optional strike for use on Aluminum Door applications, please specify when ordering. No. S458, optional strike for use on Mullion applications, please specify when ordering. For optional strike information see page 30.

DOGGING - 1/4 turn hex key dogging standard. NOT available on Fire Exit Hardware.

TOUCHBAR HEIGHT - 39-15/16" from floor standard. May be varied as situation dictates.

REVERSIBLE - Reversible for all functions and Trims. Standard packaging RHRB.

UL LISTED - Panic and Fire Exit Hardware. For FIRE EXIT HARDWARE Ratings see page 35. Conforms to UL10C and UBC 7-2.

ANSI/BHMA - Devices are BHMA certified for ANSI 156.3, Grade 1.

FINISHES - 605, 606, 612, 613, 625, 626, 628, 630. For Finish description see page 3.

CYLINDERS - Rim Type, not furnished standard. Specify when required. For cylinder details see page 19.

STILE WIDTH - See Stile Information on page 32.

RETROFIT APPLICATIONS - The 2100 and FL2100 Series Devices are designed to retrofit into other manufacturers' mounting hole locations. 1700 Series Pull Trim and 4900 Series Lever Trim may also be factory set for these applications by specifying prefix "R" (e.g. 2108 x R4908A).

Consult factory for details.

Apex 21 Series - Nonhanded

The 21 Series Device is designed to be compatible with many manufacturers' Access Control exterior trim. The device incorporates a center driven cam to receive the tailpiece of the access control product. The tailpiece rotation required to retract the latch is a minimum of 50 degrees.

Consult factory for details.

DEVICE OPTIONS

Prefix	Description	Page
DE	Delayed Egress	24
E	Electric Device	28
ELR	Electric Latch Retraction	21
FL	Fire Exit Hardware	4
HC	Windstorm and Hurricane Code Device	20
LDS	Latchbolt Monitoring Double Switch	29
LS	Latchbolt Monitoring Switch	29
TDS	Touchbar Monitoring Double Switch	29
TS	Touchbar Monitoring Switch	29
WTDS	Weatherized Touchbar Mon. Dbl. Switch	29
WTS	Weatherized Touchbar Monitoring Switch	29

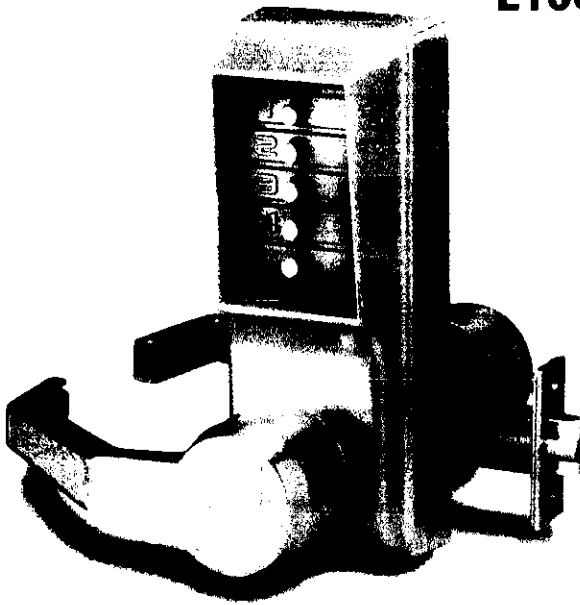
To specify add Prefix to Device No. (e.g. TS2103)

Suffix	Description	Page
ALK	Exit Alarm: battery operated	27
ALW	Exit Alarm: remote power	27
BRL	Braille Touchbar	31
CD	Cylinder Dogging	19
DS	Door Position Monitoring Switch	29
SEC	Security Screws	3
SNB	Sex Nut and Bolt	3
WALW	Weatherized Exit Alarm: remote power	27

To specify add Suffix to Device No. (e.g. 2103CD)



L1000 Series



Specifications

Construction: Heavy-duty cylindrical lock housing conforms to ANSI 156.2 Grade 1, ADA & D.O.D.5220.22M. Cast front housing; fixed lever. Brass unified trim plate; cast or wrought brass levers.

Door thickness: 1 3/8" to 2 1/4" (35 to 57 mm)

Strike: Includes "TS" strike plate 201288-*01, "ASA" strike plate 201413-*41 and "DB" strike box 55068-000-01.

Latch: 5/8" (16 mm) throw latch carries a 3-hour UL/ULC fire rating for "A" labeled doors. 2 3/4" (70 mm) backset. Floating front.

Installation: Cross bore for housing: 2 1/8" (54 mm) dia. Edge bore for latch: 1" (25 mm) dia. Installation wrench 201278-018-01 included. Minimum stile required: 5" (127 mm)

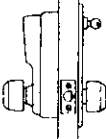
Control: Includes two DF59 keys for combination change; two DF5 keys for models 1051, 1061.

Door handing: Factory handed; cannot be changed in the field.

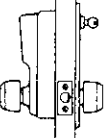
Weight: 8 1/4 lbs. (3.7 kg)

Substitute the -* in the product number with one of the finish codes below

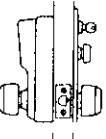
- 1011**



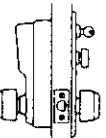
Exterior access by combination.
Egress by interior lever.
- 1021**



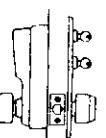
Exterior access by combination
or key override.
Egress by interior lever.
- 1031**



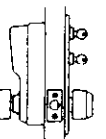
Exterior access by combination
or passage feature (thumbturn activated).
Egress by interior lever.
- 1041**



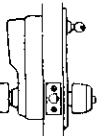
Exterior access by combination,
key override,
or passage feature (thumbturn activated).
Egress by interior lever.
- 1051**



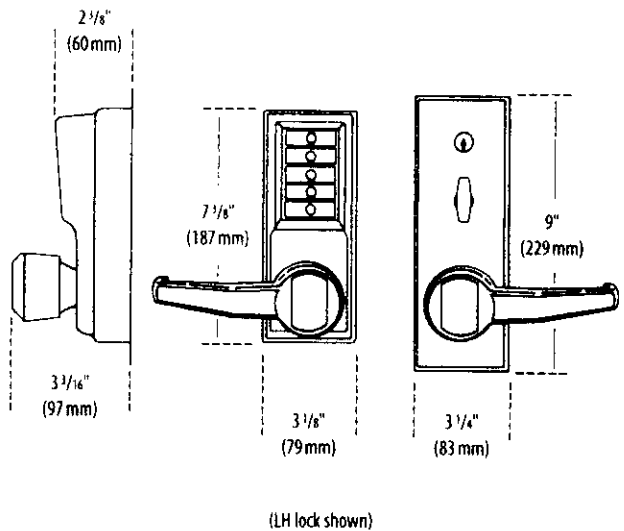
Exterior access by combination
or passage feature (key activated).
Egress by interior lever.
- 1061**



Exterior access by combination,
key override,
or passage feature (key activated).
Egress by interior lever.
- 1075**



Exterior access by combination
or key override.
Button on inside lever activates privacy function.
Egress by interior lever.



How to order

HAND MODEL FINISH PACKAGE

LR1041A - 26D - 41

LEVER KEY OVERRIDE

(Models 1021, 1041 and 1061 core not supplied - see page 2 for key override options)

MODEL Choose from the seven models pictured at left: 1011, 1021, 1031, 1041, 1051, 1061, 1071

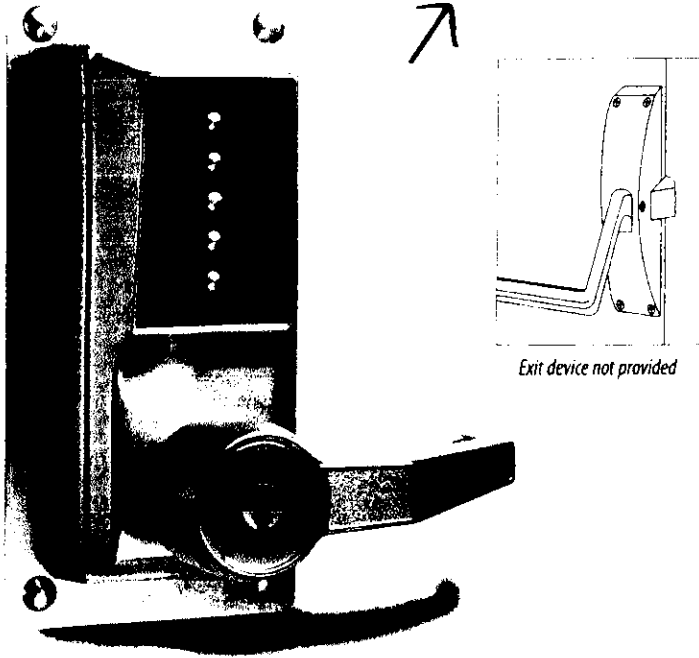
FINISH 03 - "Chiara" Bright Brass
05 - Antique Brass
26D - Satin Chrome

PACKAGE 41 - 1 lock per box

HAND L - Left hand R - Right Hand

Exit Device Controls LP1000 Series

ILCO UNICAN



Exit device not provided

Specifications

Construction: Cast front housing with fixed lever (factory handed) and brass mounting plate. Cast lever meets all ADA (Americans with Disabilities Act) standards.

Door thickness: Up to 2 1/4" (57 mm)

Strike/Latch: Not included

Installation: Minimum stile required: 5" (127 mm). See exit device compatibility. (Installation may require recessing LP1000 thru-bolts on inside of door.)

Control: Includes tool #55179 for combination change.

Door handing: Factory handed; cannot be changed in the field.

Weight: 8 lbs. (3.6 kg)

The Lever Panic lock replaces the key cylinder on new or existing surface-mounted exit devices. The UNICAN® LP1000 can be used with a variety of manufacturer's rim-mounted exit devices.

- Complies with ADA (Americans with Disabilities Act) standards.
- Weather-resistant; all-metal construction, ideal for use outdoors.
- Designed for high-frequency use.
- Lock comes with a 2 3/4" (70 mm) long tailpiece to operate exit device from the outside
- Exit device can have up to 60° rotation (either direction).
- LP1000 may not be used with mortise design, or with most vertical rod devices.
- Exit device may be "dogged" without affecting the LP1000.

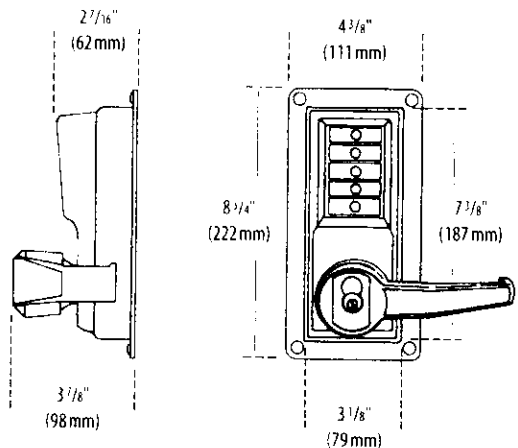
LP1000 locks can be used with many leading brands of surface-mounted exit devices including but not limited to the following:

Von Duprin — All models are Exit Only (EO) or Exit Only Fire (EOF): 22, 88 (EO only), 98, 99, 900, 2227, 9827, 9847, 9847 WDC, 9848, 9857, 9947 WDC, 9927, 9947, 90027, 90047 WDC, 90057

American Device — 6324, F6324, 6424, F6424

Monarch — XX-R*, FXX-R, 18-R*, F-18-R*, 17-R, F-17-R*, XX-V*, F-XX-V*, 18-V*, F-18-V*, F-XX-V*, 11-R*, 11-V*.

*Requires a special K-hub adapter (to be supplied by Monarch).



How to order

HAND	MODEL	FINISH	PACKAGE
LRP	1020A	- 26D	- 41
LEVER	KEY OVERRIDE		

(Core not supplied - see page 2 for key override options)

MODEL 1020 Exterior access by combination or key override. Interior egress by exit device (not supplied).

FINISH 26D - Satin Chrome

PACKAGE 41 - 1 lock per box

HAND LP - Left hand panic RP - Right hand panic

TABLE OF CONTENTS

D-4550 / D-4551 Series	
General Information	2, 3
Standard Application	4
Parallel Arm Application	5
Top Jamb Application	6
Heavy Duty Arm Application	7
Track Rail Arm Application	8
Accessories	9, 10, 11

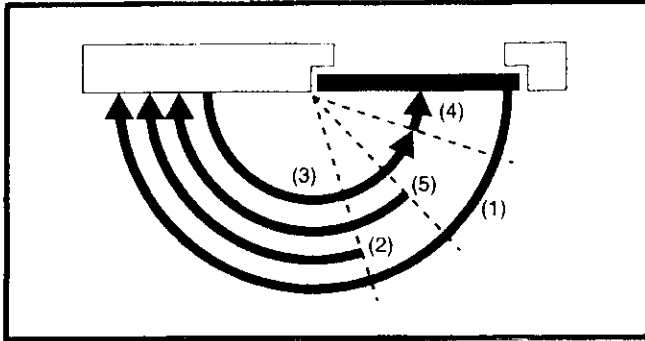
Introduction

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

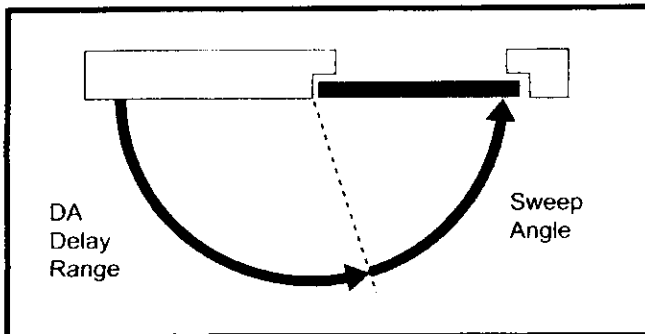
Controls the door through the entire opening and closing cycles by providing adjustable backcheck upon opening and adjusting general and latch speeds through the closing cycle.



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



Non-Handed

Can be used on both RH and LH doors for both push side and pull side mounting.

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).

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.

Non-Critical Regulation

The separate adjustments for backcheck, general and latch speeds are equipped with non-critical "V-Slot" regulating valves which allow for fine tuning the closing and latching speeds as well as the backcheck intensity.

All Season Fluid

All season fluid eliminates the need for seasonal adjustment.

Special High Silicon Aluminum Alloy Housing

All D-4550 / D-4551 Series Door Closers are constructed of RYOBI'S R14 HIGH SILICON ALUMINUM ALLOY to exceed the ANSI/BHMA A156.4 Grade 1 requirements.

