

Hollow Metal Doors and Frames

Distributed By:

J&L Metal Doors

8305 West 183rd Place

Tinley Park, IL 60487

Phone: 708-532-8600 Fax: 708-532-8601

RECORD OF SUBMITTALS		
	SUBMITTED	RETURNED
1 ST		
2 ND		
3 RD		
4 TH		
		DATE
APPROVED DRAWINGS		
APPROVED HARDWARE		
DRAWN BY:		

PROJECT: Landlord Renovations
LOCATION: Orland Park, IL
ARCHITECT:
CONTRACTOR: FJDevelopment Corp.

**Landlord Renovations
Orland Park, IL**

Door Frame Submittal Legend

Manufacturer		
CD		Ceco Door Products

Door Description		
CD	HMD	Hollow Metal Door

Door Series		
CD	LP	Legion - Polystyrene Core Handed
	RI	Regent - Honeycomb Core-Handed

Door Gauge		
CD	18	18 Gauge

Door Thickness		
CD	1 3/4	1 3/4" Thickness

Door Material		
CD	A60	Galvanneal - A60
	CRS	Cold Rolled Steel

Frame Description		
CD	SGL	3 Piece Frame - Single

Frame Series		
CD	SU	Unequal Frame Rabbet

Frame Gauge		
CD	16	16 Gauge

Frame Construction		
CD	KD	Knocked Down W/Tabs (Sq Ends 12 ga.)

Frame Material		
CD	A60	Galvanneal - A60

Frame Head		
------------	--	--

CD	H400	4" Face Head (Sgle. Frame)
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Frame Anchors		
CD	A01/MSZ1+	MSZ1 Welded-W/Fir Anc over 7'2
	A17/MT-	MasonT-Welded Fir Anc to 7'2

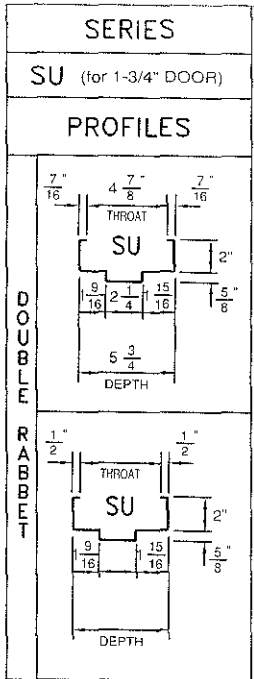
186

Landlord Renovations
Orland Park, IL

Door Frame Submittal

Opening							Door											Frame																
Opening Number	Qty	Hdw Hdg	Hdw Set	Rating	Wall Cond	Sill	Leaf Size	Mfg	Arch Type	Desc	Thick	Series	Matl	Core	Ga/ Ply	Edge	Finish	Elev Code	Hand	Size	Mfg	Arch Type	Desc	Matl	Series	Profile	Ga	Cons	Jamb/ Throat	Head	Elev Code	Anchor	Hand	Weld
CORRIDOR	1	02	02	60Min			3070	CD	HMD	1 3/4	RI	CRS			18			F	LHR	3070	CD	SGL	A60	SU		16	KD	534 478			A01/MSZ 1+	RH	Y	
	Corridor from Tenant Space																																	
FRONT DOOR	1	01	01				3070	CD	HMD	1 3/4	LP	A60			18			F	LHR	3070	CD	SGL	A60	SU		16	KD	534 478	H400		A17/MT-	RH	Y	
	Exterior from Corridor																																	
TENANT B	1	01	01				3070	CD	HMD	1 3/4	LP	A60			18			F	RHR	3070	CD	SGL	A60	SU		16	KD	534 478	H400		A17/MT-	LH	Y	
	Exterior from Tenant SpaceB																																	
TENANT D	1	01	01				3070	CD	HMD	1 3/4	LP	A60			18			F	RHR	3070	CD	SGL	A60	SU		16	KD	534 478	H400		A17/MT-	LH	Y	
	Exterior from Tenant SpaceD																																	

286



DEPTHS	
STANDARD DEPTHS (In addition to 5-3/4")	OPTIONAL DEPTHS
4-3/4"	4-1/2" thru 17-7/8" (in 1/8" increments)
6-3/4"	
7-3/4"	
8-3/4"	

FACES --- STANDARD --- K.D. or WELDED ...
Jambs: 2"; Head 2"

FACES --- OPTIONAL --- K.D. or WELDED ...
Jambs and Head (equal): 1" thru 1-7/8"
Jambs: 2"; Head: 2-1/8" thru 4"

FACES --- OPTIONAL --- WELDED ...
Jambs and Head (equal): 2-1/8" thru 4"
Jambs: 2"; Head: 1" thru 1-7/8"

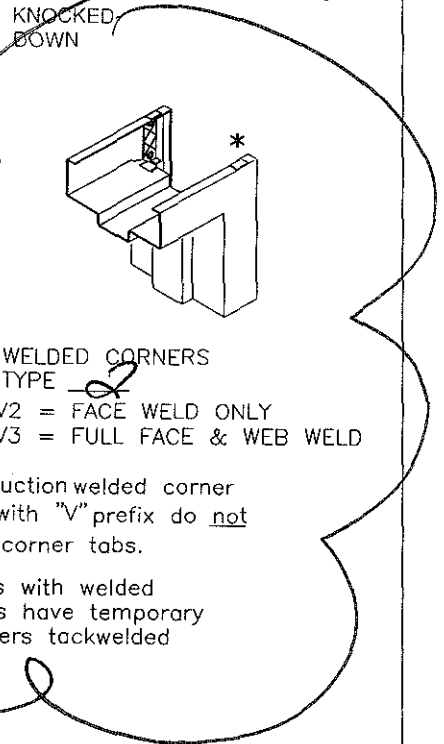
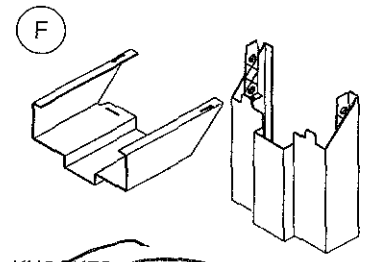
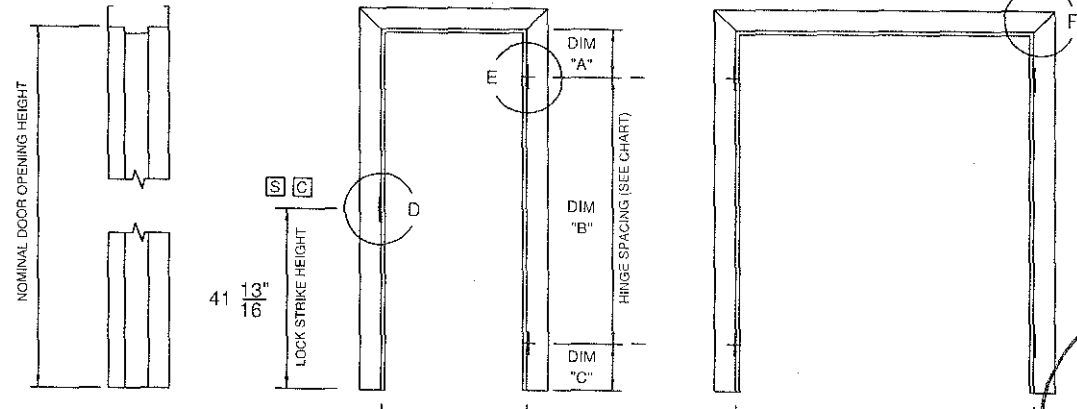
Range of sizes are in increments of 1/8".

