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CECO DOOR PRODUCTS

DIVISION OF ASSA ABLOY DOOR GROUP, INC.

CECO FLUSH PAIRS OF DOORS
LARGE MISSILE IMPACT (LMI) - LEVEL "D"
HVHZ

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INSTRUCTIONS FOR USING THIS APPROVAL

STEP 1: USE THE DOOR ELEVATIONS PROVIDED ON PAGE 2 AND 3 TO DETERMINE THE APPLICABLE ASSEMBLY NUMBER

STEP 2: MOVE TO THE CHART BELOW THE DOOR ELEVATIONS, ALSO ON PAGE 2 AND 3, AND LOCATE YOUR ASSEMBLY NUMBER. BY SCANNING HORIZONTALLY THROUGH THE SAME ROW OF YOUR ASSEMBLY NUMBER, YOU WILL BE ABLE TO DETERMINE THE APPROVED **DOOR SERIES, MIN DOOR THICKNESS, MAX DESIGN PRESSURE, MAX DOOR OPENINGS, SWINGING OPTIONS, LATCHING HARDWARE FOR BOTH ACTIVE AND IN ACTIVE PANELS.**

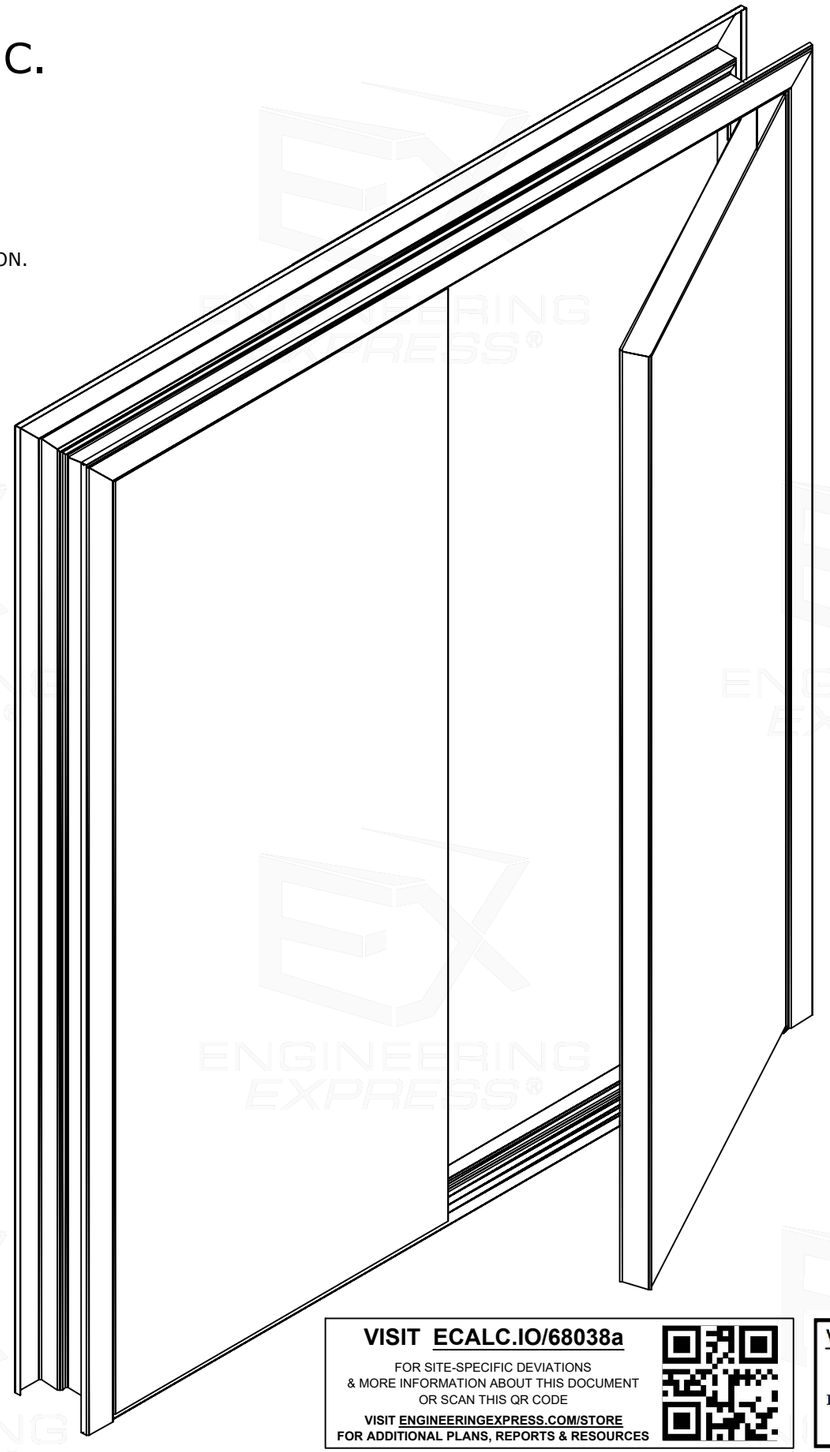
STEP 3: USE PAGE 4 TO DETERMINE YOUR FRAMING PROFILES AND FRAMING CONSTRUCTION OPTIONS

STEP 4: USE THE TABLES ON PAGE 5 AND 6 TO DETERMINE THE ANCHOR TYPE AND SPACING, BASED ON THE YOUR PRESSURE AND SUBSTRATE CRITERIA

STEP 5: USE THE DETAILS PROVIDED ON PAGE 7 AND 8 TO DETERMINE YOUR WEATHERSTRIPPING OPTIONS

SHEET INDEX

# SHEET	DESCRIPTION
1	COVER SHEET
2-4	ASSEMBLY OPTIONS
5	DOOR FRAME DETAILS
6-7	DOOR FRAME ANCHORING INFORMATION
8-9	DOOR FRAME WEATHER STRIPPING INFORMATION
10	MANUFACTURERS AND ENGINEERING NOTES
10	TOTAL



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ASSA ABLOY, the global leader in door opening solutions.