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.

Metal Cover - Optional

An optional stainless steel, brushed finish metal cover is available.

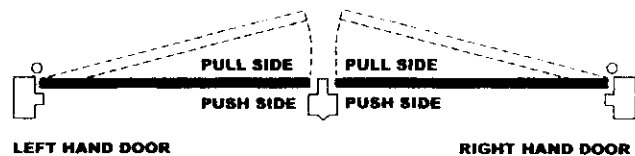
Special Rust Inhibitor (SRI) - Optional

For installations where a higher level of corrosive resistance is required.

Maintenance Free

Door Closers mounted in accordance with the provided installation instructions are maintenance free from periodic inspection and adjustment.

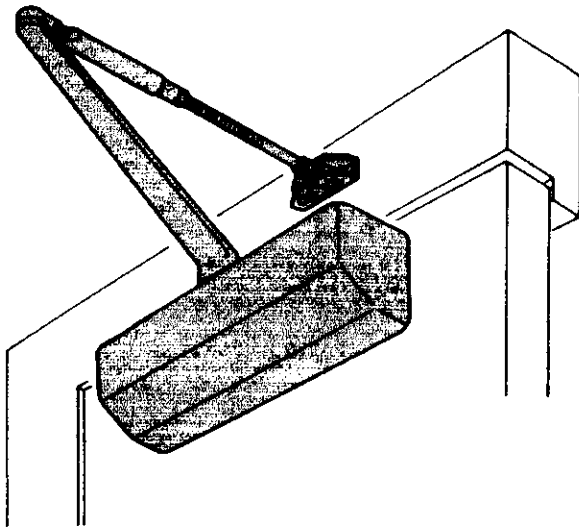
Handing



STANLEY

D-4550 SERIES

STANDARD APPLICATION ←



D-4550 / D-4551 Series Door Closer

Specifications

- Closer mounted on Pull side of door
- 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 Stanley for assistance.

Maximum Door Opening

120° Opening

A = 11-1/4" (286 mm)

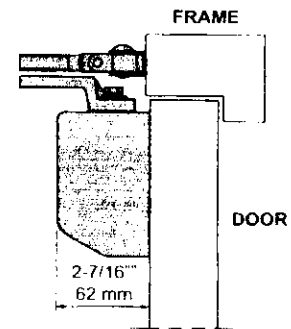
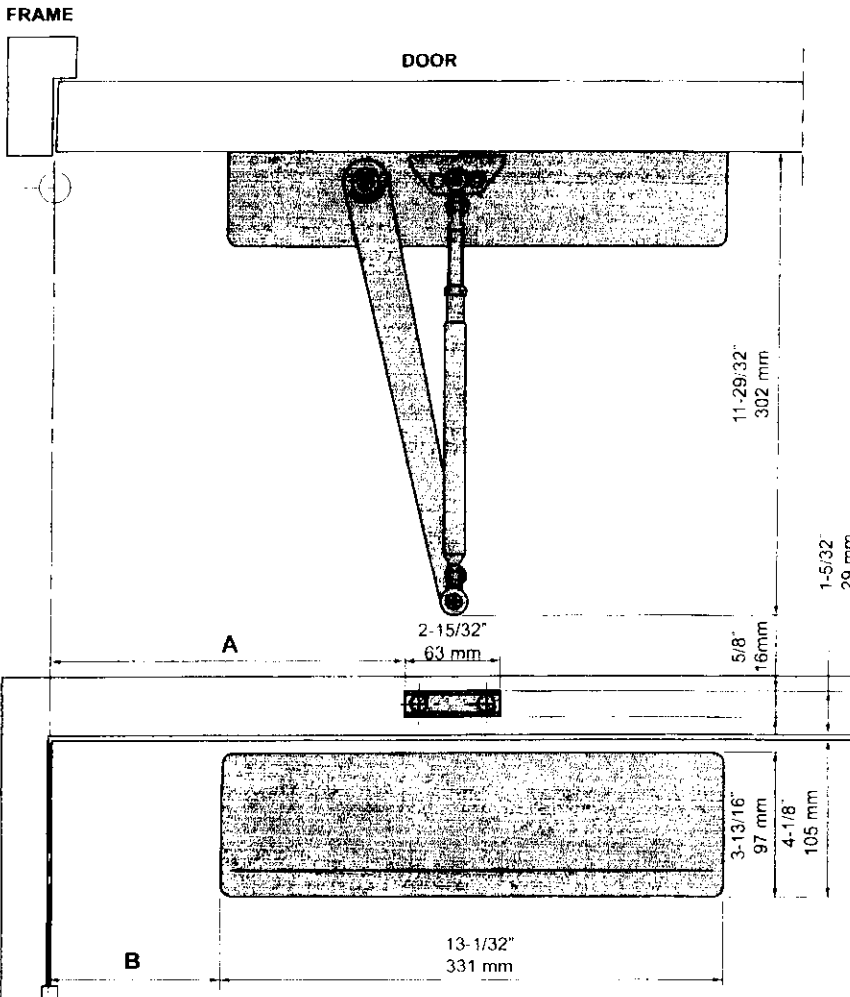
B = 6-1/2" (165 mm)

180° Opening

A = 9-1/4" (235 mm)

B = 4-1/2" (114 mm)

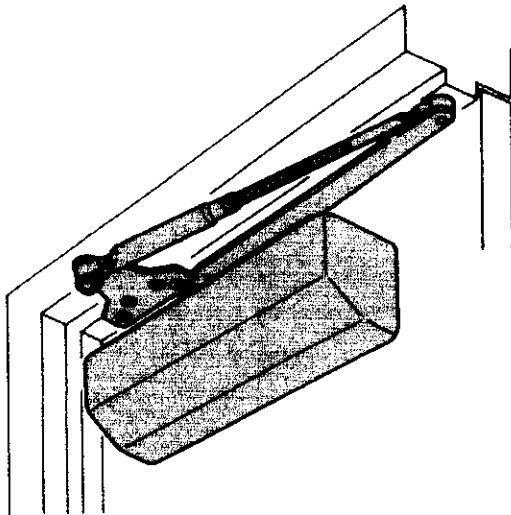
Hold-open points up to maximum door opening with hold open arm.



D-4550 / D-4551 Series Door Closer

Specifications

- Closer mounted on **PUSH** side of door
- 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 Stanley for assistance.



Maximum Door Opening

120° Opening

A = 8-23/32" (222 mm)

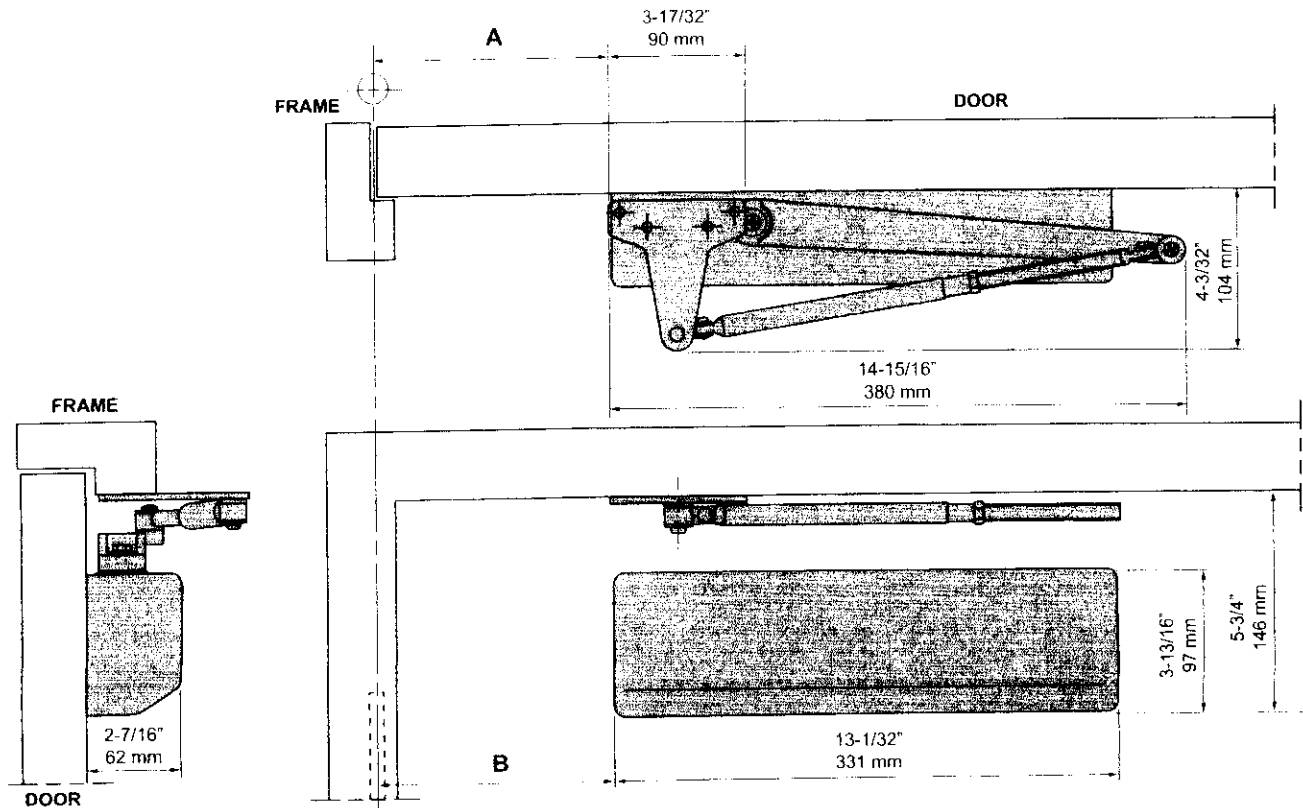
B = 8-27/32" (224 mm)

180° Opening

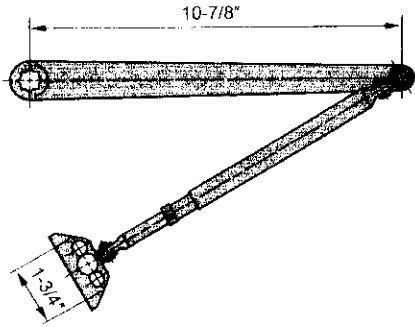
A = 6-3/32" (155 mm)

B = 6-7/32" (158 mm)

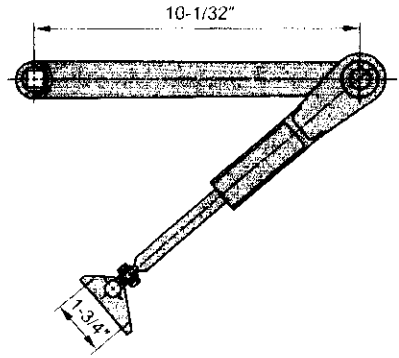
Hold-open points up to maximum door opening with hold open arm.



**Standard Arm Set
A45-501**

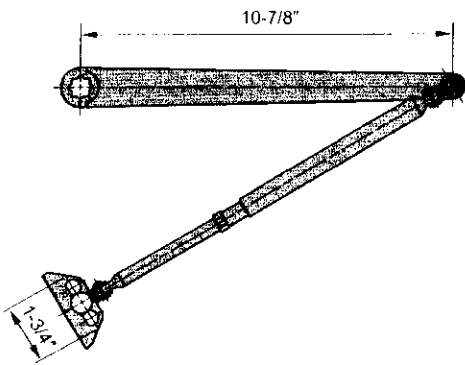


**Standard Hold-Open Arm Set
A45-501H**



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

- For reveals from 6-1/2" to 8"

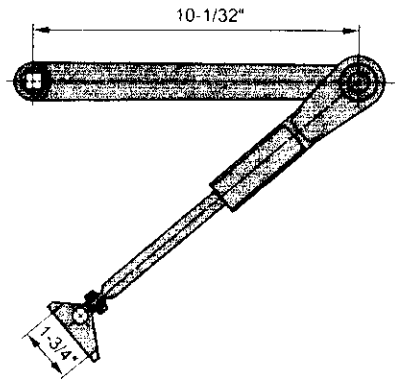


**Standard Hold-Open Arm with Long Rod and Shoe Set
A45-501HL**

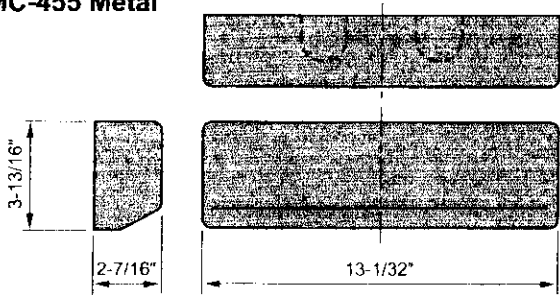
- For reveals from 3-3/16" to 4-13/16"

A45-501HXL

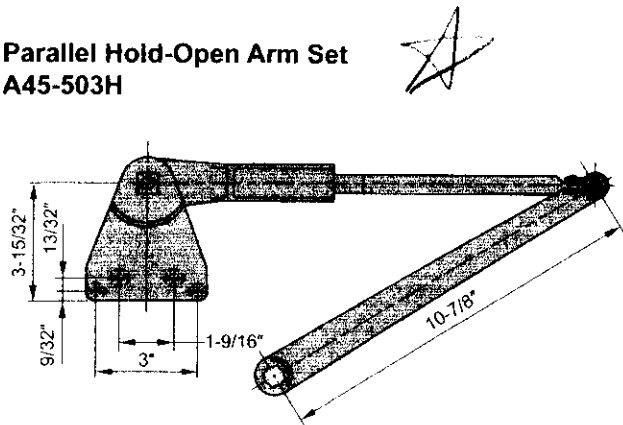
- For reveals from 4-7/8" to 8"



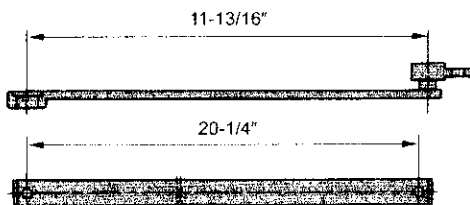
**Full Cover
C-455 Plastic
MC-455 Metal**