STANDARD HINGE SPACING

OPENING HEIGHT ▶	6-6			7-0			7-2			7-10			8-0			9-0			10-0		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	D	E	
1 3/2" DOOR SPACING ▶	9"	(2) AT 31"	9"	9"	(2) AT 33"	9"	9"	(2) AT 34"	9"	9"	(3) AT 25.33"	9"	9"	(3) AT 26"	9"	9"	(3) AT 30"	9"	9"	(3) AT 34"	9"

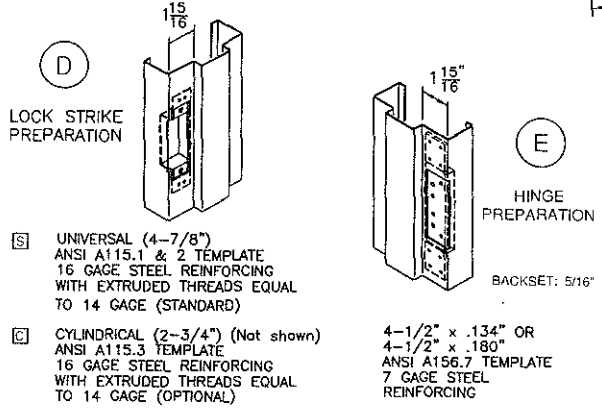
Unless otherwise indicated, frames are for 1-3/4" thick doors.
For SI conversion: 1" = 25.4 mm.

STANDARD FRAMES HAVE THE FOLLOWING HINGE PREP QUANTITY:
7'-6" HIGH OR SMALLER: (3) HINGE PREPS
HIGHER THAN 7'-6": (4) HINGE PREPS



C.R.S. steel is standard.
Galvanized steel is optional.

VERTICAL SECTION



LABELING AGENCIES
Underwriters Laboratory
Warnock Hersey
Factory Mutual

FIRE TESTS
NFPA 252, UL10B, UL10C
See Tech Data Manual for
additional information.



ASSA ABLOY

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SHT 3 OF 6 CONTRACT NO. _____

ISSUE DATE _____ REVISIONS _____ BY _____

SERIES SU STEEL FRAMES

(FIRE DOOR FRAMES MUST COMPLY WITH PROCEDURES OF LABELING AGENCY)

Furnished with one coat of neutral color primer paint.
Primer paint has been tested in conformance with ANSI A250.10.

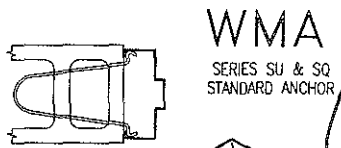
FOR HAND & SWING
SEE DOOR SCHEDULE

FOR ANCHORAGE
SEE DOOR SCHEDULE &
ANCHOR SHEET

ASSA ABLOY, the global leader
in door opening solutions.

JAMB ANCHORS

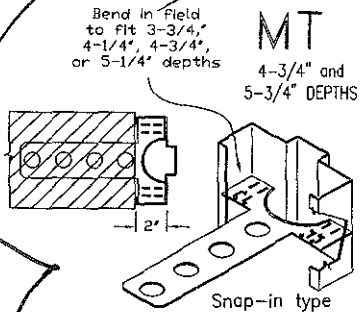
FLOOR ANCHORS



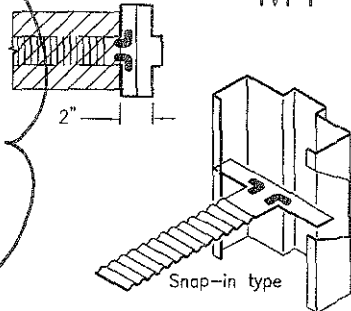
WMA
SERIES SU & SQ
STANDARD ANCHOR

Snap-in type

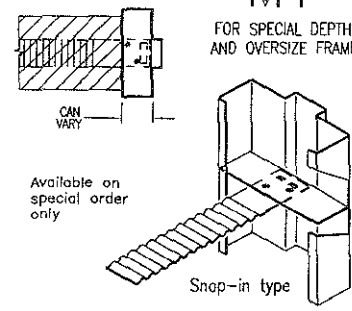
WIRE MASONRY ANCHOR
(For 3" thru 8-3/4" Depths)



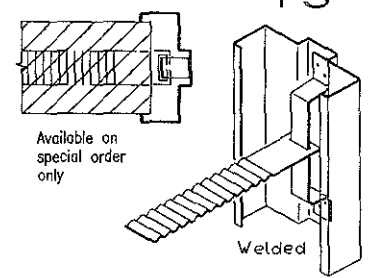
MASONRY "T" ANCHOR
(ADJUSTABLE)



(For Depths 6-3/4", 7-3/4", & 8-3/4")

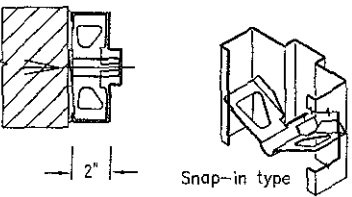


(For Min. Depth of 4-3/4")



Available on special order only

YOKE AND STRAP MASONRY ANCHOR

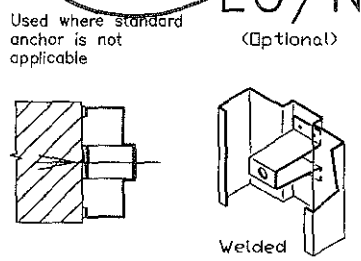


EO
SERIES SU & SQ
STANDARD ANCHOR

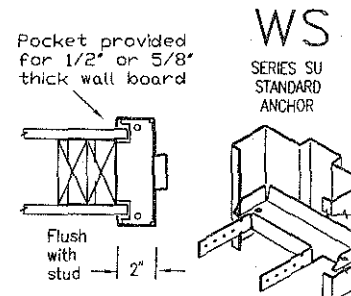
Snap-in type

EXISTING OPENING ANCHOR

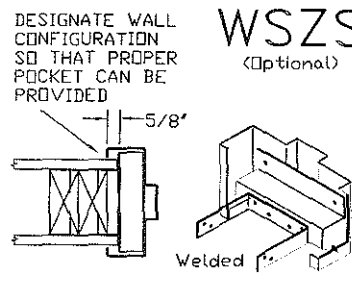
EO/S6: 4-1/2" thru 6-3/4" depth
EO/S8: 6-7/8" thru 9-3/4" depth



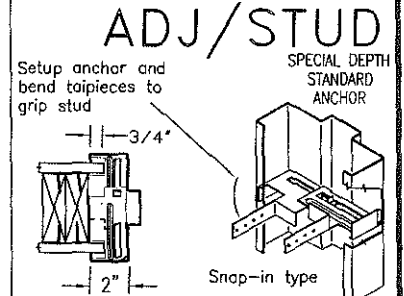
EXISTING OPENING ANCHOR



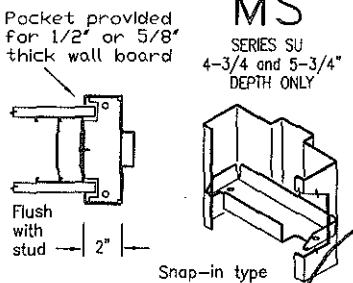
WOOD STUD ANCHOR
(Used also for METAL STUD Walls)



WOOD STUD "Z" STRAP ANCHOR



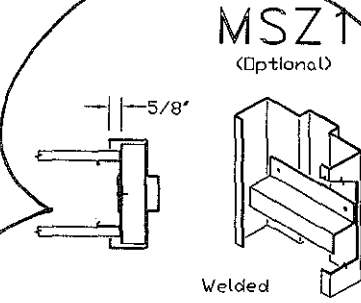
ADJUSTABLE ANCHOR FOR STUD WALLS
3-3/4" thru 8-3/4" depth