FRANK BENNARDO, PE
PE# 0046549 CA# 9885

FRANK L. BENNARDO LICENSE No 0046549 STATE OF FLORIDA PROFESSIONAL ENGINEER SIGNED: May 08 2024

Digitally signed by Frank Bennardo
Date: 2024.05.08 18:03:13 -04'00'

FL# 16355.1

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DIVISION OF ASSA ABLOY DOOR GROUP, INC.
9159 TELECOM DRIVE
MILAN, TN 38358

COMMERCIAL STEEL EXTERIOR DOORS
FLUSH PAIRS OF DOORS (LMI) - FBC (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#16355.1)

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CECO DOOR FLUSH PAIRS DOORS

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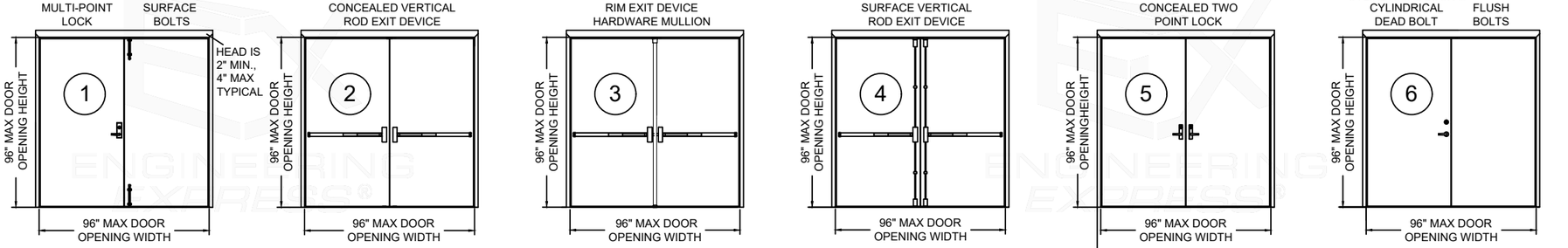

ASSEMBLY 1	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Required
+/-150 PSF	+/-60 PSF

ASSEMBLY 2	
Design Pressure Where Water Infiltration Is NOT Needed	Design Pressure Where Water Infiltration IS Needed
+/-70 PSF	+/-60 PSF

ASSEMBLY 3	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Required
+/-70PSF	+/-60 PSF

ASSEMBLY 4	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Required
+/-70 PSF	+/-60 PSF

ASSEMBLY 5	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Needed
+/-70 PSF	+/-60 PSF

ASSEMBLY 6	
Design Pressure Where Water Infiltration Is NOT Needed	Design Pressure Where Water Infiltration IS Required
+/-70 PSF	+/-60 PSF

Assembly	Door Series	Minimum Door Gauge	Maximum Design Pressure (psf)		Maximum Door Opening (inches)		Door Swing	Latching Hardware Description Active			Latching Hardware Description In-Active		
			Positive	Negative	Width	Height		Type	Brand	Model	Type	Brand	Model
1	Regent, Imperial	14	150	150	96	96 *	Out Swing or In Swing*	Multi-Point Lock	Corbin Russwin	6600	Surface Bolt	Corbin Russwin	988CR
									Sargent	7300		Sargent	988
2	Fuego,Medallion, Legion, Omega, Regent, Ultra, Trio, Trio-E	16 Trio, TrioE -18	70	70	96	96	Out Swing	Concealed Vertical Rod	Sargent	HC-MD-8600, HC-12-8600, HC-MD-12-8600, WS-MD-8600,WS-12-8600, WS-MD-12-8600	Concealed Vertical Rod	Sargent	HC-MD-8600, HC-12-8600, HC-MD-12-8600, WS-MD-8600, WS-12-8600, WS-MD-12-8600
3	Medallion, Legion, Omega, Regent, Ultra, Trio, Trio-E	16 Trio, TrioE -18	70	70	96	96	Out Swing	Rim Exit Device	Corbin Russwin	ED5200S(A) x M107	Rim Exit Device	Corbin Russwin	ED5200S(A) x M107
									Sargent	HC8800, 12-HC8800		Sargent	HC8800, 12-HC8800
									ASSA ABLOY ACCENTRA	7150(F)WS/7250M(F)WS		ASSA ABLOY ACCENTRA	7150(F)WS/7250M(F)WS
4	Medallion, Legion, Ultra, Regent, Omega, Trio, Trio-E	16 Trio, TrioE -18	70	70	96	96	Out Swing	Surface Vertical Rod	Corbin Russwin	ED5470(B) x M107	Surface Vertical Rod	Corbin Russwin	ED5470(B) x M107
									Sargent	HC4-8700		Sargent	HC4-8700
									ASSA ABLOY ACCENTRA	7170(F)WS		ASSA ABLOY ACCENTRA	7170(F)WS
5	Fuego, Imperial, Medallion, Legion, Omega, Regent, Ultra, Versadoor,	16 Trio, TrioE -18	70	70	96	96	Out Swing	Concealed Two Point Lock	Corbin Russwin	M9800 (A/B) x M107	Concealed Two Point Lock	Corbin Russwin	M9800 (A/B) x M107
									Sargent	WS-12-7000, HC-12-7000		Sargent	WS-12-7000, HC-12-7000
6	Trio, Trio-E	18	70	70	96	96	Out Swing or In Swing*	Cylindrical Lock & Cylindrical Dead Bolt	Corbin Russwin	CL3100 DL3200 Dead Bolt	Flush Bolt	Rockwood	556WS
									Sargent	11 Line 480 Dead Bolt			
Hinges **	Butt	McKinney 4-1/2" x 4-1/2" 0.134" thick minimum steel hinges or any FBC approved butt hinges may be used. Any SDI member hinge locations may be used.											
	Continuous	Markar FM100, FM200, FM300, FM3500, FM100, FM1111, or HG305; Pemko CFMSLF-HD continuous hinges or any FBC approved continuous hinge may be used											
	Pivots	Rixson 195 Pivot set with M19 intermediate pivots may be used. Any FBC approved pivot may be used.											
Auxiliary Hardware		1" diameter and smaller preparations for door position switches, Door position switches that fit in a cutout measuring 1.25" x 4.875"; Securitron EPT, SEPT, and CEPT may be used.											
		Maglocks may be used in addition to the hardware listed above. Viewers with 1" and smaller hole preparation may be used.											

*

*In-Swing Configurations not approved for water infiltration.
See Hardware notes for additional Hardware options.

** SUBSTITUTIONS, WITH FBC COMPONENT APPROVALS, MAY BE USED AS LONG AS THE SUBSTITUTIONS ARE WITHIN THE LIMITING DESIGN PARAMETERS OF THIS APPROVAL AND THE COMPONENT APPROVAL.