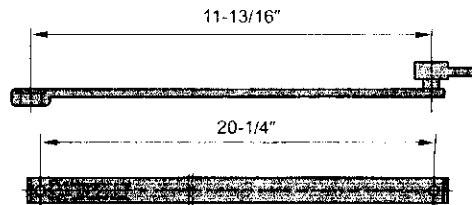
**Parallel Hold-Open Arm Set
A45-503H**



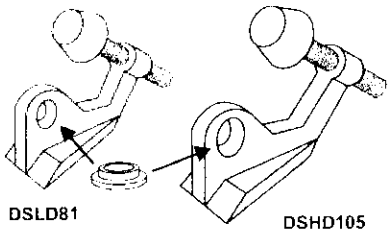
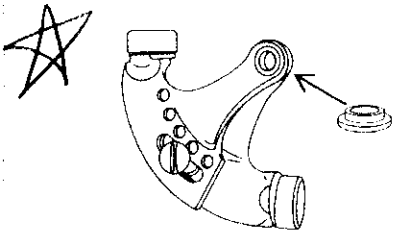
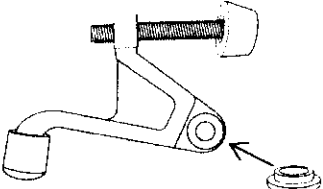
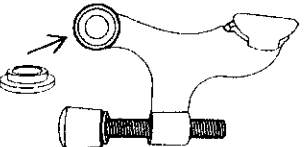
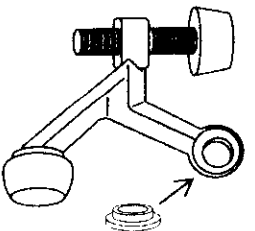
**Track Rail Arm Set
A45-507T**



**Track Rail Hold-Open Arm Set
A45-507HT**



DOOR STOPS

ILLUSTRATION	ITEM	SIZE	ITEM #	FINISH
 <p>DSL81 DSHD105</p>	<p align="center">Hinge Pin Stop With Removable Nylon Bushing</p> <ul style="list-style-type: none"> ➤ Adjustable Angle Setting ➤ Comparable to IVES #69, 69F ➤ Architectural finishes available 	<p>Hinge Pins Diameter $\frac{1}{4}$" or $\frac{5}{16}$"</p> <p>HINGE SIZES: $3\frac{1}{2}$" x $3\frac{1}{2}$" 4" x 4"</p> <p>Hinge Pins Diameter $\frac{1}{4}$" or $\frac{5}{16}$"</p> <p>HINGE SIZES: $3\frac{1}{2}$" x $3\frac{1}{2}$" 4" x 4" $4\frac{1}{2}$" x $4\frac{1}{2}$"</p>	<p align="center">DSL81 (Recommended for Residential use)</p> <p align="center">DSHD105 (Recommended for Commercial use)</p>	<p align="center">US3, 5, 10B, 15, 15A, 26, 26D</p>
	<p align="center">Jumbo Heavy Duty Hinge Pin Door Stop With Removable Nylon Bushing</p> <ul style="list-style-type: none"> ➤ Adjustable Angle Setting ➤ For commercial and residential grade hinges ➤ Comparable to IVES #69, 69F 	<p>Hinge Pins Diameter $\frac{1}{4}$" or $\frac{5}{16}$"</p> <p>HINGE SIZES: $3\frac{1}{2}$" x $3\frac{1}{2}$" 4" x 4" $4\frac{1}{2}$" x $4\frac{1}{2}$"</p>	<p align="center">IVHP23 (Commercial and Residential use)</p>	<p align="center">US3, 5, 26, 26D, 15, 15A, 10B</p>
	<p align="center">Jumbo Hinge Pin Door Stop With Removable Nylon Bushing</p> <ul style="list-style-type: none"> ➤ Easy installation ➤ For use with commercial and residential door hinges ➤ Architectural finishes available 	<p>Hinge Pins Diameter $\frac{1}{4}$" or $\frac{5}{16}$"</p> <p>HINGE SIZES: $3\frac{1}{2}$" x $3\frac{1}{2}$" 4" x 4" $4\frac{1}{2}$" x $4\frac{1}{2}$"</p>	<p align="center">JHP11 (Commercial and Residential use)</p>	<p align="center">US3, 5, 26, 15, 15A, 10B</p>
	<p align="center">Deluxe Hinge Pin Door Stop With Removable Nylon Bushing</p> <ul style="list-style-type: none"> ➤ Easy installation ➤ For use with residential door hinges ➤ Architectural finishes available 	<p>Hinge Pin Diameter $\frac{1}{4}$"</p> <p>HINGE SIZES: $3\frac{1}{2}$" x $3\frac{1}{2}$" 4" x 4"</p>	<p align="center">NHP78 (Recommended for Residential use)</p>	<p align="center">US3, 5, 26, 26D, 15, 15A, 10B</p>
	<p align="center">Residential Hinge Pin Door Stop With Removable Nylon Bushing</p> <ul style="list-style-type: none"> ➤ Easy installation ➤ For use on residential hinges ➤ Architectural finishes available 	<p>Hinge Pin Diameter $\frac{1}{4}$"</p> <p>HINGE SIZES: $3\frac{1}{2}$" x $3\frac{1}{2}$" 4" x 4"</p>	<p align="center">HP95 (Recommended for Residential use)</p>	<p align="center">US3, 5, 26, 15, 15A, 10B</p>

Specification Sheets available for submittal purposes at www.cal-royal.com. Click on "Specification Sheets Image"

Cal-Royal Products, Inc.

6605 Flotilla St., City of Commerce, CA 90040 U.S.A.

Phone: (323) 888-6601 • (800) 876-9258 • Fax: (323) 888-6699 • (800) 222-3316

Email: sales@cal-royal.com • Website: www.cal-royal.com

The illustration and technical description in this Specification Sheet is current as of the date in the version box above.

Cal-Royal Product reserves the right to and may frequently make changes and/or improvements in designs and dimensions.



Ver. 1, Rev. 5/11

©2011 CRP, Inc.

Floor Door Stop & Manual Holder

FS446

Features:

- Manual type floor holder ideal for interior or exterior use
- Cast brass or aluminum construction.
- Accommodates door undercut up to 2-1/2".
- Non-marring rubber tip.
- Unit functions as a stop but serves as a Hold-Open device when hook is manually engaged in strike. Unit requires manual disengagement to release Hold-Open
- Packed with expansion shield and lead shield
- Meets ANSI/BHMA 156.16, L11371 for brass and L31371 for aluminum.
- Finishes: US3, US4, US5, US10, US10B, US14, US15, US15A, US26, US26D, US28.

Product No.	Overall Height	Height from Floor to Stop Center Line	Stop Diameter	Base Diameter
FS446	3-3/4"	2-5/8"	1-1/16"	2-1/2"



FS450

Features:

- Manual type floor holder ideal for interior or exterior use.
- Cast brass or aluminum construction.
- Accommodates door undercut up to 2-1/2".
- Non-marring rubber tip.
- Unit functions as a stop but serves as a Hold-Open device when hook is manually engaged in strike. Unit requires manual disengagement to release Hold-Open.
- Packed with wood screws.
- Meets ANSI/BHMA 156.16, L11361 for brass and L31361 for aluminum.
- Finishes: US3, US4, US5, US10, US10B, US14, US15, US15A, US26, US26D, US28.

Product No.	Overall Height	Height from Floor to Stop Center Line	Stop Diameter	Base Diameter
FS450	3-3/4"	2-5/8"	1-1/16"	2-1/2"



FS451

Features:

- Manual type door holder ideal for interior or exterior use.
- Cast brass construction.
- Strike features hinged hook which engages the holder
- Accommodates door undercut up to 2-1/2".
- Resilient rubber tip.
- FS451-WS packed with wood screws.
- FS451 packed with expansion shield and tamper. Strike packed with sheet metal screws
- FS451-WS meets ANSI/BHMA 156.16, L11361 for brass and L31361 for aluminum. FS451-WS meets ANSI/BHMA 156.16, L11371 for brass and L31371 for aluminum.
- Finishes: US3, US4, US5, US10, US10B, US14, US15, US15A, US26, US26D, US28.

Product No.	Overall Height	Base Depth	Base Width
FS451-WS	3-3/16"	2-1/2"	1-5/8"
FS451	3-3/16"	2-1/2"	1-5/8"





TRIM & AUXILIARY



Door Protection Plates

The metal door protection plates below meet ANSI A156.6 for J101 Metal Armor Plate, J102 Metal Kickplate, and J103 Metal Mop Plate. The plastic door protection plates below meet ANSI A156.6 for J105 Plastic Armor Plate, J106 Plastic Kickplate, and J107 Plastic Mop Plate. Options for all plates include countersunk holes, UL armor plate stamped, self-adhesive tape, spanner head screws, torx head screws, round corners, wrap around side and bottom return, and 0.125" (3.2 mm) material. All plates below are supplied standard with #6 x 5/8" truss head screws (unless specified otherwise). They are available in mop plate, kick plate, stretcher plate, and armor plate sizes.

- Mop Plate:** Protects the bottom of the pull side of doors subject to cleaning and mopping procedures.
- Kick Plate:** Protects the bottom of the push side of doors subject to scuffing from foot traffic.
- Stretcher Plate:** Protects doors in specific areas where constant contact is made by stretchers, service carts, or other equipment.
- Armor Plate:** Protects lower half of doors from abuse by carts, trucks, and rough usage.

190S

Gauge: 0.050" (1.3 mm)
 Materials: Aluminum, brass, bronze, stainless steel
 Finishes: US3, US4, US10, US10B, US28, US32, US32D
 Bevel: None
 Options: UL Listed for US32 and US32D*

193S

Gauge: 0.050" (1.3 mm)
 Materials: Aluminum, brass, bronze, stainless steel
 Finishes: US3, US4, US10, US10B, US28, US32, US32D
 Bevel: 3 edges
 Options: UL Listed for US32 and US32D*

194S

Gauge: 0.050" (1.3 mm)
 Materials: Aluminum, brass, bronze, stainless steel
 Finishes: US3, US4, US10, US10B, US28, US32, US32D
 Bevel: 4 edges
 Options: UL Listed for US32 and US32D*

198S

Gauge: 0.038" (0.8 mm)
 Materials: Stainless steel
 Finishes: US32D
 Options: UL Listed*

199B

Gauge: 0.038" (0.8 mm)
 Materials: Aluminum
 Finishes: Bright gold anodized
 Fasteners: #6 x 5/8" TPH Tapping Screws

220S

Gauge: 0.062" (1.6 mm)
 Materials: Aluminum, brass, bronze, stainless steel
 Finishes: US3, US4, US10, US10B, US28, US32, US32D
 Bevel: None

223S

Gauge: 0.062" (1.6 mm)
 Materials: Aluminum, brass, bronze, stainless steel
 Finishes: US3, US4, US10, US10B, US28, US32, US32D
 Bevel: 3 edges

224S

Gauge: 0.062" (1.6 mm)
 Materials: Aluminum, brass, bronze, stainless steel
 Finishes: US3, US4, US10, US10B, US28, US32, US32D
 Bevel: 4 edges

204S

Gauge: 0.125" (3.2 mm)
 Materials: Clear plastic
 Bevel: 4 edges

214S

Gauge: 0.125" (3.2 mm)
 Materials: Plastic laminate
 Bevel: 4 edges
 Colors: Black, Brown, Grey
 Notes: Other colors are available and will be subject to minimum order quantities; priced on application

225S

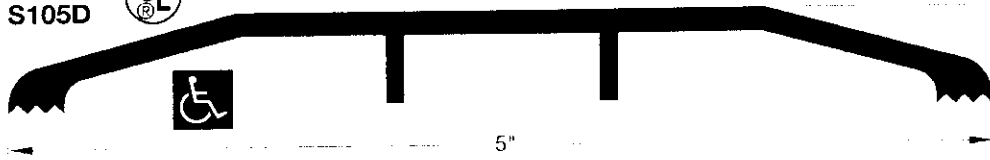
Gauge: 0.060" (1.9 mm)
 Materials: Kydex®
 Colors: CBO - Calcutta Black, KGO - Beige, KHO - Chocolate
 Notes: Other colors are available and will be subject to minimum order quantities; priced on application
 Options: UL Listed*



*Must specify UL stamp.



S105A
S105D

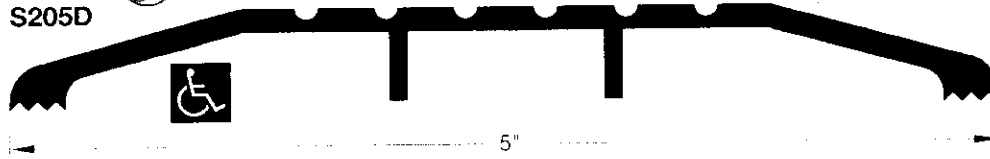


1/2"

Finish Designations:

- A Aluminum mill finish
- B Architectural brass
- D Dark bronze anodized aluminum

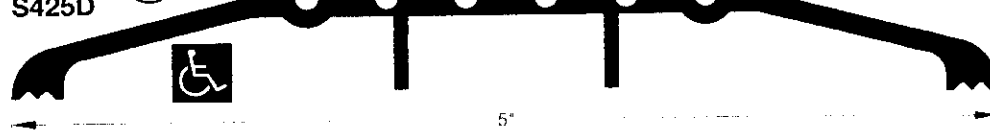
S205A
S205B
S205D



1/2"

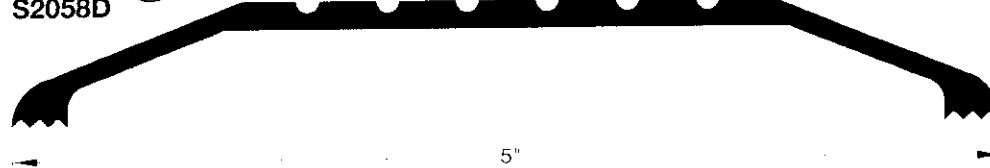
NOTE: S205B does not have center legs.