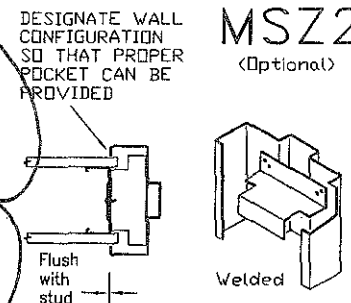
MS
SERIES SU
4-3/4" and 5-3/4" DEPTH ONLY

Snap-in type

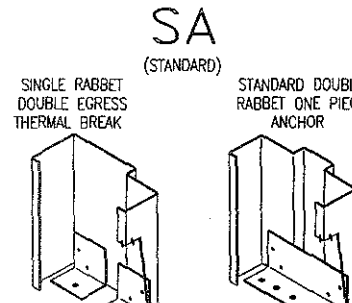
METAL STUD ANCHOR
CecoDoor



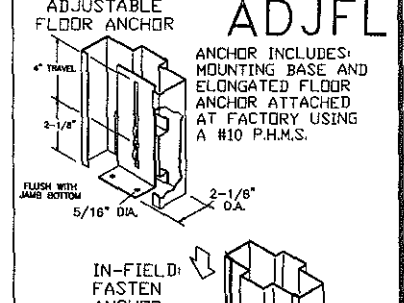
METAL STUD "Z" ANCHOR



METAL STUD "Z" ANCHOR



FLOOR ANCHOR



IN-FIELD: FASTEN ANCHOR TO FLOOR. SLIP-FIT FRAME OVER ANCHOR

SIDLITE FLOOR ANCHOR

FRAME ANCHORS

SLFA

3 PER JAMB FOR HEIGHTS UP TO 7-2 AND ONE FLOOR ANCHOR
4 PER JAMB FOR HEIGHTS FROM 7-3 THRU 9-0 AND ONE FLOOR ANCHOR
ONE ADDITIONAL JAMB ANCHOR FOR EACH ADDITIONAL TWO FEET IN HEIGHT OR FRACTION THEREOF
IF STUDS ARE ERECTED, AN ADD'L MS OR WS ANCHOR MAY BE SUBSTITUTED FOR FLOOR ANCHOR

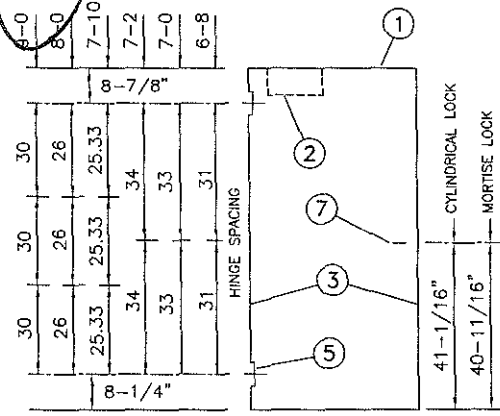
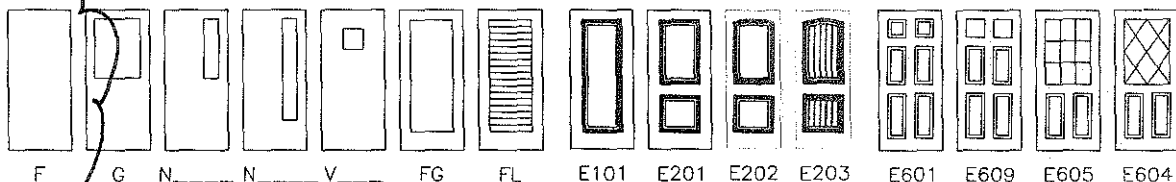
ASSA ABLOY

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CHK'D BY _____ DATE _____
SHT 4 OF 6 CONTRACT NO. _____

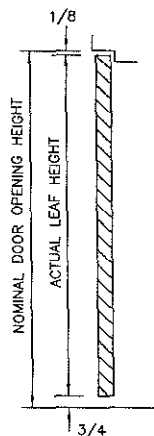
ISSUE DATE _____ REVISIONS _____ BY _____

ANCHOR QUANTITIES

DOOR DESIGNS



DOOR ELEVATION



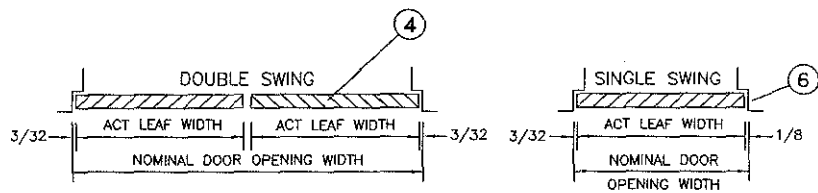
VERTICAL SECTION

FIRE DOORS:

TEST: UL10B, UL10C
UBC 7-2

LABELING AGENCIES:
UNDERWRITERS LABORATORY, INC.
WARNOCK HERSEY INTL.

RATING: 20 MIN THRU 3 HR
MAX. SIZE: 40 x 80 SINGLE
* 80 x 80 PAIR
* 90 x 90 W/ VERT RODS
DESIGNS: F, G, N, & V



HORIZONTAL SECTIONS

1-3/4" LEGION (LP) DOOR

C.R.S. steel is standard
Galvanized steel is optional

① END CHANNELS

INVERTED TOP AND BOTTOM

② CLOSER REINFORCEMENT (OPTIONAL)

14 GAGE STEEL CHANNEL 20"

③ VERTICAL EDGES

Hairline Seam Epoxy Seal

MECHANICALLY INTERLOCKED HEMMED EDGES

ALSO AVAILABLE SEAMLESS (WELDED OR BODY FILLER)

④ CORE

1 LB DENSITY POLYSTYRENE CORE

CONFORMS TO ASTM C578, TYPE 1

⑤ HINGE PREPARATION

7 GAGE REINFT.

4-1/2 OR 5 IN. HIGH, STANDARD OR HEAVY WEIGHT, FULL MORTISE HINGES

ANSI A156.7 TEMPLATE

HANDED

⑥ LOCK EDGE

BEVEL 1/8" IN 2"

⑦ LOCK PREPARATIONS

(LC1)
GOV. 160/161
CYLINDRICAL
LOCK PREP
(ANSI A115.2)
2-3/4" BACKSET

(LM1)
GOV. 86
MORTISE
LOCK PREP
(ANSI A115.1)
2-3/4" BACKSET

(LMO)
SIMILAR TO
DETAIL LESS
FACE CUTOUT



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ISSUE DATE _____

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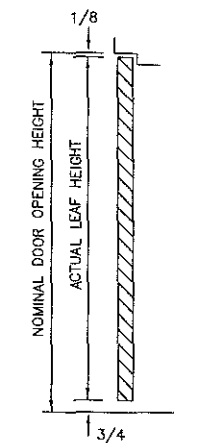
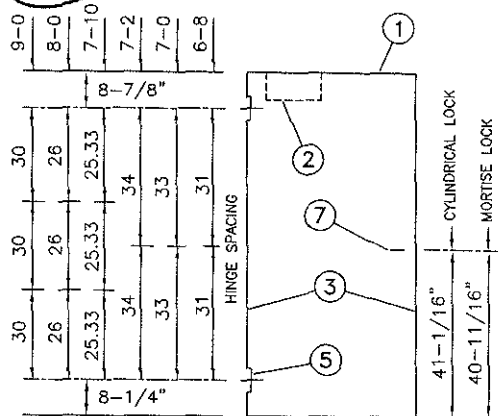
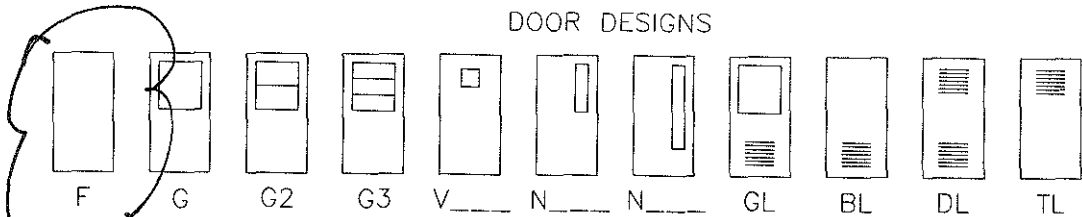
FOR HAND & SWING
SEE DOOR SCHEDULE