FRANK BENNARDO, PE
PE# 0046549 CA# 9885
FRANK L. BENNARDO LICENSE No 0046549 STATE OF Florida PROFESSIONAL ENGINEER
SIGNED: 05/08/2024

MAY 8, 2024

FL# 16355.1

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9159 TELECOM DRIVE
MILAN, TN 38358

CECO Door ASSA ABLOY

COMMERCIAL STEEL EXTERIOR DOORS
FLUSH PAIRS OF DOORS (LM1) - FBC (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#16355.1)

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CECO DOOR FLUSH PAIRS DOORS

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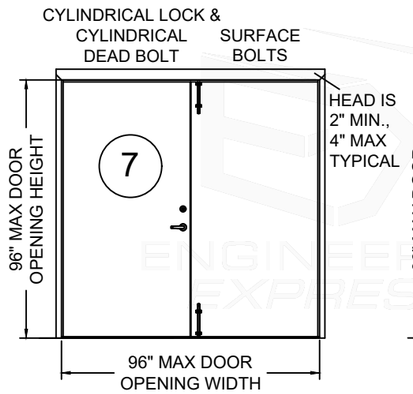
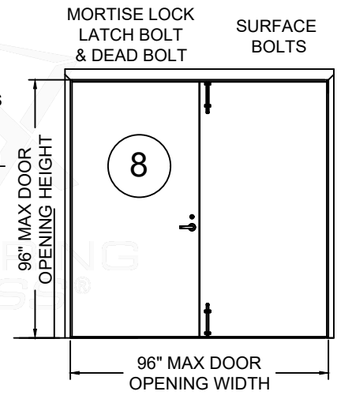
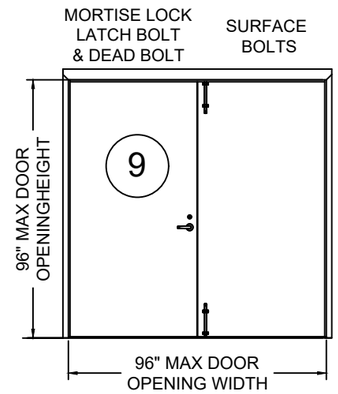


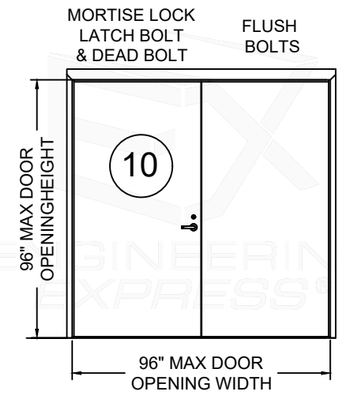
ASSEMBLY 7	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Required
+/-70 PSF	+/-60 PSF



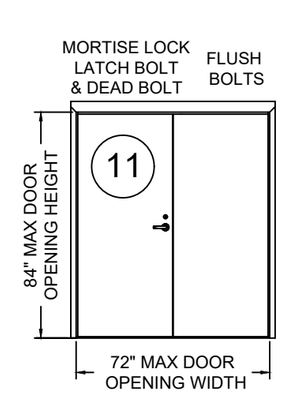
ASSEMBLY 8	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Required
+/-70 PSF	+/-60 PSF



ASSEMBLY 9	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Required
+/-70 PSF	+/-60 PSF



ASSEMBLY 10	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Required
+/-70 PSF	+/-60 PSF



ASSEMBLY 11	
Design Pressure Where Water Infiltration Is NOT Needed	Design Pressure Where Water Infiltration IS Needed
+/-70 PSF	+/-60 PSF

Assembly	Door Series	Minimum Door Gauge	Maximum Design Pressure (psf)		Maximum Door Opening (inches)		Door Swing	Latching Hardware Description Active			Latching Hardware Description In-Active		
			Positive	Negative	Width	Height		Type	Brand	Model	Type	Brand	Model
(7)	Trio, Trio-E	18	70	70	96	96	Out Swing or In Swing*	Cylindrical Lock & Cylindrical Dead Bolt	Corbin Russwin	CL3100 DL3200 Dead Bolt	Surface Bolt	Corbin Russwin	988CR
									Sargent	11 Line 480 Dead Bolt		Sargent	988
(8)	Fuego, Imperial, Medallion, Legion, Omega, Regent, Ultra, Versadoor	16	70	70	96	96	Out Swing	Mortise Lock Latch Bolt & Dead Bolt	Corbin Russwin	ML2000	Surface Bolt	Corbin Russwin	988CR
									Sargent	7800, 8200, R8200		Sargent	988
									ASSA ABLOY ACCENTRA	8800		ASSA ABLOY ACCENTRA	988Y
(9)	Trio, Trio-E	18	70	70	96	96	Out Swing or In Swing*	Mortise Lock Latch Bolt & Dead Bolt	Corbin Russwin	ML2000	Surface Bolt	Corbin Russwin	988CR
									Sargent	7800, 8200, R8200		Sargent	988
									ASSA ABLOY ACCENTRA	8800		ASSA ABLOY ACCENTRA	988Y
(10)	Trio, Trio-E	18	70	70	96	96	Out Swing or In Swing*	Mortise Lock Latch Bolt & Dead Bolt	Corbin Russwin	ML2000	Flush Bolt	Rockwood	556WS
									Sargent	7800, 8200, R8200			
									ASSA ABLOY ACCENTRA	8800			
(11)	Trio, Trio-E	18	70	70	72	84	Out Swing or In Swing*	Mortise Lock Latch Bolt & Dead Bolt	Corbin Russwin	ML2000	Surface Bolt	Corbin Russwin	988CR
									Sargent	7800, 8200, R8200		Sargent	988
									ASSA ABLOY ACCENTRA	8800		ASSA ABLOY ACCENTRA	988Y
Hinges**	Butt	McKinney 4-1/2" x 4-1/2" 0.134" thick minimum steel hinges or any FBC approved butt hinges may be used. Any SDI member hinge locations may be used.											
	Continuous	Markar FM100, FM200, FM300, FM3500, FM100, FM1111, or HG305; Pemko CFMSLF-HD continuous hinges or any FBC approved continuous hinge may be used											
	Pivots	Rixson 195 Pivot set with M19 intermediate pivots may be used											
Auxiliary Hardware		1" diameter and smaller preparations for door position switches, Door position switches that fit in a cutout measuring 1.25" x 4.875"; Securitron EPT, SEPT, and CEPT may be used.											
		Maglocks may be used in addition to the hardware listed above. Viewers with 1" and smaller hole preparation may be used.											

*In-Swing Configurations not approved for water infiltration.
See Hardware notes for additional Hardware options.

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FRANK BENNARDO, PE
PE# 0046549 CA# 9885
FRANK L. BENNARDO LICENSE No 0046549 STATE OF FLORIDA PROFESSIONAL ENGINEER
SIGNED: 05/08/2024

MAY 8, 2024

FL# 16355.1

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9159 TELECOM DRIVE
MILAN, TN 38358

COMMERCIAL STEEL EXTERIOR DOORS
FLUSH PAIRS OF DOORS (LMI) - FBC (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#16355.1)

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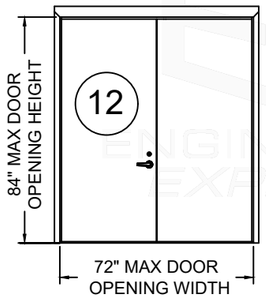
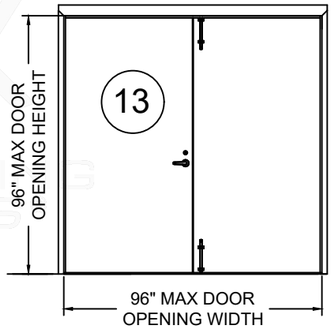