S425A
S425D



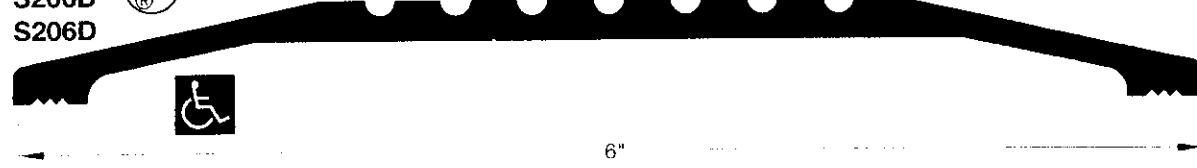
1/2"

S2058A
S2058D



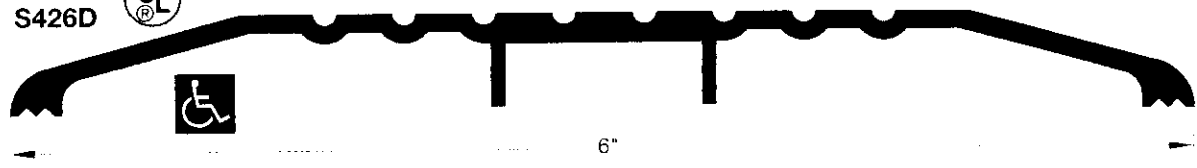
5/8"

S206A
S206B
S206D



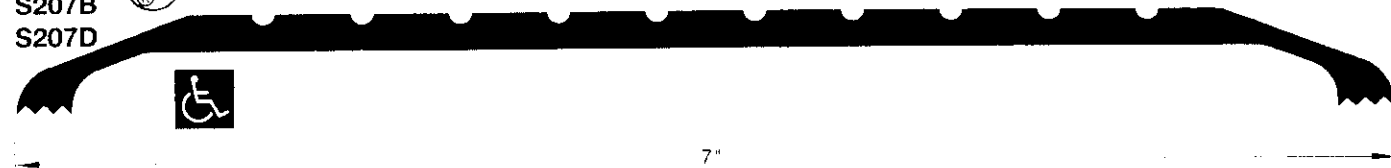
1/2"

S426A
S426D



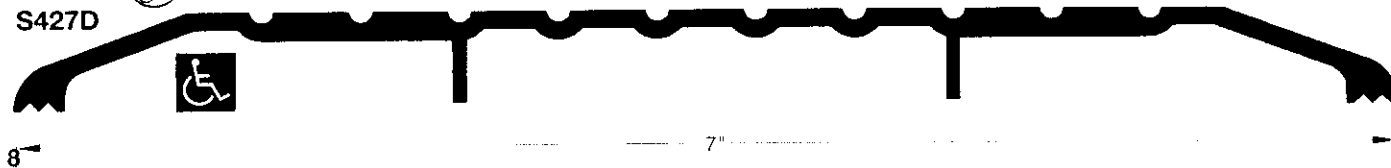
1/2"

S207A
S207B
S207D



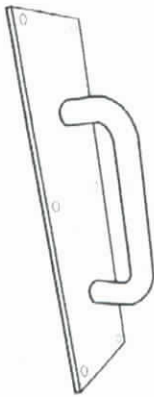

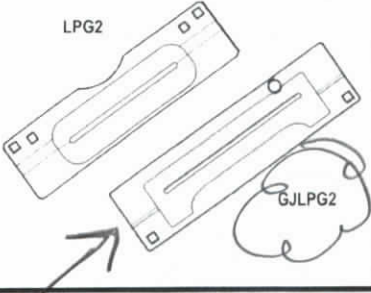
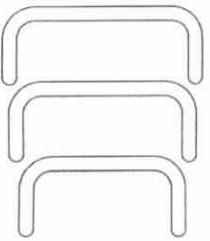
1/2"

S427A
S427D



1/2"

MISCELLANEOUS DOOR AND WINDOW HARDWARE

ILLUSTRATION	ITEM	SIZE	ITEM #	FINISH			
	<p style="text-align: center;">Pull Plate Solid Bar Round 1000 Series</p> <ul style="list-style-type: none"> ➤ Meets ANSI 156.6 for J401 Pulls ➤ 18 Gauge (0.050") Plate 	3/4" dia.	3.5" x 15"	1000	US32D, 10B, 3		
		6"CTC	4" x 16"	1001		1001 ADA	US32D
		3/4" dia.	3.5" x 15"	1002	1003		
		8"CTC	4" x 16"	1003		1003 ADA	US32D
		1" dia.	3.5" x 15"	1004	1005		
		8"CTC	4" x 16"	1005		1005 ADA	US32D
		1" dia.	3.5" x 15"	1006	1007		
		10"CTC	4" x 16"	1007		1007 ADA	US32D
			<p style="text-align: center;">Push Plate</p> <ul style="list-style-type: none"> ➤ Individually packed with protective film and screws ➤ Easy installation ➤ Conforms to ANSI/BHMA A156.6 ➤ Architectural finishes available 	0.050" x 3 1/2" x 15"	PSPL3515	US32D, 10B, 10, 6, 5, 4, 3, 26	
0.050" x 4" x 16"	PSPL4016						
	<p style="text-align: center;">Latch Guard Protector</p> <ul style="list-style-type: none"> ➤ Universal latch guard for out-opening doors ➤ Fits most single, double and mortise locks ➤ Conforms with ANSI/BHMA 156.2 Series 4000 	2 7/8" x 11"	LPG2	USP,ALUM DURO, GOLD			
		3" x 11"	GJLPG2	US32D			
	<p style="text-align: center;">Solid Brass Drawer Pull</p> <ul style="list-style-type: none"> ➤ Includes Screws for 3/4" – 1 3/8" thick drawers or doors ➤ Conforms to ANSI/BHMA A156.9 B22011 ➤ Architectural finishes available 	Dia. of Rod : 3", 5/16"	WP300	US3, 26, 26D, US10B			
		Dia. of Rod 3 1/2", 5/16"	WP350				
		Dia. of Rod 4", 5/16"	WP400				

Specification Sheets available for submittal purposes at www.cal-royal.com. Click on "Specification Sheets Image"

Cal-Royal Products, Inc.

6605 Flotilla St., City of Commerce, CA 90040 U.S.A.

Phone: (323) 888-6601 • (800) 876-9258 • Fax: (323) 888-6699 • (800) 222-3316

Email: sales@cal-royal.com • Website: www.cal-royal.com

The illustration and technical description in this Specification Sheet is current as of the date in the version box above.

Cal-Royal Product reserves the right to and may frequently make changes and/or improvements in designs and dimensions.



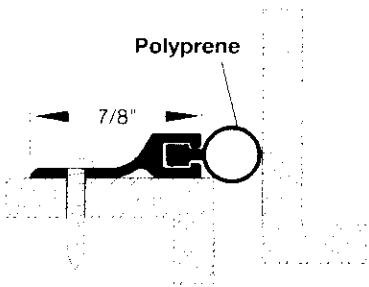
Ver. 1, Rev. 5/11

©2011 CRP, Inc.

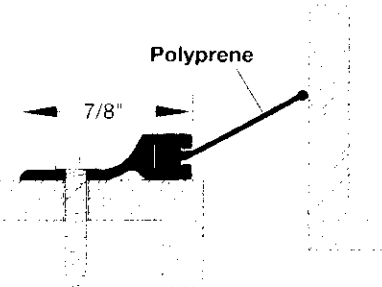
Polyprene

Polyprene®, a thermoplastic compound rubber, is a series of high-performance elastomers which combine the desirable characteristics of vulcanized rubber, such as flexibility and low compression set with the processing ease of thermoplastics.

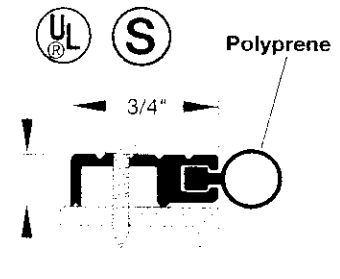
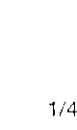
815A
815C
815D
815G



817A
817C
817D
817G



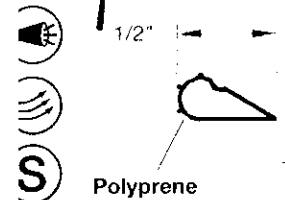
818A
818C
818D
818G



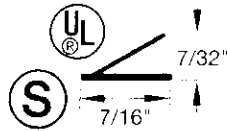
797W White
797B Black



Note: 797 and 798 available in 17', 19', 21', 25' and 500' rolls.



798B Black

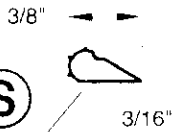


- Withstands a wide variety of temperature extremes: remains stable and keeps its shape from -76°F to 250°F.
- Has soft, good low temperature flexibility.
- More wear resistant than silicone rubber.
- Low compression set – outstanding memory for consistent long-term sealing pressure.
- Unaffected by sunlight, ozone and ultraviolet rays.
- Fatigue resistance – unsurpassed flex fatigue resistance.

Silicone

Silicone rubbers are synthetic polymers with unusual molecular structures; giant backbones of alternating silicon and oxygen atoms. This linkage is similar to that found in quartz, thus silicones have superior heat resistance compared to other elastomers.

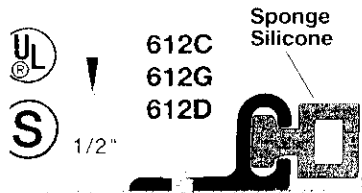
38CH



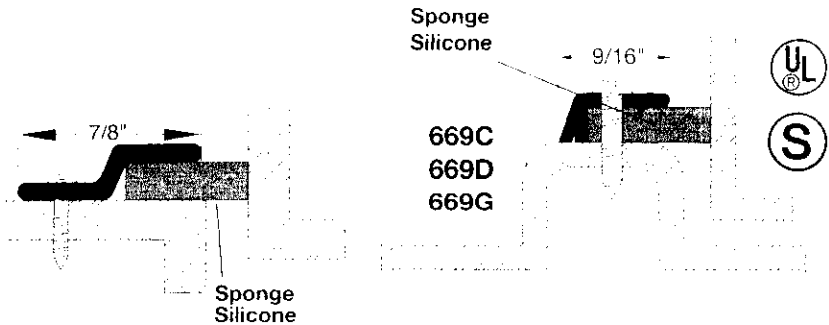
Charcoal color available in 17', 19', 21' and 25' rolls.

- Withstands a wide variety of temperature extremes and remains flexible from -75°F to 400°F.
- Retains softness indefinitely – will not deteriorate under normal exposure.
- Resists compression set – lower than thermal plastic elastomers.
- Resists fungus, mildew, moisture and steam.
- Unaffected by sunlight, ozone and ultraviolet rays.
- Nontoxic.

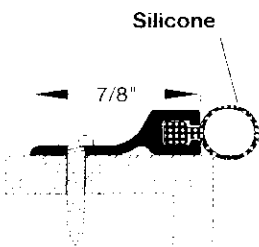
Note: All self-adhesive weatherstrips must be applied on clean, dry frames between +50°F and +100°F. Smoke seals have a pre-installation shelf life of 6 to 9 months.



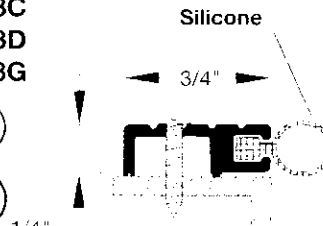
619C
619D
619G



678A
678C
678D
678G



688A
688C
688D
688G

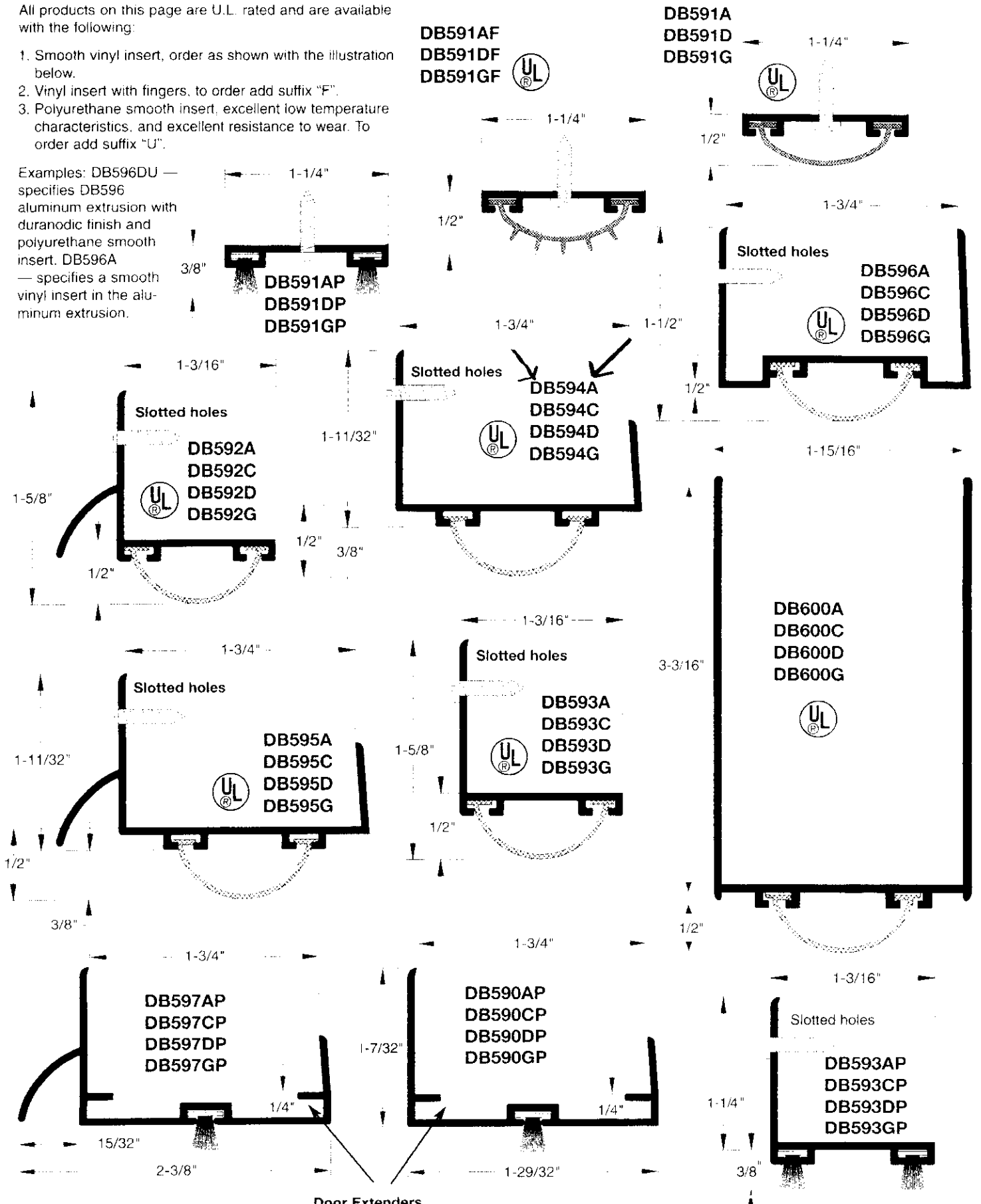


Polyurethane, Vinyl and Pile Seals

All products on this page are U.L. rated and are available with the following:

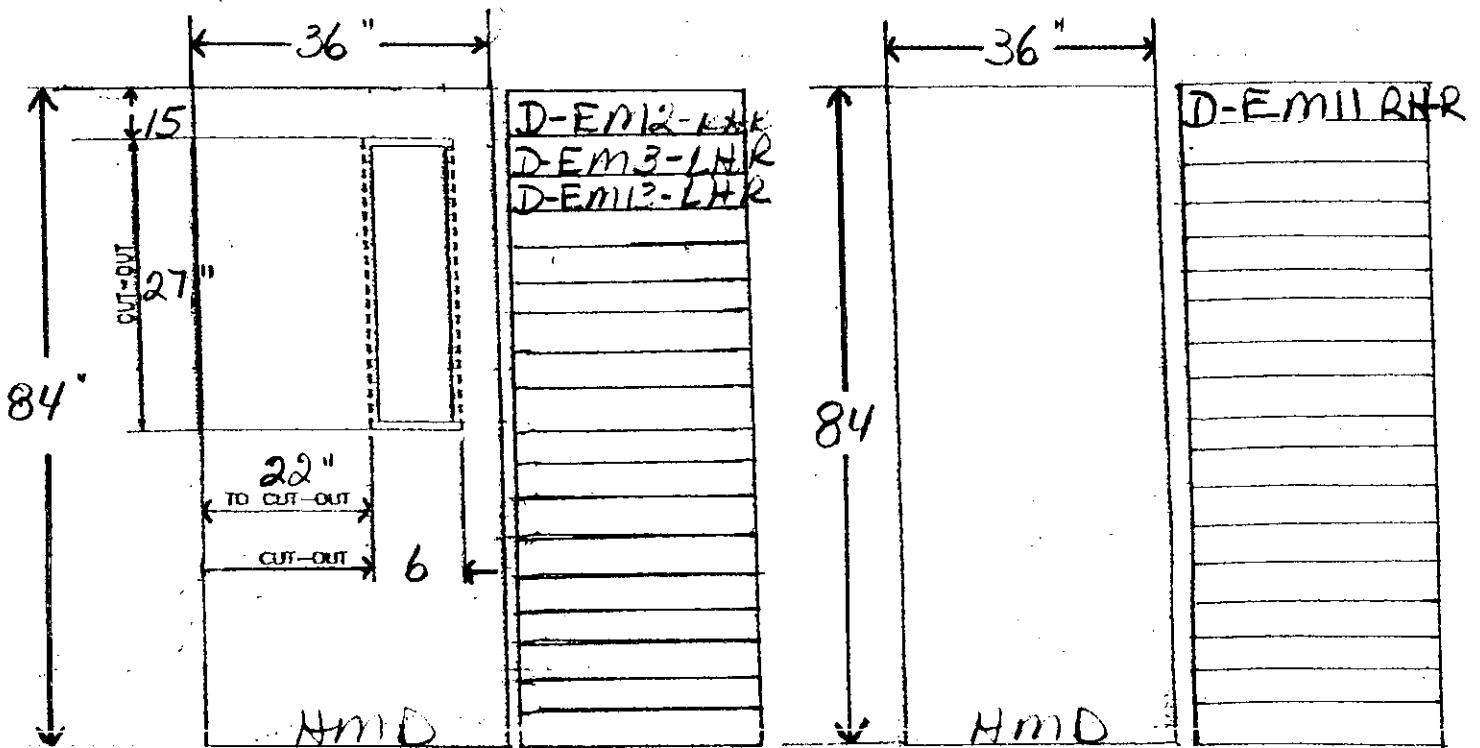
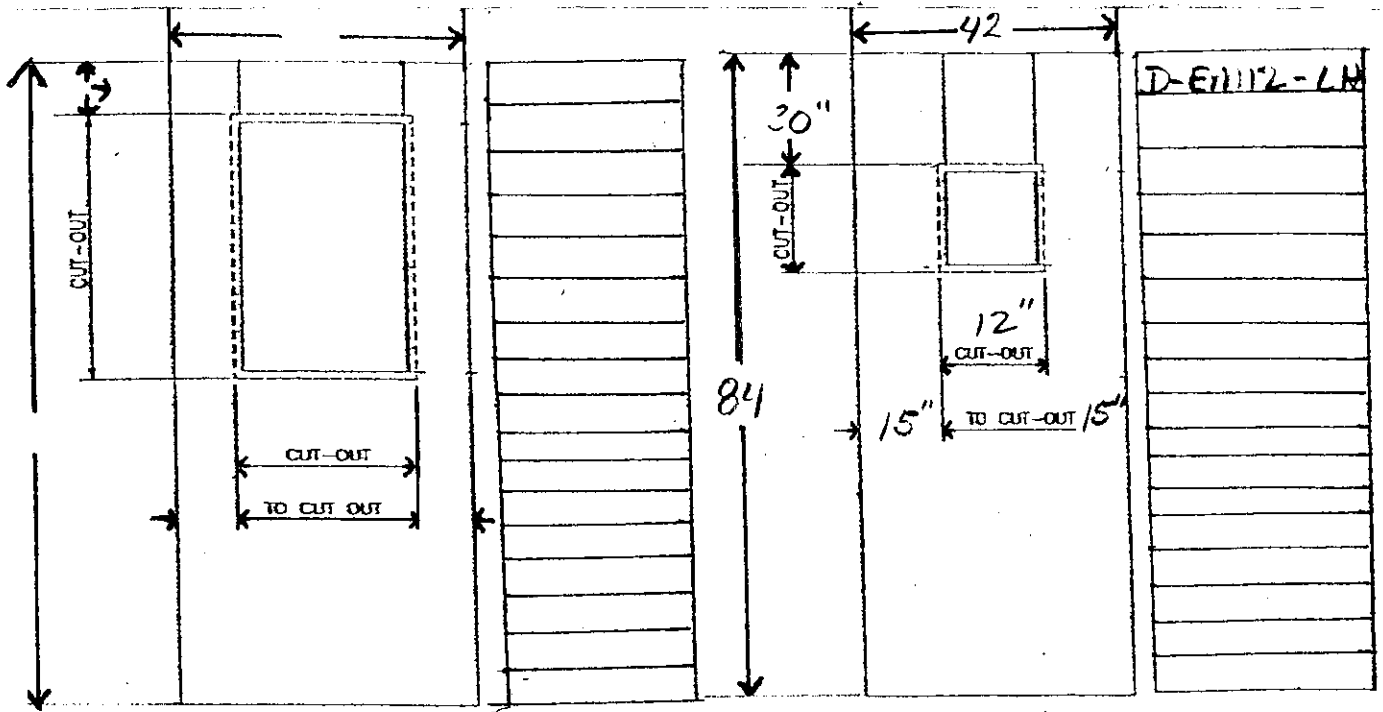
1. Smooth vinyl insert, order as shown with the illustration below.
2. Vinyl insert with fingers, to order add suffix "F".
3. Polyurethane smooth insert, excellent low temperature characteristics, and excellent resistance to wear. To order add suffix "U".

Examples: DB596DU — specifies DB596 aluminum extrusion with duranodic finish and polyurethane smooth insert. DB596A — specifies a smooth vinyl insert in the aluminum extrusion.



Door Extenders

Newco Door & Hardware, LLC.
 and Rick L. Bradley, your hardware consultant,





L-FRA100 Low Profile Lite Kit

L-FRA100

Low Profile Self-Attaching Lite Kit for 1 3/4" Door with 3/16" or 1/4" Glass

STANDARD FEATURES

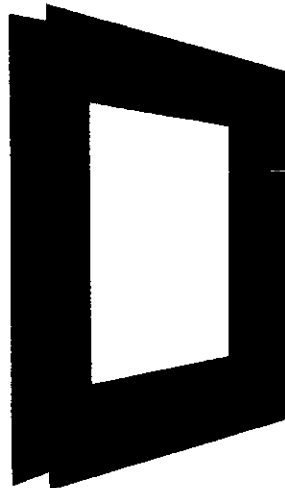
- * 20 ga. cold rolled steel
- * Mitered and welded corners
- * Welded reinforcing clips at corners
- * Counter-sunk mounting screw-holes
- * #8 x 3/4" Phillips head SMS
- * Available in uneven and fractional sizes
- * Standard finish = (GPZ) Gray Primer

OPTIONAL FEATURES

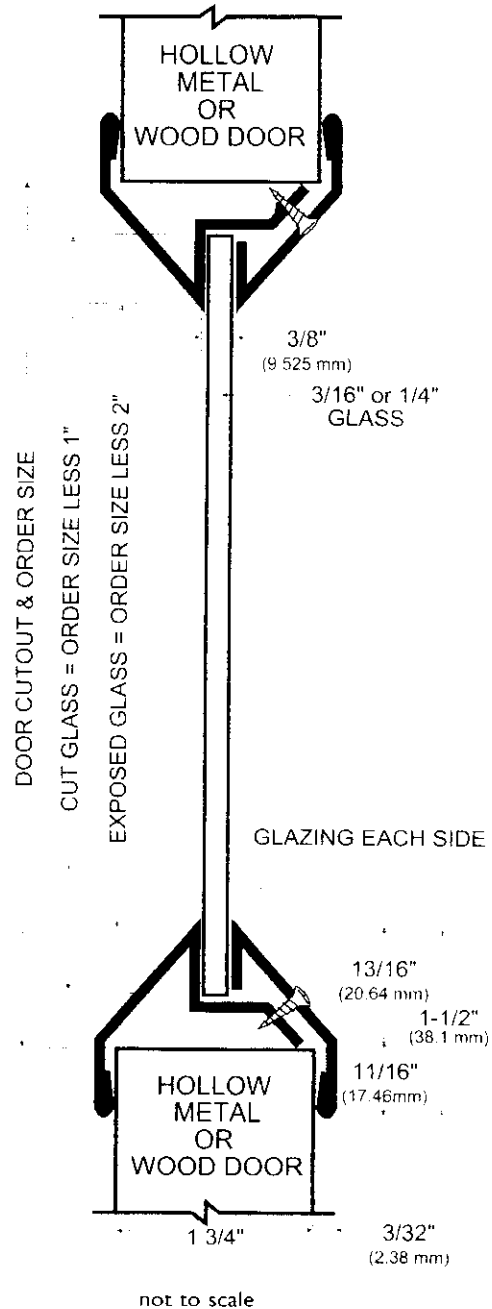
- * See page L2 for optional finishes
- * Torx Security Screws
- * Galvanneal - A40 Steel
- * Zinc electro-plating
- * Glass & Glazing tape (Pages L23-L27)
- * Lead lining

UL10C POSITIVE PRESSURE FIRE-RATED

- * Fire-rated 1/4" wire glass:
20 min. requires closed cell PVC foam glazing tape like NGP GT-116.
45, 60, 90 min. requires NGP 9800 or 3M GIS intumescent glazing tape.
- * Fire-Lite® NT, or Fireglass 20™
requires closed cell PVC foam glazing tape like NGP GT-116 or GT-118.



Designed for use on 1 3/4" thick doors manufactured within door industry tolerance of +/- 1/16".

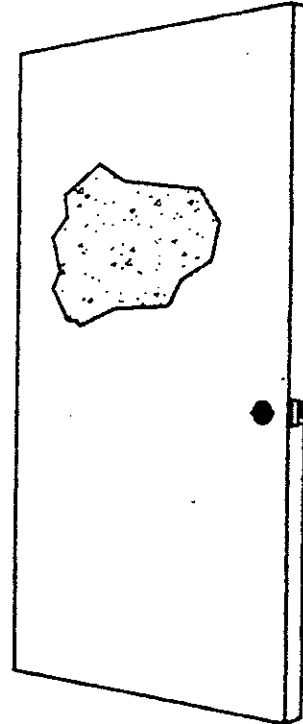


ENGINEERING DETAILS for STANDARD

SERIES CHP Seamless 1 3/4" Doors

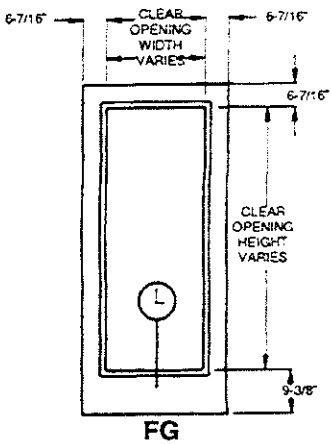
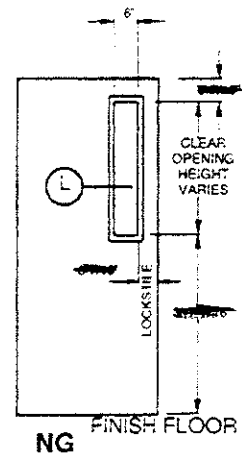
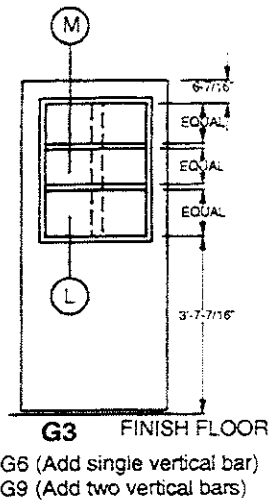
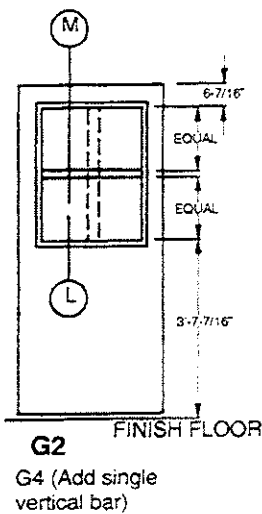
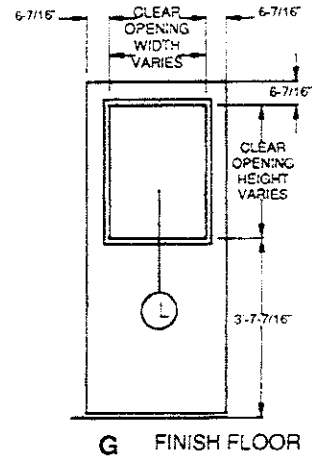
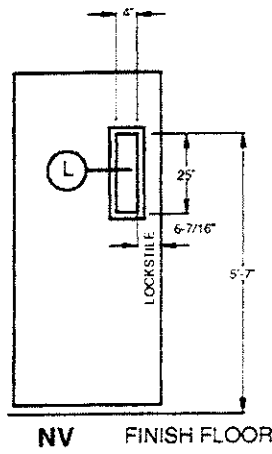
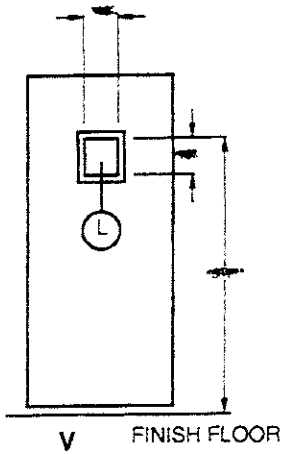
Specifications