NOTE: FOR GLAZING TRIM, LOUVERS OR ASTRAGALS REQUIRED, SEE DOOR SCHEDULE & ACCESSORY SHEET

THERMAL INSULATION VALUE	FULLY OPERABLE ASSEMBLIES (ASTM C1363)	R = 2.83	U = 0.35
SOUND TRANSMISSION	CORE CALCULATED (ASTM C518)	R = 6.35	U = 0.157
PHYSICAL ENDURANCE TEST DATA	SOUND TRANSMISSION CLASS (STC): 27 F DESIGN, 18 GAGE FACE SHEETS -- ASTM E90 & E413 (FULLY OPERABLE)		
	MEETS OR EXCEEDS ANSI A 250.4 PERFORMANCE TEST: 20 gage steel (500,000 cycles); 18 & 16 gage steel (1,000,000 cycles).		

ASSA ABLOY, the global leader in door opening solutions.

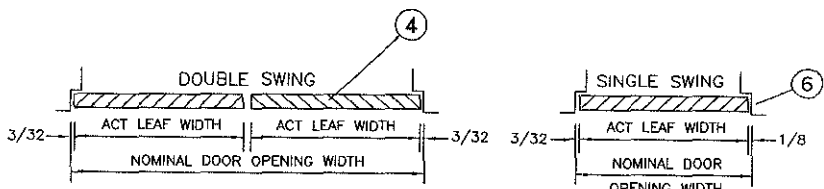
DOOR DESIGNS



FIRE DOORS:
 TEST: UL10b & UL10c

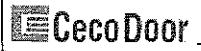
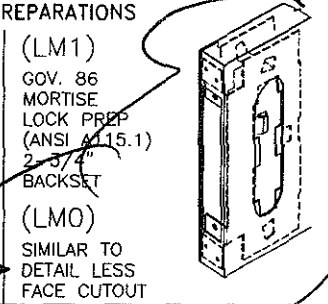
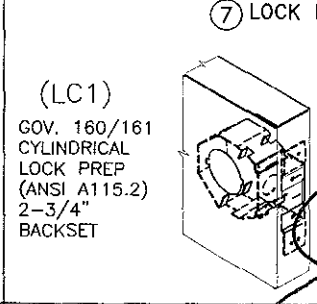
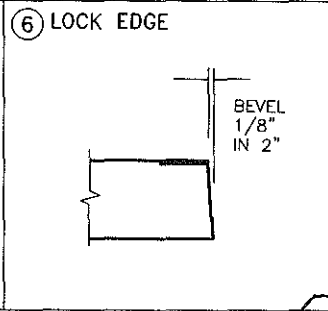
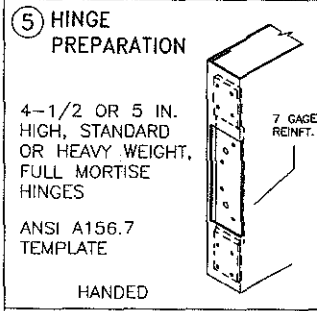
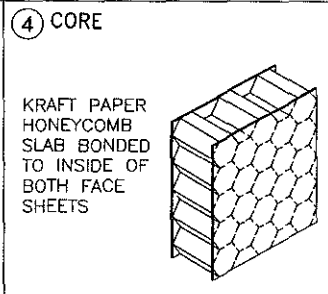
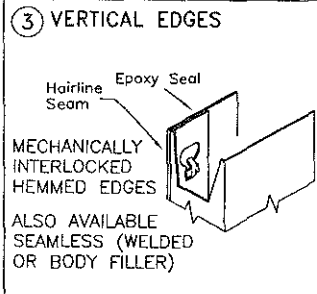
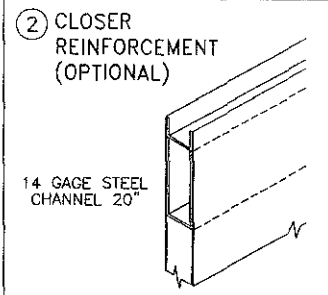
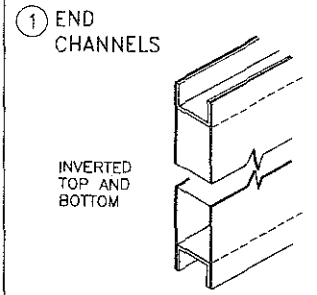
LABELING AGENCIES:
 UNDERWRITERS LABORATORY, INC.
 WARNOCK HERSEY INTL.
 FACTORY MUTUAL SYSTEM

RATING: 20 MIN THRU 3 HR
MAX. SIZE: 40 x 90 SINGLE
 80 x 90 PAIR
DESIGNS: F, G, N, & V



HORIZONTAL SECTIONS

1-3/4" REGENT (RI) DOOR



C.R.S. steel is standard
 Galvanized steel is optional

ASSA ABLOY

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 CHK'D BY _____ DATE _____

SHT OF _____ CONTRACT NO. _____

ISSUE DATE _____ REVISIONS _____ BY _____

FOR HAND & SWING
 SEE DOOR SCHEDULE

NOTE: FOR GLAZING TRIM, LOUVERS OR ASTRAGALS REQUIRED, SEE DOOR SCHEDULE & ACCESSORY SHEET

SOUND TRANSMISSION

PHYSICAL ENDURANCE TEST DATA

SOUND TRANSMISSION CLASS (STC): 32 F DESIGN, 18 GAGE FACE SHEETS -- ASTM E90 & E413 (FULLY OPERABLE)

MEETS OR EXCEEDS ANSI A250.4 PERFORMANCE TEST: 20 gage steel (500,000 cycles); 18 & 16 gage steel (1,000,000 cycles).

ASSA ABLOY, the global leader in door opening solutions.

DOOR HARDWARE

Section 08710

PROJECT: Landlord Renovations
66 Orland Square Drive
Orland Park, IL,
60462

OWNER: FJDevelopment Corp.
9002 Kedvale
Skokie, IL, United States
60076

ARCHITECT:

''

Prepared By:

J&L Metal Doors
8305 West 183rd Place
60487

Date: June 18, 2015

Manufacturer List

<u>Code</u>	<u>Name</u>
HA	Hager
LC	LCN Closers
PE	Pemko
SC	Schlage
VO	Von Duprin

Hardware Schedule

HEADING #02 (SET #02)

Opening Description: 3' 0" x 7' 0" x 1 3/4" x HMD x HMF x 60Min

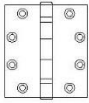
1 Single Door #CORRIDOR	Corridor from Tenant Space			LHR
3 Hinge	BB1279 4 1/2 X 4 1/2 NRP		US26D	HA
1 Fire Exit Device	22L-F x 230L	LHR	SP28	VO
1 Closer	1461 REG/PA		US26D	LC

HEADING #01 (SET #01)

Opening Description: 3' 0" x 7' 0" x 1 3/4" x HMD x HMF

1 Single Door #FRONT DOOR	Exterior from Corridor			LHR
1 Single Door #TENANT B	Exterior from Tenant SpaceB			RHR
1 Single Door #TENANT D	Exterior from Tenant SpaceD			RHR
9 Hinge	BB1279 4 1/2 X 4 1/2 NRP		US26D	HA
1 Exit Device	22L x 230L	LHR	SP28	VO
2 Exit Device	22L x 230L	RHR	SP28	VO
3 Mortise Cylinder	20-001 1 1/4" C123 KEYWAY		626	SC
3 Closer	1461 REG/PA		US26D	LC
3 Weatherstrip	303 AV 1 x 36" 2 x 84"			PE
3 Door Bottom	315 CN 36"			PE
3 Threshold	171 A 36"			PE

Image Reference: HABB1279



BB1279*
Ball Bearing
Steel

Image Reference: HABB1279_BB1191

Ball Bearing • Standard Weight • Template
For use on Medium Weight Doors or Doors Requiring Medium Frequency Service

BB1279
Steel with steel pin ANSI A8112

BB1191
Brass with brass pin ANSI A2112
Stainless Steel with stainless steel pin ANSI A5112

Five knuckle two ball bearings non-rising removable pin with button tip and plug.
Specify screw requirements.