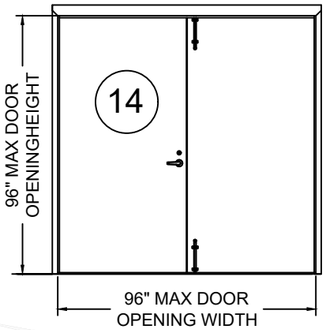
ASSEMBLY 11	
Design Pressure Where Water Infiltration Is NOT Needed	Design Pressure Where Water Infiltration IS Needed
+/-60 PSF	+/-60 PSF

SURFACE VERTICAL ROD



ASSEMBLY 8	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Required
+/-150 PSF	+/-60 PSF

SURFACE VERTICAL ROD



ASSEMBLY 9	
Design Pressure Where Water Infiltration Is NOT Required	Design Pressure Where Water Infiltration IS Required
+/-150 PSF	+/-60 PSF

Assembly	Door Series	Minimum Door Gauge	Maximum Positive	Maximum Negative	Maximum Width	Maximum Height	Door Swing	Latching Hardware Description Active: Type	Brand	Model	Latching Hardware Description In-Active: Type	Brand	Model
(12)	Fuego, Imperial, Medallion, Legion, Omega, Regent, Ultra, Versadoor, Trio, Trio-E	18	60	60	72	72	Out Swing	Rim Exit	Corbin Russwin	ED5200S(A) x M107	Rim Exit	Corbin Russwin	ED5200S(A) x M107
									Sargent	HC8800, 12-HC8800		Sargent	HC8800, 12-HC8800
									ASSA ABLOY ACCENTRA	7150(F)WS/7250M(F)WS		ASSA ABLOY ACCENTRA	7150(F)WS/7250M(F)WS
(13)	Regent, Imperial, Medallion, Legion	14	150	150	96	96	Out Swing	Surface Vertical Rod	Sargent	HC4-8700, 12-HC4-8700	Surface Vertical Rod	Sargent	HC4-8700, 12-HC4-8700
(14)	Regent, Imperial, Medallion, Legion	14	150	150	96	96	Out Swing	Surface Vertical Rod	Sargent	HC4-8700, 12-HC4-8700	Surface Bolt	Sargent	988
Hinges**	Butt	McKinney 4-1/2" x 4-1/2" 0.134" thick minimum steel hinges or any FBC approved butt hinges may be used. Any SDI member hinge locations may be used.											
	Continuous	Markar FM100, FM200, FM300, FM3500, FM100, FM1111, or HG305; Pemko CFMSLF-HD continuous hinges or any FBC approved continuous hinge may be used											
	Pivots	Rixson 195 Pivot set with M19 intermediate pivots may be used											
Auxiliary Hardware		1" diameter and smaller preparations for door position switches, Door position switches that fit in a cutout measuring 1.25" x 4.875"; Securitron EPT, SEPT, and CEPT may be used.											
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See Hardware Notes for additional Hardware Options

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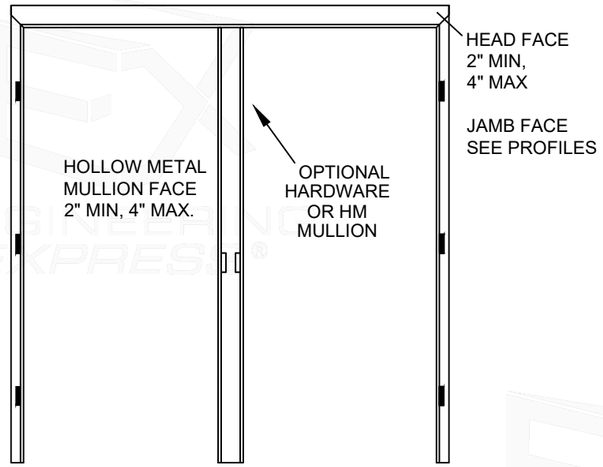
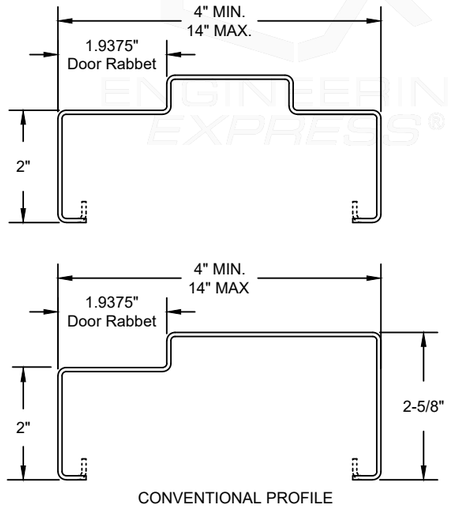
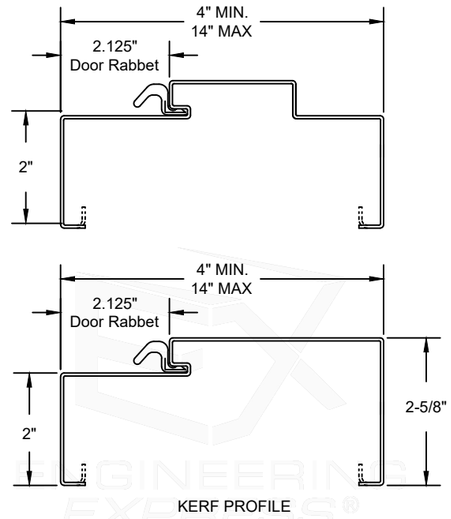


8'0" X 8'0" MAX.
4" MIN./14" MAX. DEPTH
KD 16 GA. MIN.
WELDED 16 GA MIN., 12 GA. MAX.
MAX DESIGN PRESSURE WITHOUT MULLIONS +/-150 PSF
MAX DESIGN PRESSURE WITH MULLIONS +/-70 PSF
FOUR SIDED DOOR FRAME WITH WELDED CORNERS ALSO PERMITTED