1. HP doors shall be formed from two 16 or 18 gage A60 Galvanized Steel per ASTM A924 and A653 and shall be 1-3/4" thick.
2. CHP doors shall be formed from two 14, 16 or 18 gage A 60 Galvanized steel per ASTM A924 and A653 and shall be 1-3/4" thick.
3. Doors shall have a core of rigid Polystyrene. The core shall have a nominal density of 1.0 #/ft³, with an "R" factor of 7.12. The door panel shall develop a "U" factor of 0.014.
4. HP doors shall have vertical mechanical interlocking seams on hinge and lock edges. There shall be no seam on the faces of door.
5. CHP doors shall have no seams on the faces or edges of doors. Vertical edges of doors shall be continuously seam-welded full height of the door.
6. Exterior doors shall be capped to retard moisture penetrating the door.
7. All hinge reinforcements shall be 3/16" thick.
8. All doors shall be internally reinforced with a 12 gage plate both sides of the door for application of surface applied door closures and holders.
9. Glass light moulding shall be Pioneer standard steel moulding, with no exposed screws on the secure side of door.
10. Louvers shall be Pioneer standard design for application required.
11. All doors shall be cleaned and given one coat of baked -on rust- inhibitive metal primer in compliance with ANSI A250.10-2004
12. All fire rated doors, where indicated, shall be manufactured in accordance with UL or WHI procedures and bear the appropriate classification mark (label).
13. Door construction complies with ANSI A250.8-2003 (SDI 100)
14. Doors shall be packaged to minimize damage in transit and handling.
15. Hardware reinforcements are in accordance with ANSI A 250.6-2003. Locations are in accordance with ANSI/BHMA A156.115

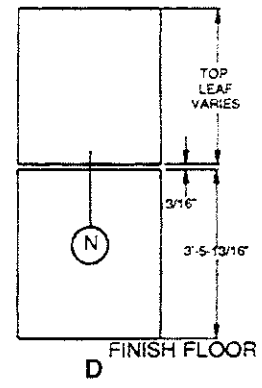
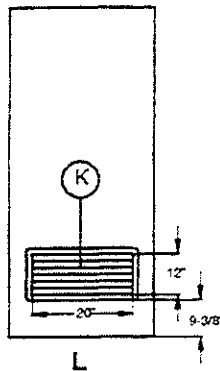


Insulation Values

Factor	Definition																				
K	The rate at which heat flows thru a material. Values for insulation are normally based on one inch thickness of a single homogeneous material and are expressed in BTU/ft ² /°F/hr/inch.																				
C	The rate at which heat flows thru a material of any given thickness. The "C" factor at one inch = "K" factor. The "C" factor of the same material at three inches is 1/3 of the "K" factor; at two inches the "C" factor is 1/2 the "K" factor.																				
U	The overall coefficient of heat transfer (conductivity) for all elements of construction (as well as environmental factors). A "U" factor is determined by adding the "C" factors of the various individual materials making up the composite structure. Units are expressed as BTU/ft ² /°F/hr.																				
R	A measure of the resistance to heat flow. As the thickness of the insulation material increases, the resistance to the heat flow increases. See the following common insulation materials for typical "R" factors.																				
	<table border="1"> <thead> <tr> <th>Material</th> <th>1" thick</th> <th>2" thick</th> <th>3" thick</th> </tr> </thead> <tbody> <tr> <td>Urethane</td> <td>7.0</td> <td>13.0</td> <td>20.0</td> </tr> <tr> <td>Polystyrene</td> <td>4.1</td> <td>8.0</td> <td>12.0</td> </tr> <tr> <td>Fiberglass (1# or less)</td> <td>4.0</td> <td>8.0</td> <td>12.0</td> </tr> <tr> <td>Vermiculite</td> <td>2.0</td> <td>3.6</td> <td>5.5</td> </tr> </tbody> </table>	Material	1" thick	2" thick	3" thick	Urethane	7.0	13.0	20.0	Polystyrene	4.1	8.0	12.0	Fiberglass (1# or less)	4.0	8.0	12.0	Vermiculite	2.0	3.6	5.5
Material	1" thick	2" thick	3" thick																		
Urethane	7.0	13.0	20.0																		
Polystyrene	4.1	8.0	12.0																		
Fiberglass (1# or less)	4.0	8.0	12.0																		
Vermiculite	2.0	3.6	5.5																		

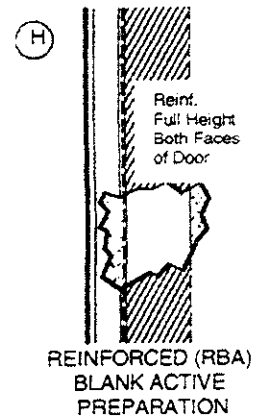
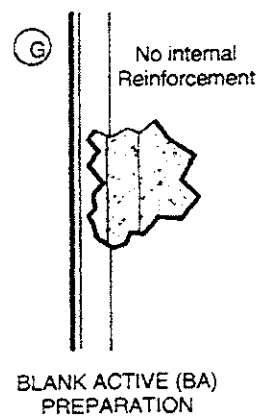
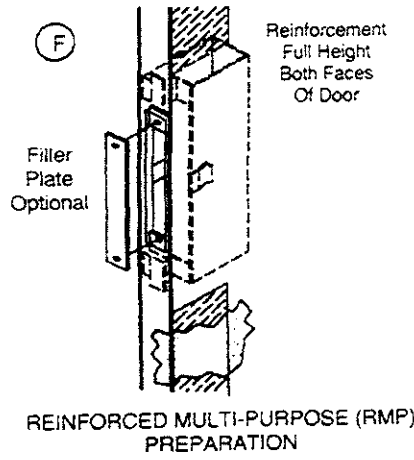
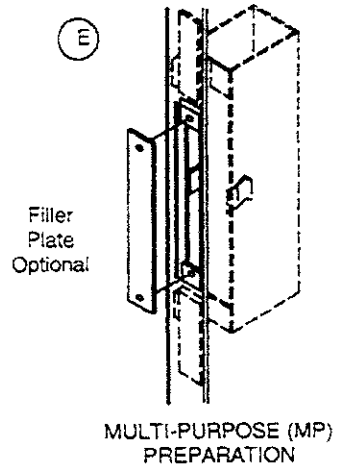
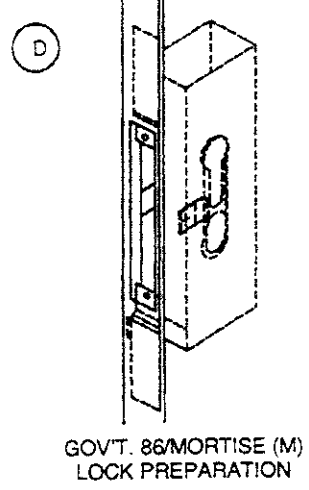
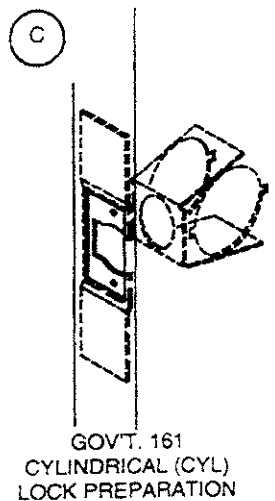
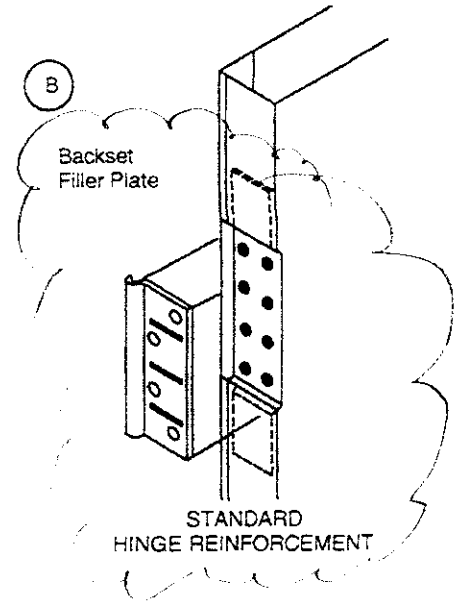
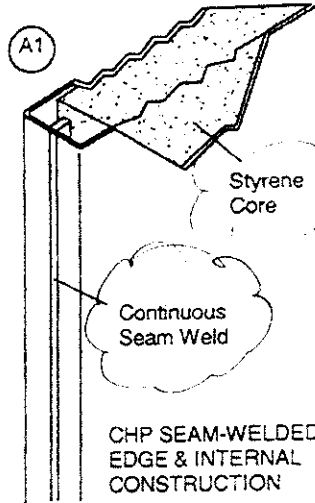
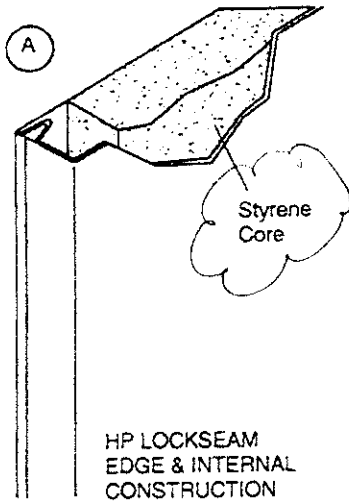


NOTE: 12" x 12" Louver standard for 2'-0" & 2'-4" door – all others 20" x 12", 20" x 24" Louver available

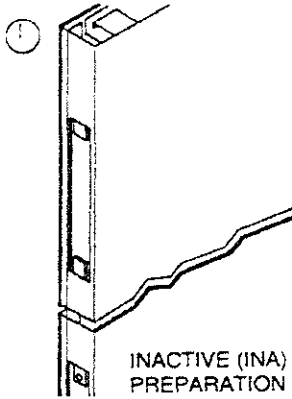


171 S. Newman St., Hackensack, NJ 07601 • Tel (201) 933-1900 • Fax (201) 933-9580

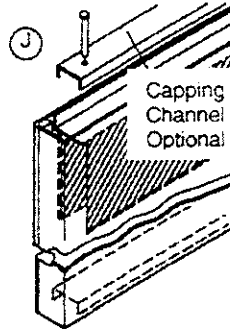
MANUFACTURING DETAILS: FULL FLUSH & SEAMLESS DOORS



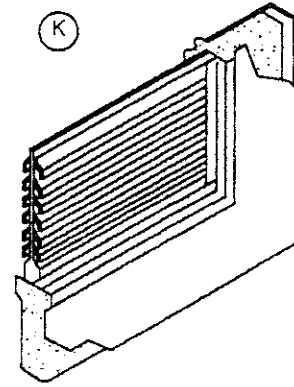
171 S. Newman St., Hackensack, NJ 07601 • Tel (201) 933-1900 • Fax (201) 933-9580



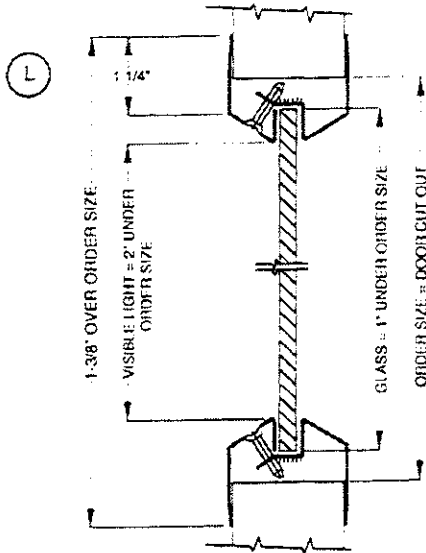
INACTIVE (INA)
PREPARATION



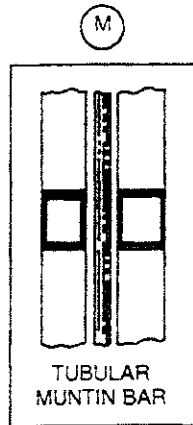
CLOSER REINFORCEMENT
TOP & BOTTOM CHANNELS



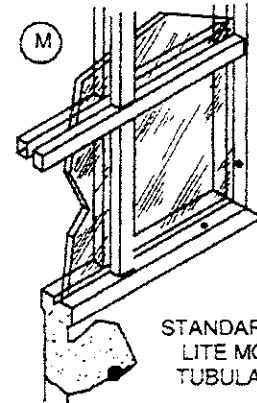
STANDARD
LOUVER



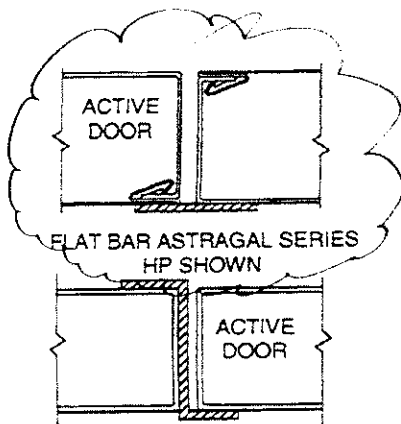
1/4"
1-3/8" OVER ORDER SIZE
VISIBLE LIGHT = 2" UNDER
ORDER SIZE
GLASS = 1" UNDER ORDER SIZE
ORDER SIZE = DOOR CUT OUT