For Hospital type
prefix "HT" to
catalog number

Hinge Size		Gauge of metal	Number of holes	Screw Size		Quantity		Avg weight per case (lbs)	
Inches	Millimeters			Machine	Wood	Box	Case	Steel	SSteel/Brass
3½ x 3½	89 x 89	0.119	6	½ x 10-24	1 x 9	2 each	100 each	66	72
4 x 4	102 x 102	0.129	8	½ x 12-24	1¼ x 12	3 each	48 each	43	47
4½ x 4	114 x 102	0.134	8	½ x 12-24	1¼ x 12	3 each	48 each	55	60
4½ x 4½	114 x 114	0.134	8	½ x 12-24	1¼ x 12	3 each	48 each	55	60
5 x 4	127 x 102	0.145	8	½ x 12-24	1¼ x 12	3 each	24 each	37	40
5 x 4½	127 x 114	0.145	8	½ x 12-24	1¼ x 12	3 each	24 each	37	40
5 x 5	127 x 127	0.145	8	½ x 12-24	1¼ x 12	3 each	24 each	37	40
6 x 4½	152 x 114	0.160	10	½ x 1/4-20	1½ x 14	3 each	24 each	57	62
6 x 5	152 x 127	0.160	10	½ x 1/4-20	1½ x 14	3 each	24 each	57	62
6 x 6	152 x 152	0.160	10	½ x 1/4-20	1½ x 14	3 each	24 each	57	62

Image Reference: LC1460-APPLICATION

1000 SERIES

APPLICATIONS

- ▶ For aluminum, hollow metal, or wood swinging doors and frames.
- ▶ Can be used with hinge or pivot mounted door.
- ▶ Mounts on 1 1/2" transom without adapter plates.
- ▶ Adapter plates and other installation accessories available for unusual conditions.

FEATURES COMMON TO 1000 SERIES

- ▶ 1000 series closers mount three ways. 1460 closers with regular or hold-open arm mount hinge side or top jamb. P1460 closers includes - 62PA SHOE required to parallel arm mount either regular or hold-open arms. 1460T mounts hinge side, top jamb (pull side) and stop face.
- ▶ Non-handed for right and left swinging doors.
- ▶ Closers to meet ADA reduced opening force requirements.
- ▶ Adjustable hydraulic backcheck cushions opening swing prior to 90°.
- ▶ Available in a wide range of powder coated finishes to blend with door and frame.
- ▶ Separate regulation of general closing speed and latching speed.
- ▶ Joints in arm and shoe adapt to uneven trim.
- ▶ Reversible shoe to boost latching power on double lever arms.

DESIGN ASSISTANCE

LCN has been providing reliable solutions to unique door control problems for over 70 years. Design and specification assistance are only a phone call away.

Contact LCN for assistance or technical information at **800-526-2400** or FAX **800-248-1460**.

WARRANTY

10 year limited warranty. See General Section for complete warranty details.

SPECIFICATIONS

Refer to "SPECIFICATIONS" section for suggested architectural specifications.

MATERIALS

- ▶ High strength cast iron cylinder.
- ▶ Forged steel main arm for 1460 Series, HD, EDA and Cush Arms.
- ▶ One piece forged steel piston.
- ▶ All weather fluid eliminates seasonal adjustments.
- ▶ High efficiency, low friction bearings.
- ▶ Non-critical, tamper resistant regulating screws.
- ▶ Full rack and pinion hydraulic action.
- ▶ Quiet, low friction track and roller combination for all single lever arm closers.

LISTINGS & APPROVALS

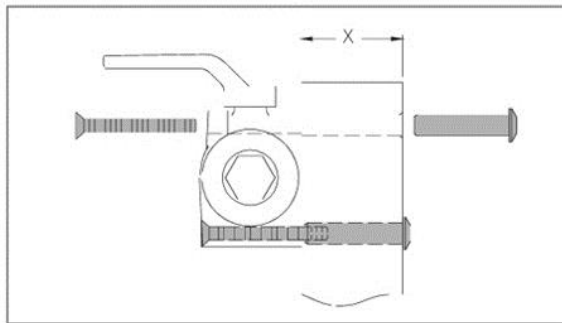
UL listed for self-closing doors without hold-open under "SWINGING DOOR CLOSERS" (GVEV) file R 1943.

Tested and certified under ANSI Standard A156.4 grade one. Consult factory for details.

Consult factory for other listings such as; ULC, California State Fire Marshal, Bureau of Standards and Appeals.

FASTENERS

Standard WOOD and MACHINE SCREW (WMS) pack contains phillips head wood and machine screws to install the closer. LCN through bolts (TB) can be installed on 1 3/4" thick doors with either the 1/4-20 machine screws or optional TORX screws supplied with the closer. Optional sizes are available for 1 5/8" or 1 3/8" door thicknesses, but this must be specified when ordering.



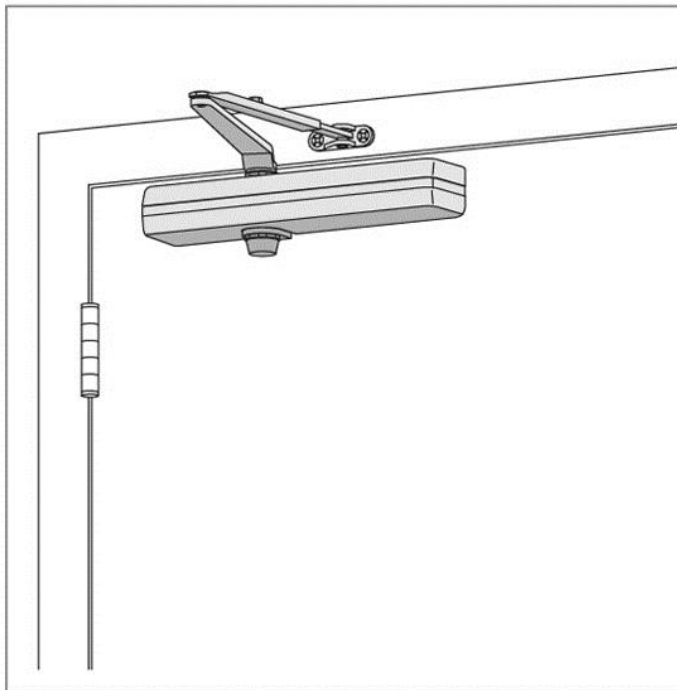
Note 1: For Through Bolts, specify door thickness if other than 1 3/4" (44 mm).

Note 2: Phillips head, metric machine screws are available on special order.

MAINTENANCE

Closers mounted according to LCN installation instructions require no periodic maintenance or adjustments.