FRAME PROFILES

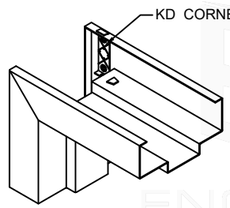


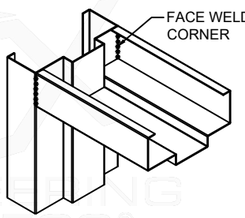
CONVENTIONAL PROFILE

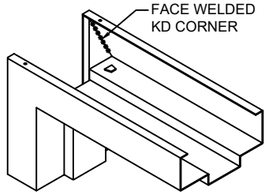


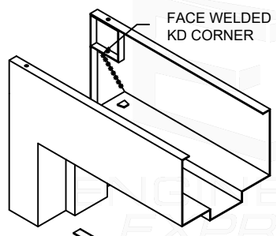
KERF PROFILE

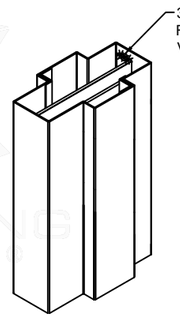
FRAME CONSTRUCTION OPTIONS

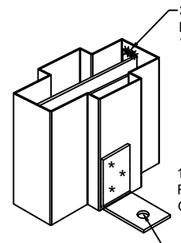


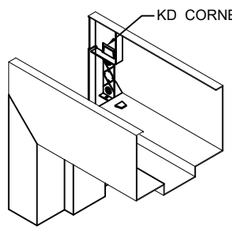


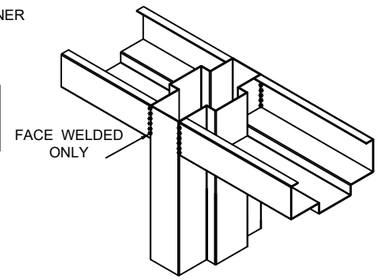


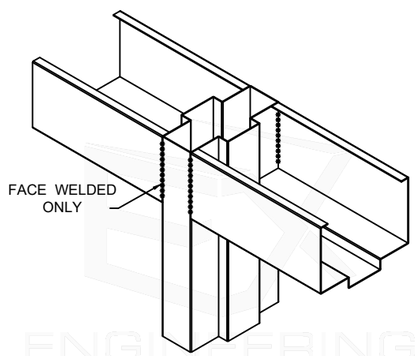


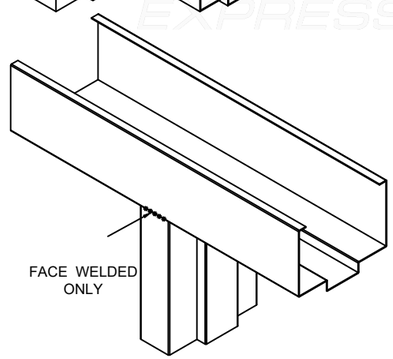


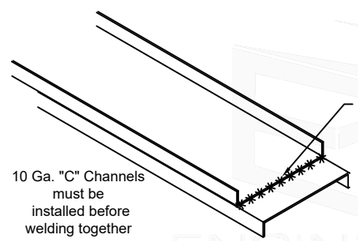












FRANK BENNARDO, PE
PE# 0046549 CA# 9885

FRANK L. BENNARDO LICENSE No 0046549 STATE OF Florida PROFESSIONAL ENGINEER SIGNED: 05/08/2024

MAY 8, 2024

FL# 16355.1

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CECO DOOR PRODUCTS
DIVISION OF ASSA ABLOY DOOR GROUP, INC.
9159 TELECOM DRIVE
MILAN, TN 38358
CecoDoor ASSA ABLOY

COMMERCIAL STEEL EXTERIOR DOORS
FLUSH PAIRS OF DOORS (LMI) - FBC (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#16355.1)

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2023 FBC (PREV 20-34667)	AMZ	RS	10/18/23

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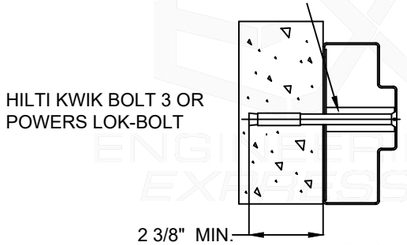
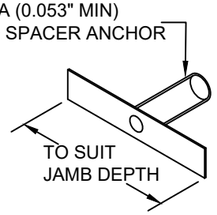
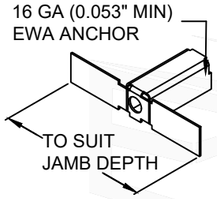
CECO DOOR FLUSH PAIRS DOORS

PRODUCTS ILLUSTRATED IN THIS DOCUMENT ARE QUALIFIED FOR LARGE AND SMALL MISSILE IMPACT. LARGE MISSILE IMPACT IS 9 LB 2 X 4 AT 50 FEET PER SECOND OR 350 FT-LBS. (MISSILE LEVEL D) PRODUCT MEETS REQUIREMENTS OF THE HIGH VELOCITY HURRICANE ZONE.

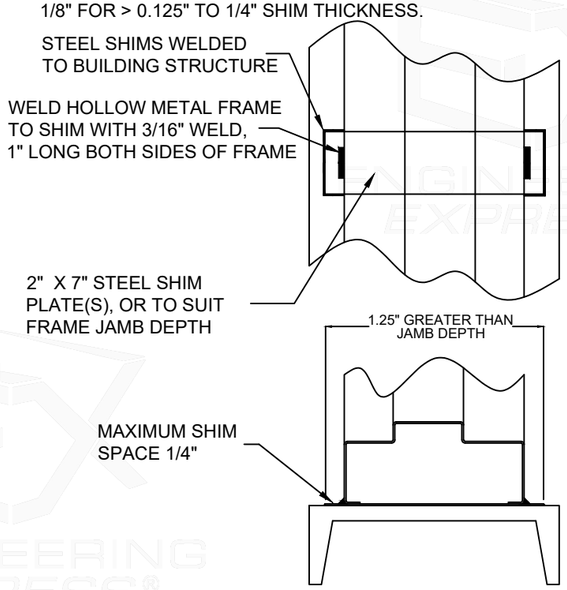
EXISTING MASONRY OR POURED CONCRETE, 3000 psi MIN.
WELDED PIPE SPACER OR EWA ANCHOR WITH 3/8"
EXPANSION ANCHOR BOLTS USING 3/8" GRADE 5 BOLT
MINIMUM EDGE DISTANCE = 4.0"
MAXIMUM SHIM THICKNESS = 0.25"

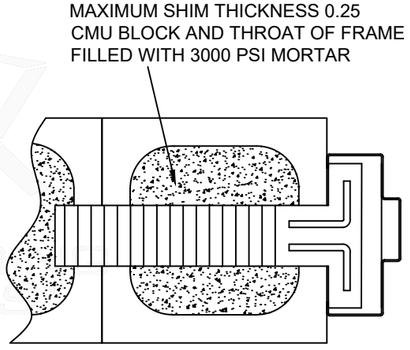


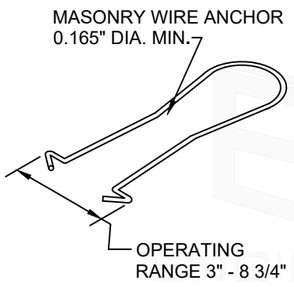


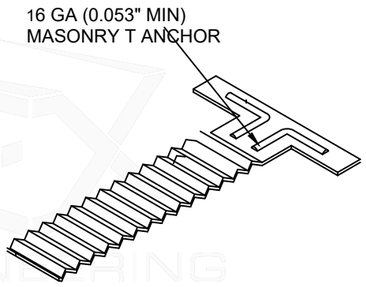


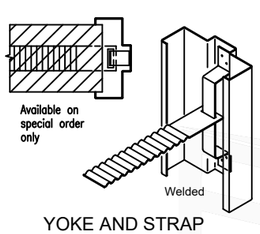
¼" MAX. THICK A-36 STEEL SHIMS WELDED TO STRUCTURAL BUILDING MEMBER WITH FILLET WELDS MEASURING 2" LONG USING E6018 ELECTRODES. FILLET WELD SIZE SAME AS SHIM THICKNESS FOR 0.053" TO 0.125" SHIM THICKNESS. WELD SIZE 1/8" FOR > 0.125" TO 1/4" SHIM THICKNESS.