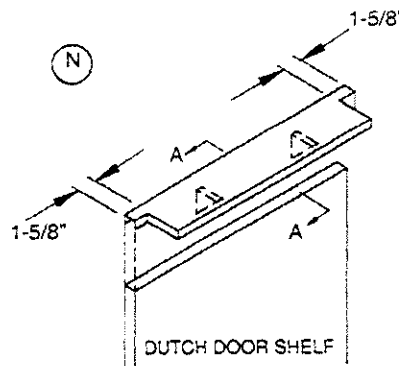
TUBULAR
MUNTIN BAR



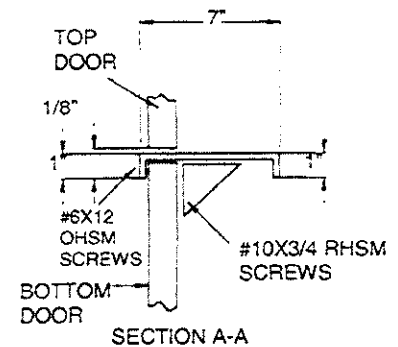
STANDARD STEEL GLASS
LITE MOULDING WITH
TUBULAR MUNTIN BAR



Z ASTRAGAL SERIES CHP
SHOWN



DUTCH DOOR SHELF



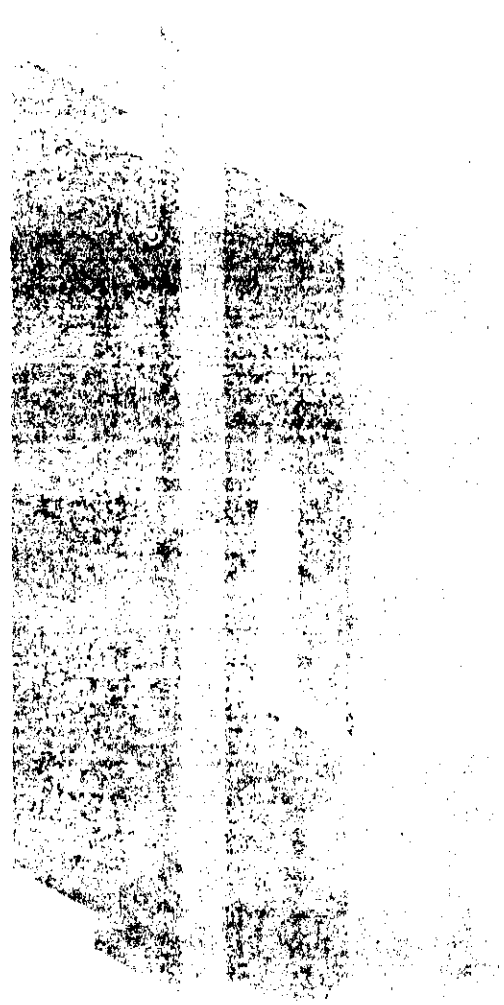
SECTION A-A

171 S. Newman St., Hackensack, NJ 07601 • Tel (201) 933-1900 • Fax (201) 933-9580

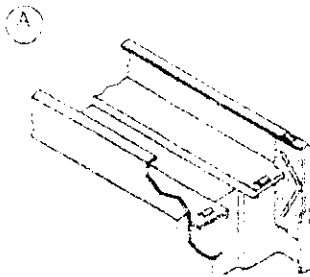
**ENGINEERING DETAILS for STANDARD
SERIES F-14 and F-16 FRAMES
For 1- 3/4" Doors**

Specifications

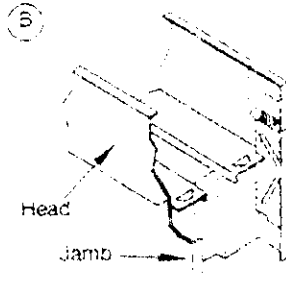
1. Frames shall be manufactured of 14 or 16 gage Steel per ASTM A 1008, 568 & 569. OR A60 Galv. Per ASTM A924 & A653
2. Frames shall be knocked down for field assembly. Milters shall have a precision hairline joint when assemble.
OPTION: Corners shall be arc-welded and ground smooth, and frames shall be provided with steel bottom spreader.
3. Heads shall be reinforced for surface applied closers, holders, or brackets when required.
4. Dual purpose hinge reinforcements shall be 3/16" thick. It comes equipped with galvanneal back-up filler plate for standard weight hinges. Conversion from standard weight to heavy weight hinges is done by removing the filler plate. All reinforcements for hinges and strikes shall have steel-plaster guards.
5. All frames shall be prepared to receive G.J.64 type door silencers, three for single frame and two for pair frame. (Silencers by others)
6. Frames are available with appropriate anchors as required to suit wall conditions. Frames shall have floor clips at bottom of all jambs for attachment to finished floor.
7. Heads of pair frames over 4'-0" wide and up to 16 gage shall be prepared with a universal "knock-out" or Mortised Flush Bolt prep. as required.
8. Frames shall be prime painted by Pioneer's exclusive "DURA-BOND" process, consisting of a wash, phosphate treatment, "flo-coat" painting and oven baking in compliance with ANSI A250.10-2004
9. Frames shall be furnished with WHI or UL Positive and Negative Pressure rated listing in accordance with NFPA 80 and per Pioneer's installation instructions.
10. Frame construction complies with ANSI A 250.6-2003 (SDI -100)
11. Hardware preparations and reinforcements comply with ANSI A250.6-2003. Hardware shall be in accordance with ANSI/BHMA A156.115-2006



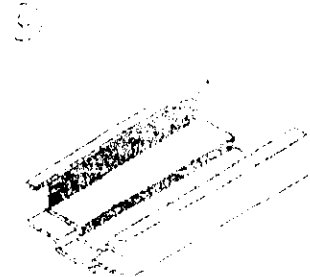




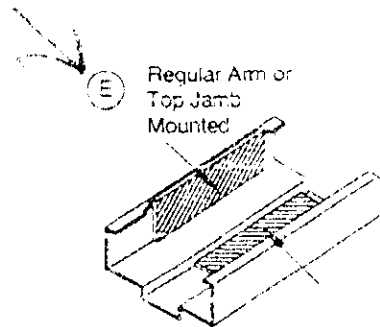
CORNER SECTION



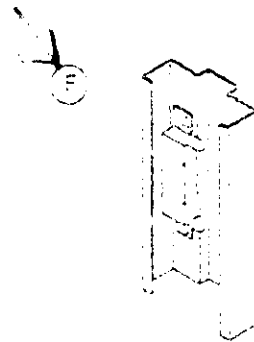
CORNER SECTION
4" HEAD



CLOSER REIN.
SLEEVE



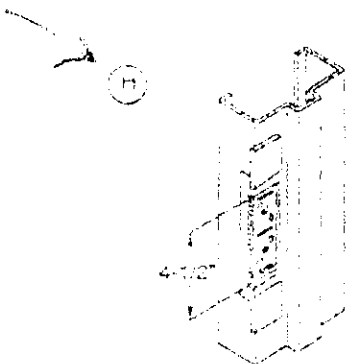
CLOSER REIN (WELD-IN),
(Available for various trim
and stop applied devices)



ASA 4-7/8" STD.
1-PIECE STRIKE REINFL.
WITH PLASTER GUARD



STRIKE PREPARATION
2 1/2\"/>



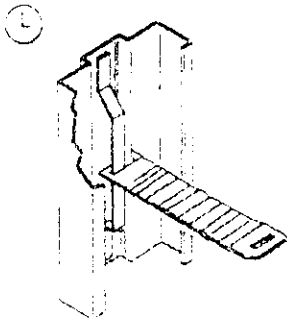
DUAL PURPOSE MORTISE
HINGE PREPARATION WITH
BACK-UP FILLER PLATE



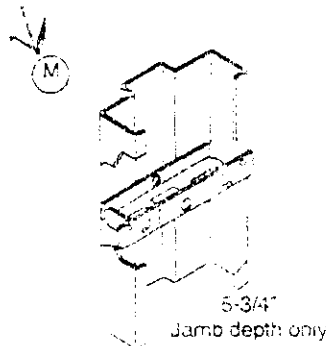
WIRE MASONRY ANCHOR
(Adjustable to desired jamb
depth)



MASONRY
TANCHOR



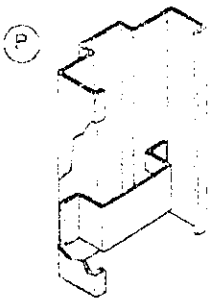
**YOKE & STRAP
MASONRY ANCHOR**



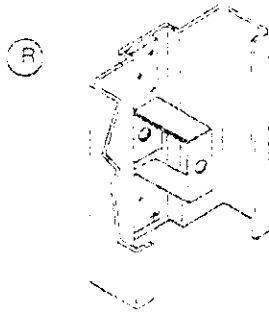
COMBINATION ANCHOR
for Steel Stud, Wood Stud
and Existing Masonry



STEEL STUD ANCHOR
(Adjustable to desired Jamb
depth)



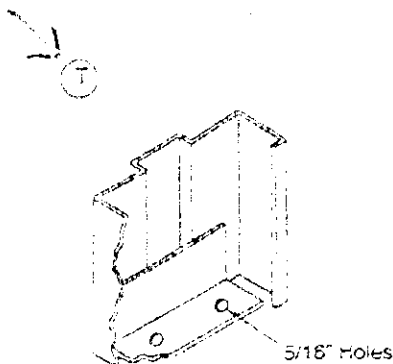
**CLOSED CHANNEL
STEEL STUD ANCHOR**
(Specify stud width)



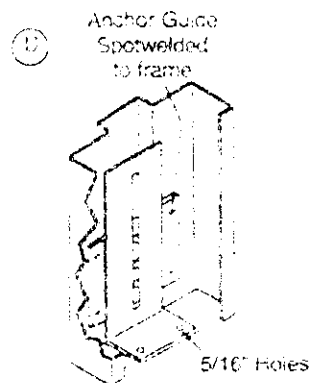
EXISTING MASONRY ANCHOR
3/8" Bolt and Shield furnished
when UL listed



WOOD STUD ANCHOR
(Adjustable to desired Jamb
depth)



BASE ANCHOR



ADJUSTABLE FLOOR KNEE

NOTE: In order to provide our Customers with the finest Products, manufactured in the most up to date manner, Pioneer Industries reserves the right to make design or specific construction changes without notice.

Pioneer Industries will not be Responsible for errors incurred By other parties through the use Of this data sheet without written confirmation from Pioneer. Other trades should contact Pioneer for exact hardware locations.



NOTES

Standard Hinge Preparation:

1 1/2 pair of 4 1/2 x 4 1/2 standard weight template hinges for 6'-8", 7'-0" & 7'-2" height. Two pair for 7'-10" and 8'-0" height. Hinge Backset 5-16" for 4 1/2" Regular Weight Butts; 11/32" for 4 1/2" Heavy Weight Butts.


Standard Strike Preparations:

ASA 4-7/8" furnished as standard. 2 3/4" strike is optional. Strike Backset = 11/32".

Standard Anchors:

Jamb Anchors — Wire Masonry anchors are available for all frames. Three (3) anchors per jamb for 6'-8", 7'-0" & 7'-2" height; four anchors per jamb for 7'-10" & 8'-0".

Base Anchors — Rigid Floor Knee furnished as standard for all frames, unless otherwise specified.

Fire Rated Label: All 16 Ga. And 14 Ga. Frames available with UL or WHI (Intertek) listing mark unless specifically prohibited by .

Standard Finish: All frames are furnished with a baked "Dura-Bond" prime finish.

MANUFACTURING TOLERANCES

Door Opening width
Nominal opening + 1/16", -0"

Door opening height
Nominal opening ± 1/16"

Jamb depth ± 1/16"

Throat
(Between returns) ± 1/16"

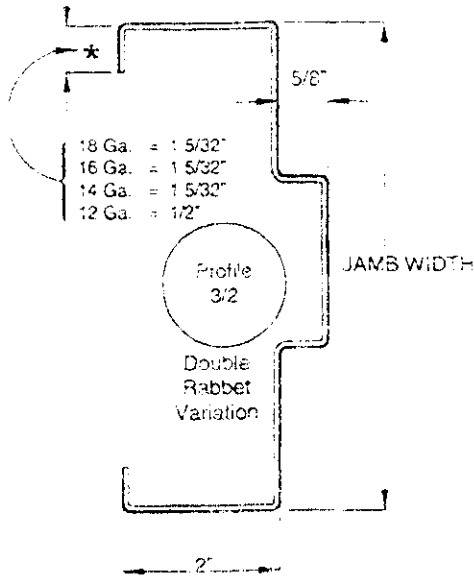
Hardware cutouts
Template dimension + 1/64", -0"

Hardware Prep location
Height ± 1/64"
Backset ± 1/64"
Depth + 1/32", - 0"

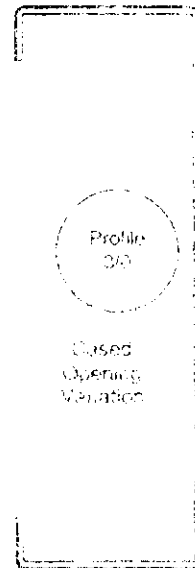
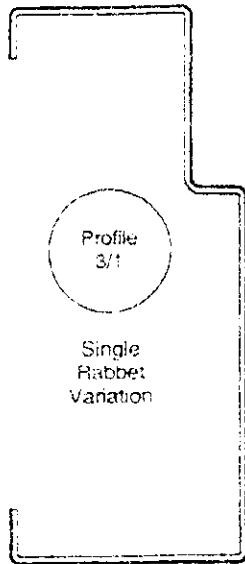


TECHNICAL DATA - FRAMES STANDARD PROFILES

ENGINEERING DETAILS for STEEL FRAMES — Type 3 (Standard Profile)



* 7/16" at standard 5 3/4" Profile



Series	Scope		
	KD Knocked Down	Setup & Welded	Fire Rated
F12		*	*
F14	*	*	*
F16	*	*	*
F18	*	*	*
UNI-FRAME			
F18	*	*	*
WF14	*	*	*
WF16	*	*	*
WF18	*	*	*

SCOPE data above intended only as a guideline as it applies to the product information covered on this page. We recommend you verify all data as to application.

Dimensions shown are standard for this profile. Variations to suit designed conditions are available.



Newco Door & Hardware, LLC.,
6606 East 47th Avenue
Denver, Co. 80216

E-mail: rickbradley56@gmail.com
P: 303.576.0558 F: 303.576.0565
Cell Phone: 303.903.3947

Project:

Harold D. Thompson
Regional Water Reclamation Facility
Lower Fountain Metropolitan Sewage Disposal District
Equipment, Maintenance and Storage Building

Architect:

GMS, Inc.
Consulting Engineers
611 N. Weber, Suite 300
Colorado Springs, Colorado 80903

Phone: Fax:

Contractor:

Weaver Construction, Management, Inc.
3679 South Huron Street, Suite 404
Englewood, Colorado 80110

Phone: 303.789.4111 Fax: 303.789.4310

Prepared By: Rick L. Bradley
Lptp

Date: January 12, 2012

Revision Date:

Job Number: NC1199

Manufacturers:

Cal Royal - Hinge Pin Stops, Latch guards
Hager - Hinges, Kick plates, Passage, Privacy
Ives - Stops
Pioneer - Hollow Meal Doors & Frames
Precision - Exit Devices
Reese - Sweeps, Thresholds, Weather stripping
Stanley - Closers

In order to better service our customers we require the following information be provided and returned with the approved submittals.