Image Reference: LC1460-FEATURE



The 1460 SUPER STOCK® is a double lever arm, slim line closer designed for use on narrow head frames and top rails. A wide choice of options, mounting accessories and ease of installation offer maximum versatility.

UL and ULC listed for self-closing doors without hold-open. Tested and certified under ANSI Standard A156.4, grade one.

- ▶ Standard 1460 series closer shipped with regular arm (non-hold-open), a slim line non-metallic cover, and wood and machine screw pack. See Page 1460-6 for options.
- ▶ Non-sized cylinders adjustable for interior doors to 5'0" and exterior doors to 4'0".
- ▶ Closer mounts hinge side, top jamb, and (with prefix "P", eg. P1460) parallel arm on either right or left swinging doors.
- ▶ Closers to meet ADA requirements. See page 1460-8.
- ▶ Standard or custom powder coat finish.
- ▶ SRI primer for installations in corrosive conditions.

MOUNTING			FINISH		COVER		CYLINDER			ARM FUNCTION*										
HINGE SIDE	TOP JAMB	PARALLEL ARM	POWDER COAT	PLATED	NON-METALLIC	METAL	NON-HANDED	NON-SIZED	ACCESSIBILITY	DELAY ACTION	AVB	180°	180°	180°	180°	110°	100°	100°	10yr	NR

● Available
○ Not available

♿ Closer available with less than 5.0 lbs. opening force on 36" door.
* Maximum opening/hold-open point with standard template. Hinge side mount.
NR = No periodic maintenance required.

Image Reference: LC1460-PA-MTG

MOUNTING DETAILS

**PARALLEL ARM (PUSH SIDE)
MOUNTING**

Optional mounting requires PA SHOE, 1460-62PA for REGULAR or HOLD-OPEN arms. Add prefix "P" to closer description (e.g. P1460.) P1460 closer includes 1460-201 FIFTH HOLE SPACER to support PA SHOE.

MAXIMUM OPENING

Regular or hold-open arm can be templated for either 140°,

Ⓐ = 2 5/8" (67 mm)

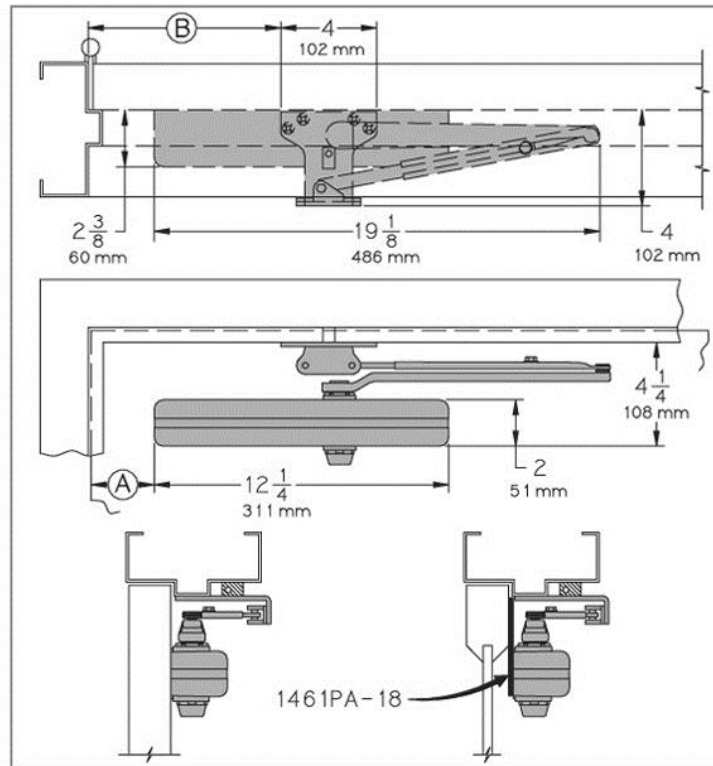
Ⓑ = 8" (203 mm)

or 180°.

Ⓐ = 1 1/8" (29 mm)

Ⓑ = 6 1/2" (165 mm)

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



1460 REGULAR or HOLD-OPEN MOUNT

- ▶ **Butt Hinges** should not exceed 5" (127 mm) in width.
- ▶ **Auxiliary Stop** is recommended at hold-open point, where a door cannot swing 180°, or where CUSH-N-STOP® arm is not used.
- ▶ **Clearance** for 1460-62PA shoe is 4" (102 mm) from door face.
- ▶ **Top Rail** less than 4 1/4" (108 mm) measured from the stop requires PLATE, 1460-18PA. With full cover, use PLATE, 1460-18PAFC. Plate requires 1 3/4" (44 mm) minimum.
- ▶ **Head Frame** flush or single rabbeted requires PA SHOE ADAPTER, 1460-418.
- ▶ **Stop Width** minimum 1" (25 mm).
- ▶ **Blade Stop** clearance, requires 1/2" (13 mm) BLADE STOP SPACER, 1460-61.
- ▶ **Auxiliary Shoe**, 1460-62A allows installation of regular arm with Glynn-Johnson overhead holder/stop. Special templating required.
- ▶ **Delay Action** Add suffix "DA" to selected cylinder (eg. P1460 DA). Delays closing from maximum opening to approximately 75°. Delay time adjustable up to 1 minute.

Options

- ▶ Delay action cylinder.
- ▶ Hold-open, EDA, H-EDA, CUSH, or H-CUSH arm, Fusible link arm, Spring-Cush, HS-Cush.
- ▶ Full cover.
- ▶ EC cover.

Special Templates

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

Image Reference: LC1460_3077

ARMS

REGULAR ARM, 1460-3077

Standard, non-handed arm mounts hinge side or top jamb. P1460 closer includes PA SHOE, 1460-62PA required for parallel arm mounting. AUXILIARY SHOE, 1460-62A allows PA installation with optional Glynn-Johnson overhead holder/stop and special templating.

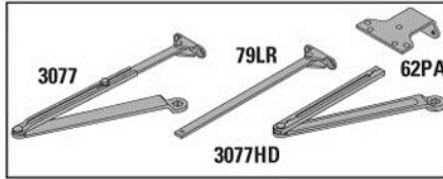


Image Reference: PE171

Saddle Thresholds

■ To use a saddle threshold in an offset condition, use an **elevator** (see page 19).

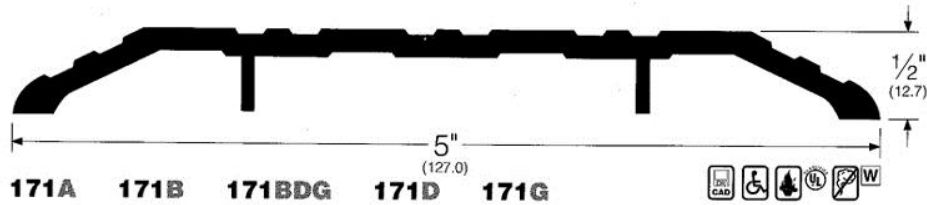
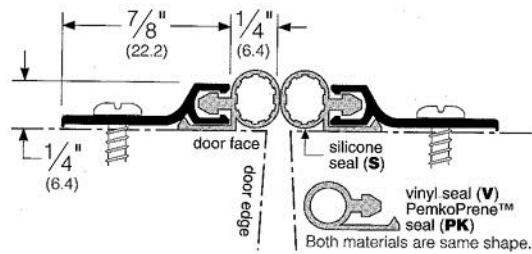