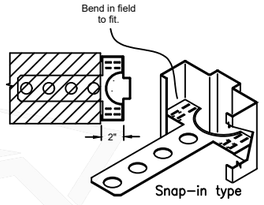




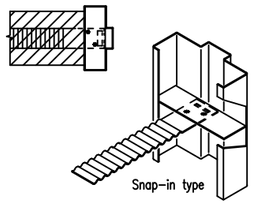




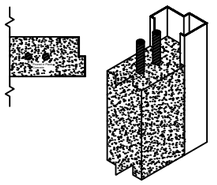
YOKE AND STRAP
MASONRY ANCHOR



MASONRY "T" ANCHOR
(ADJUSTABLE)



MASONRY "T" ANCHOR



POURED IN PLACE WALL

Expansion Shell Anchors Into 1500 psi Grout filled Concrete Masonry Requirements for Jambs						
	Up to an including 70 psf			150 psf		
Opening Height (inches)	Max. Distance From End of Jamb	Min. Anchor Quantity	Maximum Spacing (inches)	Max. Distance From End of Jamb	Min. Anchor Quantity	Maximum Spacing (inches)
Up to 84"	12	4	19	12	5	15
90	12	4	19	12	6	15
96	12	5	19	12	6	15
Expansion Shell Anchor Requirements for Heads of Paired Frames						
70 psf	2 anchors in the head			150 psf	4 anchors in the head	

Expansion Shell Anchors Into 3000 psi Concrete Requirements for Jambs						
	Up to an including 70 psf			150 psf		
Opening Height (inches)	Max. Distance From End of Jamb	Min. Anchor Quantity	Maximum Spacing (inches)	Max. Distance From End of Jamb	Min. Anchor Quantity	Maximum Spacing (inches)
Up to 84"	12	5	19	12	5	19
90	12	5	19	12	5	19
96	12	6	19	12	6	19
Expansion Shell Anchor Requirements for Heads of Paired Frames						
70 psf	2 anchors in the head			150 psf	4 anchors in the head	

Masonry Strap, Masonry T, Masonry Wire, and Welded to the Building Structure Anchor Requirements for Jambs of Paired Frames						
	Up to an including 70 psf			150 psf		
Opening Height (inches)	Max. Distance From End of Jamb	Min. Anchor Quantity	Maximum Spacing (inches)	Max. Distance From End of Jamb	Min. Anchor Quantity	Maximum Spacing (inches)
Up to 88"	12	4	24	12	4	24
90"	12	5	24	12	5	24
92"-96"	12	5	24	12	5	24
Expansion Shell Anchor Requirements for Heads of Paired Frames						
70 psf	2 anchors in the head			150 psf	4 anchors in the head	
Welded to the Building Structure Anchor Requirements for Heads of Paired Frames						
70 psf	2 anchors in the head			150 psf	2 anchors in the head	

FRANK BENNARDO, PE
PE# 0046549 CA# 9885
FRANK L. BENNARDO LICENSE No 0046549 STATE OF FLORIDA PROFESSIONAL ENGINEER
SIGNED: 05/08/2024

MAY 8, 2024

FL# 16355.1

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9159 TELECOM DRIVE
MILAN, TN 38358

CecoDoor ASSA ABLOY

COMMERCIAL STEEL EXTERIOR DOORS
FLUSH PAIRS OF DOORS (LMI) - FBC (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#16355.1)

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2023 FBC (PREV 20-34867)	AMZ	RS	10/18/23

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CECO DOOR FLUSH PAIRS DOORS

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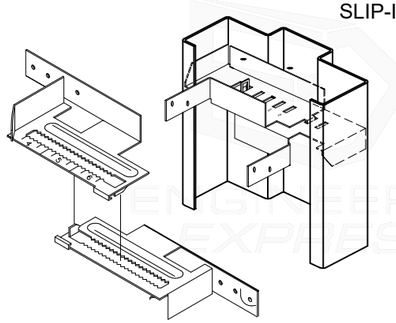
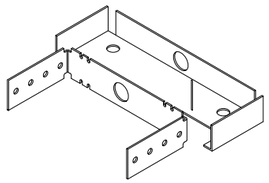
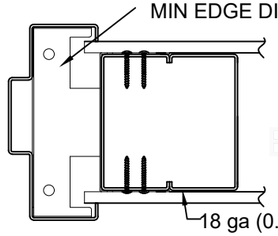


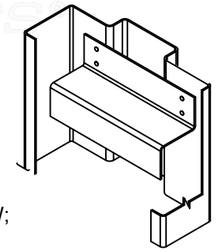
18 ga. (0.041" MIN.)
SLIP-IN STUD ANCHORS

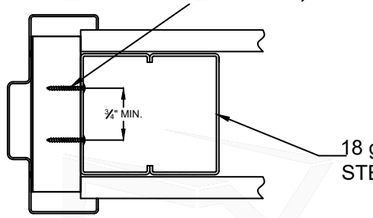




SLIP -IN STUD ANCHOR WELDEED TO
FRAME CONNECT TO STEEL
WITH #8 X 1" GRADE 5 SHEET METAL SCREW;
4 SCREWS REQUIRED PER ANCHOR;
MIN EDGE DISTANCE - 0.328"

18 ga (0.041" min.)
STEEL STUDS

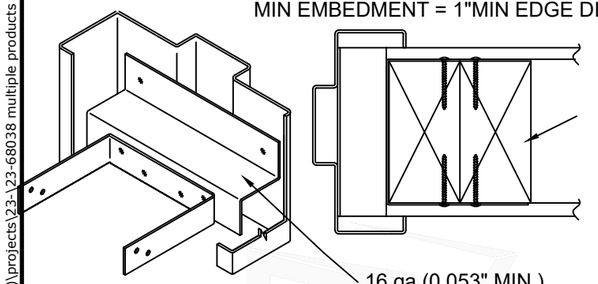




#14 x 1" GRADE 5 SHEET METAL SCREW;
2 SCREWS REQUIRED
PER ANCHOR LOCATION;