Project Manager: _____

Office / Cell Phone Number: _____ Fax: _____

Email Address: _____

Superintendent: _____

Office / Cell Phone Number: _____ Fax: _____

Email Address: _____

Dates Required:

1) Hollow Metal Door Frames: _____

2) Hollow Metal Borrowed Lite Frames: _____

3) Hollow Metal Doors: _____

4) Timely Steel Frames: _____

5) Aluminum Frames: _____

6) Wood Doors: _____

*Pre finished wood doors - Sample(s) to be provided by the General Contractor or his agent.

7) Finish Hardware: _____

8) Miscellaneous: _____

9) If we are to provide the keying for this project, please provide us with the following contact information

Name of the contact: _____ Phone #: _____

Fax #: _____ Email Address: _____

Please have this signed and returned with the submittals. We will not proceed with fabrication, or purchasing of this project until the above information has been provided.

Failure to provide this information could result in additional lead times and costs.

Signed by: _____ Date: _____

Job Note(s):

- 1) To comply with ADA requirements vision lites cannot exceed 42" above the finish floor to the bottom of the vision lite.
Please verify location of vision lites in all doors with lites.

Architect please advise.

- 2) Hardware set E. opening D-EM8, has an exit device specified with no outside trim. Is this correct/

Architect please advise.

- 3) Hardware set E.1. opening D-EM12, has an exit device specified with no outside trim. The door swings into the mechanical room, with no apparent means to egress from that room.

1) Please verify that the door is to swing into the room, or should it swing out?

2) Please verify that the exit is a correct application.

3) If it is a correct application, should there be an outside trim to get out of the mechanical room?

Architect please advise.

- 4) Hardware set F, openings E-M9 and E-M10, have passage sets specified. Please verify that this is correct. Should these be storeroom locksets?

Architect please advise.

- 5) Hardware set G, opening E-M11, has a passage set specified. I believe this should be a privacy set.

Architect please advise.

- 6) Exterior elevations show all jambs are to have 4" heads. The legend on sheet EM-2 show exterior walls to have 6" studs and wall detail 3 on sheet EM-3 shows the frame butting up in the opening, and does not wrap the walls. What type of anchors do you require in order to install the frames?

Architect please advise.

- 7) Interior wall legend shows interior walls to be 4 ¾". Please verify that 5 ¾" frames are correct for the interior walls and verify what type of anchors are required to install these frames.

Architect / contractor please advise.

- 8) All doors with sweeps - sweeps show 3/8" vinyl and the thresholds specified are ½". We suggest using either a ¼" threshold, or changing the sweep to a surface applied, to allow enough clearance between the threshold and the sweep.

Architect please advise.

- 9) The Sparta lever specified is not available with the Kaba Ilco mechanical push button locksets. In order to keep the lever design consistent, may we change the lever design to the Rhodes lever design?

Architect please advise.

Abbreviations

Abbreviation(s) For Hollow Metal Doors and Frames:

86 - Mortise Lock Prep
161 - Cylindrical Lock Prep
453 - 3 Each 4.5" X 4.5" Hinges
CYL - Cylindrical
CYLS - Cylinders
H453 - 3 Each Heavy Weight 4.5" X 4.5" Hinges
FBW - Fully Back Welded
FWC - Full Width Cloer Reinforcement
FWH - Full Width Hinge Reinforcement
LH - Left Hand
LHR - Left Hand Reverse
MRTS - Mortise
PA - Parallel Arm Closer Reinforcement
REG - Regular Arm Closer Reinforcement
RH - Right Hand
RHR - Right Hand Reverse
RESR - Rim Exit Strike Reinforcement
SNB - Sex Nuts and Bolts
SSR - Special Strike Reinforcement
TB - Thru Bolt(s)
UC - Uner Cut
WGS - Welded Ground Smooth

Abbreviation(s) For Wood Doors:

86 - Mortise Lock Prep
161 - Cylindrical Lock Prep
B1E - Bevel 1 Edge (Leading Edge)
B2E - Bevel Both Edges
CYL - Cylindrical
CYLS - Cylinders
H453 - 3 Each Heavy Weight 4.5" X 4.5" Hinges
HC - Hollow Core
LH - Left Hand
LHR - Left Hand Reverse
MPLE - Maple
MRTS - Mortise
MVE - Matching Vertical Edge
PSRO - Plain Slice Red Oak
RH - Right Hand
RHR - Right Hand Reverse
RCB - Rotary Cut Birch
SC - Solid Core
SNB - Sex Nuts and Bolts
SWE - Soft Wood Edges
TB - Thru Bolts
UC - Under Cut

Hw Set A

Opng/Tag	Location	Handing
D-EM2	Exterior from Vehicle Bays	Right Hand Reverse
D-EM3	Exterior from Vehicle Bays	Left Hand Reverse

Pioneer Hmf 2 - 3070 5 3/4" 4" hd. 14ga. gal. welded hollow metal frames - Type a prep for H453 hinges, asa strike, parallel arm closer reinforcement

Pioneer Hmd 2 - 3070 1 3/4" flush 16ga. gal. hollow metal doors - Type a prep H453 hinges, 161 cylindrical lockset, standard under cut, seamless edge vision lite cut out 6" x 27" located 15" down and 8" in

Nation Guard VL Kits 2 - L-FRA 100 6" X 27" for use with 1/4" glass provide by others

Mfr	Qty	Subtype	Item Description
Hager	6	Butts	BB1199 4.5 X 4.5 US32D nrp
Simplex	1	Mech. Combo Lock	LL1021S 2 3/4 x ASA x US26D LH
Simplex	1	Mech. Combo Lock	LR1021S 2 3/4 x ASA x US26D RH
Schlage	2	I/C Cores	23-030 626
Stanley	2	Closer	D4551 SRI Hold Open x snb 689
Ives	2	Floor Stop	FS448 626
Hager	2	Kick plate	.050 10" x 34" 630
Reese	2	Threshold	S426A 36"
Reese	2	Weather stripping	678A 1/36" x 2/84
Reese	2	Sweep	DB594AF 36"
Cal Royal	2	Latch guards	GJLPG2 US26D

Hw Set B

Opng/Tag	Location	Handing
D-EM13	Exterior from Electrical Room	Left Hand Reverse

Pioneer Hmf 1 - 3070 5 3/4" 4" hd. 14ga. gal. welded hollow metal frames - Type a prep for H453 hinges, rim exit strike reinforcement, parallel arm closer reinforcement

Pioneer Hmd 1 - 3070 1 3/4" flush 16ga. gal. hollow metal doors - Type a Prep H453 hinges, 161 cylindrical lockset, standard under cut, seamless edge vision lite cut out 6" x 27" located 15" down and 8" in

Nation Guard VL Kits 1 - L-FRA 100 6" X 27" for use with 1/4" glass provide by others

Mfr	Qty	Subtype	Item Description
Hager	3	Butts	BB1199 4.5 X 4.5 US32D nrp
Stanley	1	Rim Exit	2103 x snb US32D LHR
Simplex	1	Mech. Combo Lock	LP1021S 2 3/4 x ASA x US26D LHR
Schlage	1	I/C Cores	23-030 626
Stanley	1	Closer	D4551 SRI Hold Open x snb 689
Ives	1	Floor Stop	FS448 626
Hager	1	Kick plate	.050 10" x 34" 630
Reese	1	Threshold	S426A 36"
Reese	1	Weather stripping	678A 1/36" x 2/84
Reese	1	Sweep	DB594AF 36"
Cal Royal	1	Latch guards	GJLPG2 US26D

Hw Set D

Opng/Tag D-EM1	Location Exterior from Electrical Room	Handing Right Hand Reverse Active
-------------------	---	--------------------------------------

Pioneer Hmf 1 - 5080 5 3/4" 4" hd. 14ga. gal. welded hollow metal frames - Type a
prep for H454 hinge legs, flush bolt strike, parallel arm closer reinforcement RHR LF only

Pioneer Hmd 1 - 2680 1 3/4" flush 16ga. gal. hollow metal doors - Type a - RHRA
prep 454 hinges, 161 cylindrical lockset w/blank latch bolt edge, standard under cut
vision lite cut out 6" x 27" located 27" down and 8" in
Seamless welded edges, astragal mounted to outside edge of active leaf

Nation Guard VL Kits 1 - L-FRA 100 6" X 27" for use with 1/4" glass provide by others

Pioneer Hmd 1 - 2680 1 3/4" flush 16ga. gal. hollow metal doors - Type a - LHR Inactive
prep H454 hinges, manual flush bolts, surface mounted rim exit strike, standard under cut
Seamless welded edges

Mfr	Qty	Subtype	Item Description
Hager	8	Butts	BB1199 4.5 X 4.5 US32D nrp
Hager	2	Manual Flush bolts	282D 12" 626
Hager	1	Dust Proof Strike	280X 626
Stanley	1	Rim Exit	2103 x snb US32D RHR 30"
Simplex	1	Mech. Combo Lock	LP1021S 2 3/4 x ASA x US26D RHR
Schlage	1	I/C Cores	23-030 626
Stanley	1	Closer	D4551 SRI hold open x snb 689
Ives	2	Floor Stop	FS446 626 LHR Lf
Hager	2	Kick plate	.050 10" x 28" 630
Reese	1	Threshold	S426A 60"
Reese	1	Weather stripping	678A 1/60" x 2/96
Reese	1	Sweep	DB594AF 30"
Reese	1	Astragal	357SP 96" x 797B 96"

Hw Set E

Opng/Tag D-EM8	Location Vehicle Bays from Electrical Room	Handing Left Hand Reverse
-------------------	---	------------------------------

Pioneer Hmf 1 - 3070 5 3/4" 14ga. gal. welded hollow metal frames - 1 hour - Type f
prep for H453 hinges, ASA strike, parallel arm closer reinforcement

Pioneer Hmd 1 - 3070 1 3/4" flush 16ga. gal. hollow metal doors - 1 hour - Type f
prep H453 hinges, 161 cylindrical lockset, standard under cut
vision lite cut out 12" x 12" located 30" down and centered
Seamless welded edges

Nation Guard VL Kits 1 - L-FRA 100 12" X 12" for use with 1/4" glass provide by others

Mfr	Qty	Subtype	Item Description
Hager	3	Butts	BB1199 4.5 X 4.5 US32D
Stanley	1	Rim Exit	F2103 x snb US32D LHR
Stanley	1	Closer	D4551 SRI pa x snb 689
Cal Royal	1	Hinge Pin Stop	IVHP23 626
Hager	1	Kick plate	.050 10" x 34" 630
Reese	1	Threshold	S426A 36"
Reese	1	Weather stripping	678A 1/36" x 2/84
Reese	1	Sweep	DB594AF 36"

Hw Set E.1

Opng/Tag D-EM12	Location Vehicle Bays to Mechanical Room	Handing Left Hand (RHR)
--------------------	---	----------------------------

Pioneer Hmf 1 - 3670 5 3/4" 14ga. gal. welded hollow metal frames - 1 hour - Type f
prep for H453 hinges, ASA strike, parallel arm closer reinforcement

Pioneer Hmd 1 - 3670 1 3/4" flush 16ga. gal. hollow metal doors - 1 hour - Type f
prep H453 hinges, 161 cylindrical lockset, standard under cut
vision lite cut out 12" x 12" located 30" down and centered
Seamless welded edges

Nation Guard VL Kits 1 - L-FRA 100 12" X 12" for use with 1/4" glass provide by others

Mfr	Qty	Subtype	Item Description
Hager	3	Butts	BB1199 4.5 X 4.5 US32D
Stanley	1	Rim Exit	F2103 x snb US32D RHR 42"
Stanley	1	Closer	D4551 SRI reg x snb 689
Cal Royal	1	Hinge Pin Stop	IVHP23 626
Hager	1	Kick plate	.050 10" x 40" 630
Reese	1	Threshold	S426A 42"
Reese	1	Weather stripping	678A 1/42" x 2/84
Reese	1	Sweep	DB594AF 42"

Hw Set F

Opng/Tag	Location	Handing
D-EM9	Vehicle Bays to Storage	Left Hand
D-EM10	Vehicle Bays to Heated Storage Room	Right Hand

Pioneer Hmf 2 - 3070 5 3/4" 14ga. gal. welded hollow metal frames - Type e
prep for H453 hinges, ASA strike, regular arm closer reinforcement

Pioneer Hmd 2 - 3070 1 3/4" flush 16ga. gal. hollow metal doors - Type e
prep H453 hinges, 161 cylindrical lockset, standard under cut
vision lite cut out 12" x 12" located 30" down and centered
Seamless welded edges

Nation Guard VL Kits 2 - L-FRA 100 12" X 12" for use with 1/4" glass provide by others

Mfr	Qty	Subtype	Item Description
Hager	6	Butts	BB1199 4.5 X 4.5 US32D
Hager	2	Passage Set	3410 Archer 2 3/4 asa us26d
Stanley	2	Closer	D4551 SRI Reg x snb 689
Cal Royal	2	Hinge Pin Stop	IVHP23 626
Hager	2	Kick plate	.050 10" x 34" 630
Reese	2	Weather stripping	678A 1/36" x 2/84
Reese	2	Sweep	DB594AF 36"

Hw Set G

Opng/Tag	Location	Handing
D-EM11	Vehicle Bays fr Toilet Room	Right Hand Reverse

Pioneer Hmf 1 - 3070 5 3/4" 14ga. gal. welded hollow metal frames - Type c
prep for H453 hinges, ASA strike, parallel arm closer reinforcement

Pioneer Hmd 1 - 3070 1 3/4" flush 16ga. gal. hollow metal doors - Type c
prep H453 hinges, 161 cylindrical lockset, standard under cut
Seamless welded edges

Mfr	Qty	Subtype	Item Description
Hager	3	Butts	BB1199 4.5 X 4.5 US32D
Hager	1	Passage Set	3440 Archer 2 3/4 asa US26D
Stanley	1	Closer	D4551 SRI x snb 689
Cal Royal	1	Hinge Pin Stop	IVHP23 626
Hager	1	Kick plate	.050 10" x 34" 630
Reese	1	Weather stripping	678A 1/36" x 2/84
Reese	1	Sweep	DB594AF 36"