Image Reference: PE303-AST



303AS

Image Reference: PE303_V

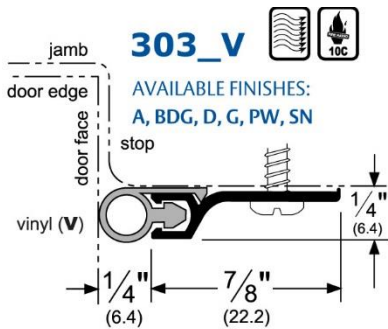


Image Reference: PE315

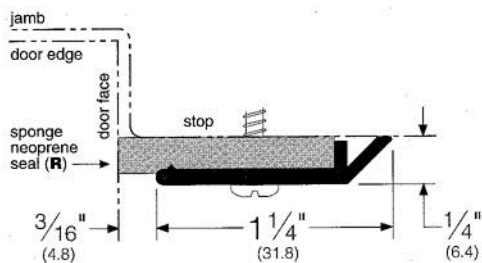


Image Reference: PEFINISH

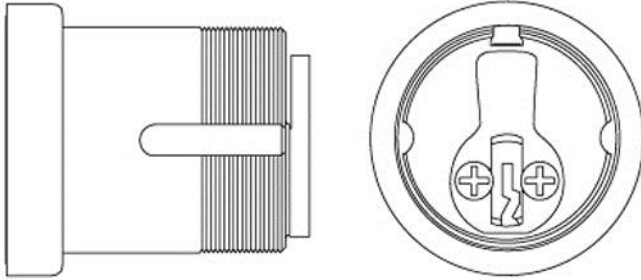
METALS AND FINISHES: Pemko's extruded metal products are made from: 6063 and 6463 aluminum alloys, and CDA alloy C38500 architectural bronze (brass). Roll-formed metal products are made from stainless steel, high-strength special-purpose zinc alloy, 70-30 yellow brass or 85-15 red brass. Roll-formed aluminum weatherstripping is produced from various alloys selected for the particular properties required. **357SP** is made from hot rolled galvanealed steel; the **357SS** is made from 304-stainless steel. See the charts (below) for all finish designations. If you do not see the option you require, please inquire with our customer service department about the feasibility of a custom finish. Also, a "Finish Designations" Option Table is shown at the top of every pair of pages as a key for one or more of the products on those pages.

Standard Finishes	
Code	Finish Designations
A	mill finish aluminum
B	mill finish extruded bronze (brass)
BDC	bright dip clear anodized aluminum
BDCG	bright dip gold anodized aluminum
C	clear anodized aluminum
CB	cladded brass
D	dark bronze anodized aluminum
G	gold anodized aluminum
PA	painted aluminum
PB	painted bronze aluminum
PD	painted dark bronze aluminum
PG	painted gold aluminum
PW	painted white aluminum
S	cladded stainless steel
SN	satin nickel anodized aluminum
SP	galvanealed steel
SS	see individual part for finish
Z	zinc metal
AK	skid resistant PemKote™ (on aluminum or bronze)
Special Order Finishes	
Code	Finish Designations
*	black anodized aluminum
*	chrome plated bronze
*	gray prime coated aluminum
*	polished aluminum, uncoated
*	polished bronze, uncoated
*	satin brushed aluminum, uncoated
*	satin brushed bronze, uncoated
*	oxidized and oil rubbed bronze

* = **no code; special order finish option.**

Image Reference: SC20-001

20-001



EVEREST™

Patented Key Control

7-Pin Small Format Interchangeable Core - Best® Style

Facilities have long been challenged by the security problems resulting from unauthorized key duplication. Schlage® can solve this problem with the new Everest patented small format interchangeable core (SFIC). Everest keyways and key blanks are protected by a utility patent. Restricted blanks, cut keys and cores are furnished only through authorized Schlage distributors, with a letter of authorization from the end-user. Restricted items are drop shipped directly to the end-user or designated location, preventing locksmiths and distributors from having access to keys and cores without the end-user's permission. In addition, Schlage Authorized Service Centers have an exclusive keyway that is controlled by them.

Patent Protected. Key control is important for the integrity of your building's security. The utility patent protects against unauthorized key duplication. This means it is a violation of federal patent law for anyone but Schlage to manufacture these key blanks. The Everest utility patents 5,715,717 and 5,809,806 are new and have a long life ahead of them to protect our restricted keys from unauthorized manufacture and distribution. Key blanks, plugs and cylinders are tightly controlled and are not shipped without proper authorization from the end-user.

Master Keying Capacity. The 7 pins provide over 16,000 change keys per keyway.

Convenience. Interchangeable cores allow instantaneous rekeying by non-locksmith personnel when a key is lost or stolen.

Flexibility. Schlage can now upgrade the key control in the diverse base of installed locks manufactured for 7-pin Best style cores. For those who want to keep their existing key system, Schlage offers the chance to upgrade the hardware with a variety of lock products to accommodate the small format core.

Schlage Quality. Schlage produces the finest quality commercial cylinders which includes features such as thicker, stronger nickel silver keys, precision construction, and finish standards that are second to none.

Exploded View - Patented SFIC

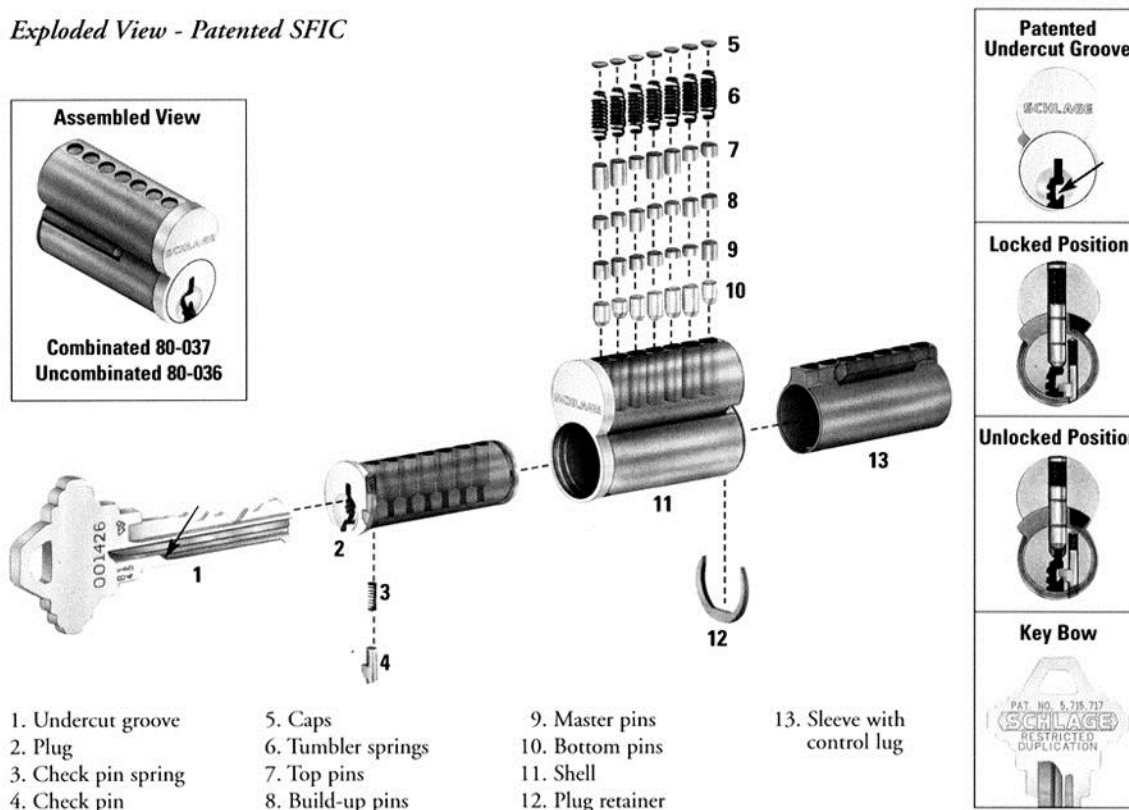


Image Reference: VO22----BU



299

22 rim device for all types of single and double doors with mullion, UL listed for accident hazard installations. Covers stock hollow metal doors with 161* cutouts. Fits door stiles as narrow as $3^{13}/16"$ (97mm), see page 10.