18 ga (0.041" min.)
STEEL STUDS

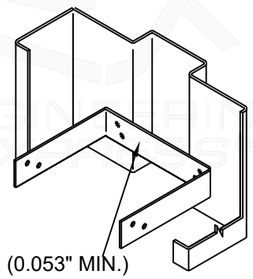
WELDED WOOD STUD ANCHOR
WITH #8 X 1" GRADE 5 SHEET METAL SCREW;
4 SCREWS REQUIRED PER ANCHOR;
MIN EMBEDMENT = 1"MIN EDGE DISTANCE = 0.524"



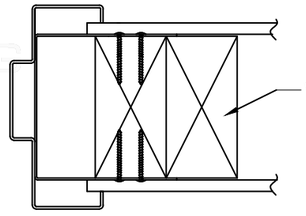
WOOD STUD

16 ga (0.053" MIN.)
WOOD STUD ANCHOR

WELED WOOD STUD ANCHOR
WITH #8 X 1" GRADE 5 SHEET METAL SCREW;
4 SCREWS REQUIRED PER ANCHOR;
MIN EMBEDMENT = 1"MIN EDGE DISTANCE = 0.524



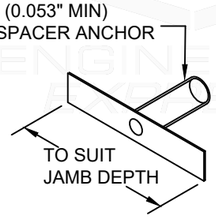
16 ga (0.053" MIN.)
WOOD STUD ANCHOR



WOOD STUD

16 GA (0.053" MIN)
PIPE SPACER ANCHOR

TO SUIT
JAMB DEPTH

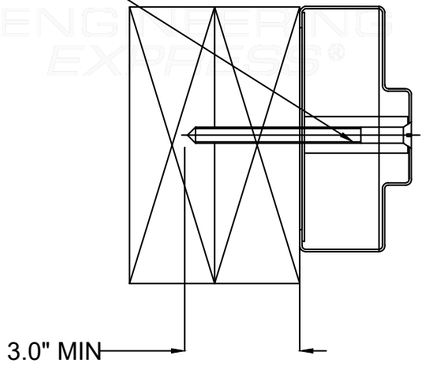


16 GA (0.053" MIN)
EWA ANCHOR

TO SUIT
JAMB DEPTH

Stud Anchor Requirements for Paired Frame Jambs						
	Up to an including 70 psf			150 psf		
Opening Height (inches)	Max. Distance From End of Jamb	Min. Anchor Quantity	Maximum Spacing (inches)	Max. Distance From End of Jamb	Min. Anchor Quantity	Maximum Spacing (inches)
Up to 88"	12	4	21	12	6	12
90"	12	5	21	12	7	12
92"-96"	12	5	21	12	7	12
Stud Anchor Requiremnts for Heads of Paired Frames						
70 psf	4 anchors in the head		150 psf	8 anchors in the head		

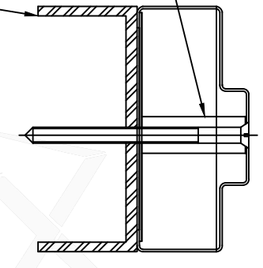
WELDED PIPE SPACER OR EWA ANCHOR
WITH 3/8" WOOD SCREW OR LAG BOLT
MINIMUM EDGE DISTANCE = 1.75"
MAXIMUM SHIM THICKNESS = 0.25"



3.0" MIN

WELDED PIPE SPACER OR EWA ANCHOR
WITH 3/8" (GRADE 2 MIN.) TAP-IN BOLT
WITH 3 PINCHES PASSED THE THREAD
PLANE. MINIMUM EDGE DISTANCE = 1.75"
MAXIMUM SHIM THICKNESS = 0.25"

1/4" THK. MIN. A36 MIN.
STEEL SUBSTRATE



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CECO DOOR FLUSH PAIRS DOORS

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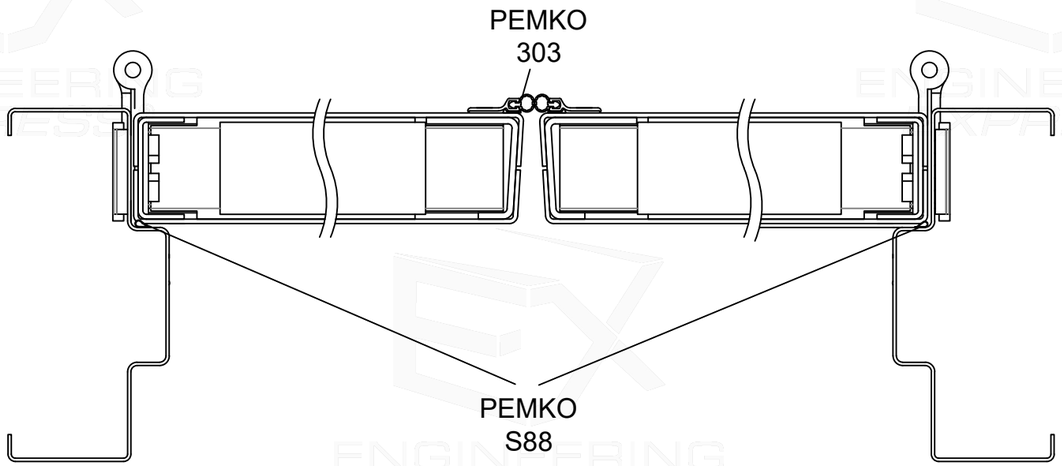
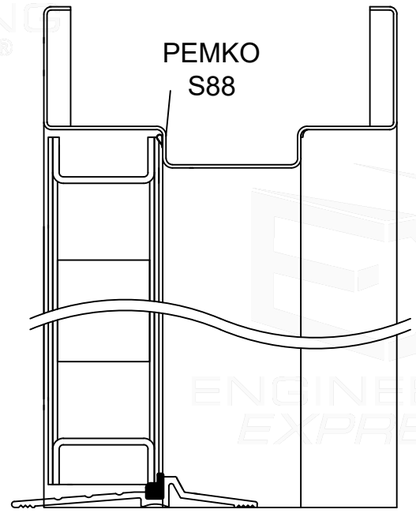
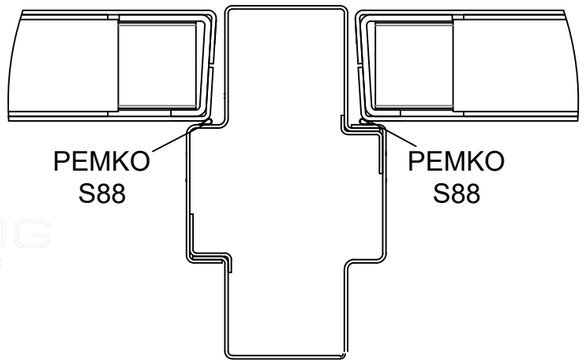
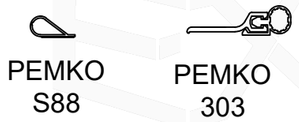
PEMKO WEATHERSTRIP USED ON CECO DOORS AND FRAMES WHERE WATER INFILTRATION IS NOT REQUIRED.