FEATURES

- Nonhanded
- Field sizeable
- $3/4"$ (19mm) throw latch bolt
- Latch bolt deadlocking
- Hex key dogging

FINISHES

- SP28 Sprayed aluminum
- SP313 Sprayed dark bronze

DIMENSIONS

Touchbar height to finished floor	$39^{13}/16"$ (1011mm) at center
Touchbar projection — neutral	$3^{3}/4"$ (95mm)
depressed	$3"$ (76mm)
Center case	$4^{3}/16" \times 2^{3}/8" \times 2^{3}/4"$ (106mm \times 60mm \times 70mm)
Device length — Short $3'$ (914mm)	$2'6"$ to $3'$ (762mm to 914mm) door size
Long $4'$ (1219mm)	$3'1"$ to $4'$ (940mm to 1219mm) door size

Image Reference: VO22-230L


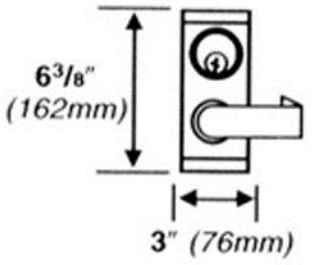
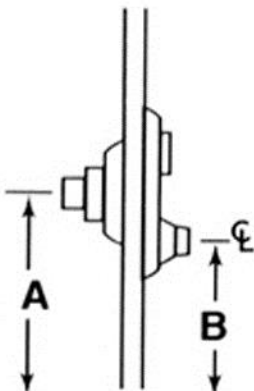
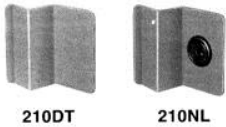
Function	08 Key Unlocks Lever
Trim Number and Descriptions	230L  
Device/Trim Center Line To Finished Floor	
Projection	2 ⁵ / ₈ " (67mm)

Image Reference: VO22-TRIM

STANDARD TRIM

SERIES 210

The 210DT and 210NL have a heavy 10 gauge (2.4mm) stainless steel escutcheon. The 210K knob trim has a 10 gauge (2.4mm) steel escutcheon and uses the Schlage "A" orbit knob with six pin "C" keyway.



SERIES 230TP

Heavy 10 gauge (2.4mm) steel escutcheon. BE blank escutcheon is available, specify 230TP-BE.



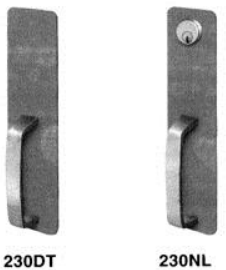
SERIES 230L

Lever trim has a cast aluminum 3/4" (19mm) depth escutcheon. Cylinder must be ordered separately. BE blank escutcheon option is available, specify 230LxBE. #06 lever style is furnished standard, #03 style lever is available, specify 230Lx03.

OPTIONAL TRIM

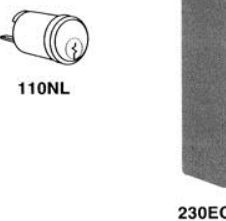
SERIES 230

Stamped 10 gauge (2.4mm) steel escutcheon. Available functions: 230DT, 230NL, and 230EO. When ordering with the exit device, use 22NLx230NL.

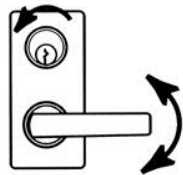


SERIES 110NL

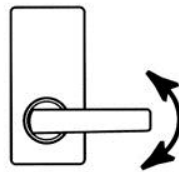
110NL cylinder kit is available MD for metal doors or WD for wood doors. When ordering with device, use 22NLx110NLMD. Cylinder must be ordered separately.



OPERATION OPTIONS



Standard operation, key locks and unlocks lever.



Blank escutcheon, lever always active. Use BE suffix, e.g., 230L-BE.

Image Reference: VO22-TRIM-TABLE

	Panic	22EO	22DT	22DTx230DT	22NL	22NLx230NL	22NL-OP	22TP	22K	22L
Rim	Fire	22EO-F	—	—	22NL-F	22NL-Fx230NL	22NL-OP-F	22TP-F	22K-F	22L-F
	Ctr. Line	—	39 ¹³ / ₁₆ " (1011mm)	34 ¹¹ / ₁₆ " (882mm)	39 ¹³ / ₁₆ " (1011mm)	34 ¹¹ / ₁₆ " (882mm)	40 ¹ / ₈ " (1019mm)	34 ¹¹ / ₁₆ " (882mm)	39 ¹³ / ₁₆ " (1011mm)	38 ¹³ / ₁₆ " (986mm)
	Panic	—	2227DT	2227DTx230DT	2227NL	2227NLx230NL	2227NL-OP	2227TP	2227K	2227L
	Fire	—	—	—	2227NL-F	—	2227NL-OP-F	2227TP-F	2227K-F	2227L-F
	Ctr. Line	39 ¹³ / ₁₆ " (1011mm)	39 ¹³ / ₁₆ " (1011mm)	A 39 ¹³ / ₁₆ " (1011mm) B 34 ¹¹ / ₁₆ " (882mm)	39 ¹³ / ₁₆ " (1011mm)	A 39 ¹³ / ₁₆ " (1011mm) B 34 ¹¹ / ₁₆ " (882mm)	39 ¹³ / ₁₆ " (1011mm)	A 39 ¹³ / ₁₆ " (1011mm) B 34 ¹¹ / ₁₆ " (882mm)	39 ¹³ / ₁₆ " (1011mm)	A 39 ¹³ / ₁₆ " (1011mm) B 38 ¹³ / ₁₆ " (986mm)
Additional SNB requirements		6	2	2	2	2	6	2	2	2
Cylinder Type Required	Device Type	Rim	—	—	Rim	Rim	Rim	Mortise	Furnished	Mortise
	Vert. Rod	—	—	—	Rim	—	Rim	Mortise	Furnished	Mortise

For wood door applications specify #425 sex bolts.

Image Reference: VO22F---BU



299F

499F

22-F fire exit rim device for all types of 4' × 8' (1219mm × 2438mm) single doors and 8' × 8' (2438mm × 2438mm) double doors with 9854 or 9954 mullion, UL listed for up to 3 hour fire labeled installations. Fits door stiles as narrow as 4³/₈" (111mm).

FEATURES

- Nonhanded
- Field sizeable
- 3/4" (19mm) throw latch bolt
- Latch bolt deadlocking

DIMENSIONS

Touchbar height to finished floor	39 ¹³ / ₁₆ " (1011mm) at center
Touchbar projection —	
neutral	3 ³ / ₄ " (95mm)
depressed	3" (76mm)
Center case	4 ³ / ₁₆ " × 2 ³ / ₈ " × 2 ³ / ₄ " (106mm × 60mm × 70mm)
Device length — Short 3' (914mm)	2'6" to 3' (762mm to 914mm) door size
Long 4' (1219mm)	3'1" to 4' (940mm to 1219mm) door size

FINISHES

- SP28 Sprayed aluminum
- SP313 Sprayed dark bronze (duranodic color)

Image Reference: VO230L---S

SERIES 230L

Lever trim has a cast aluminum $\frac{3}{4}$ " (19mm) depth escutcheon. Cylinder must be ordered separately. BE blank escutcheon option is available, specify 230LxBE. #06 lever style is furnished standard, #03 style lever is available, specify 230Lx03.

Image Reference: VOLEVER-06

LEVER DESIGN



#06 (Std.)