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PE# 0046549 CA# 9885

FRANK L. BENNARDO LICENSE No 0046549 STATE OF Florida PROFESSIONAL ENGINEER
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9159 TELECOM DRIVE
MILAN, TN 38358

CecoDoor ASSA ABLOY

COMMERCIAL STEEL EXTERIOR DOORS
FLUSH PAIRS OF DOORS (LMI) - FBC (2023)
FLORIDA STATEWIDE APPROVAL (FSA FL#16355.1)

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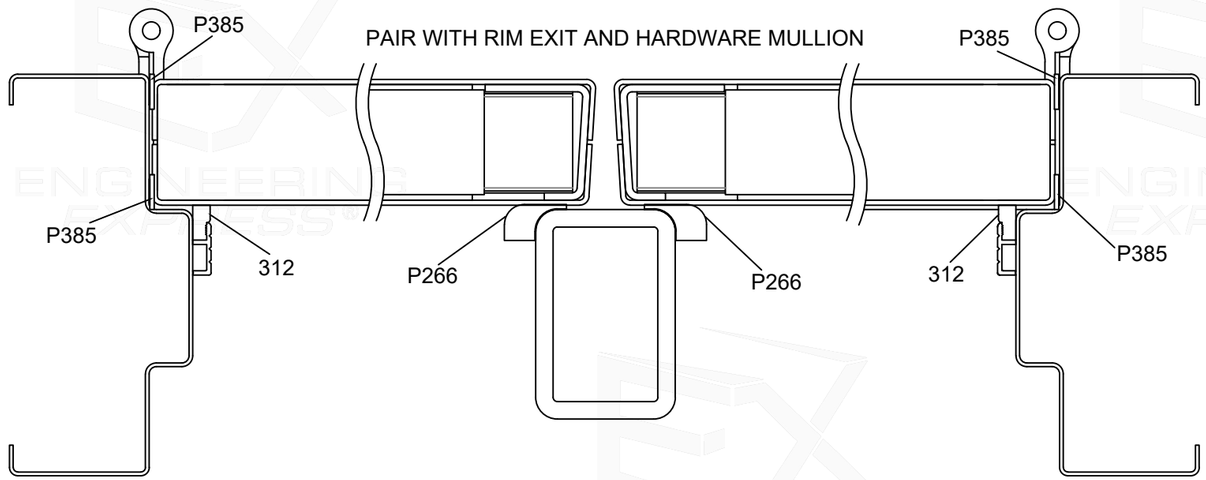

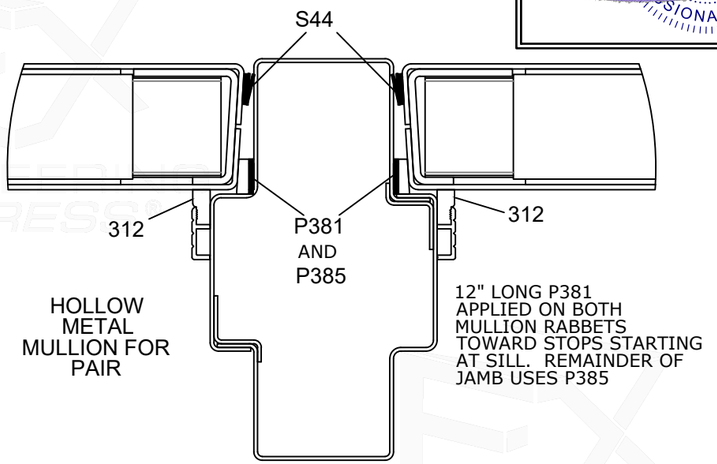

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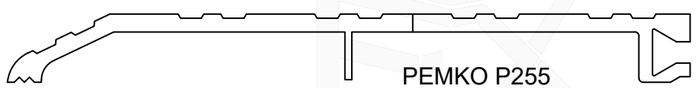
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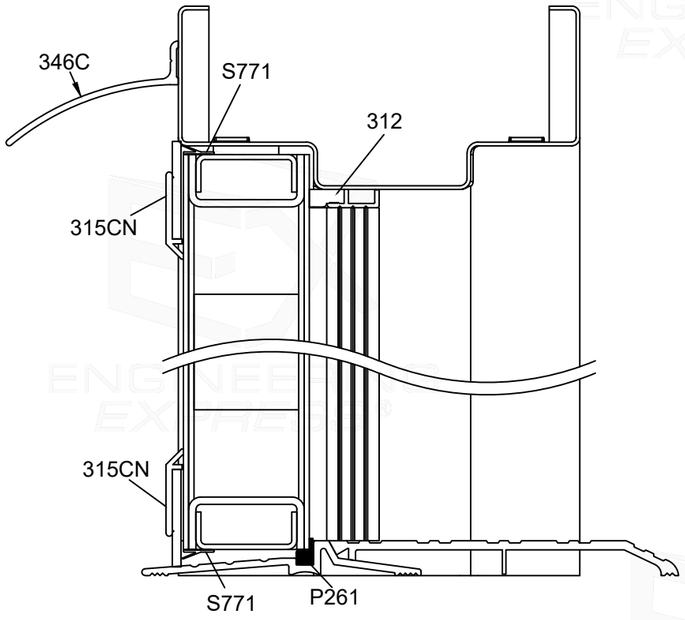
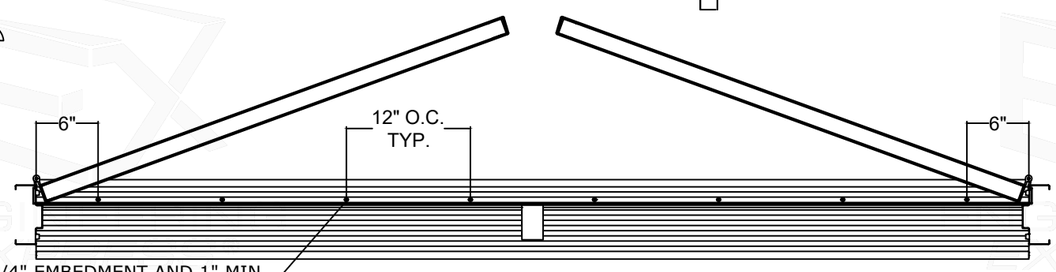


PAIR WITH RIM EXIT AND HARDWARE MULLION



1/4" ITW TAPCON W/ 1-3/4" EMBEDMENT AND 1" MIN.
EDGE DISTANCE TO 3192 PSI CONCRETE

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HARDWARE NOTES

CORBIN RUSSWIN

THE ED5200(S)A RIM EXIT AND THE ED5470(B) X M107 SURFACE VERTICAL ROD MAYBE SUFFIXED BY MER. MAY USE M94 WITH ANY COMBINATION OF THE M61, M92, M93, OR M1 SUFFIXES.

THE ED5200(S)A X M107 RIM EXIT AND THE ED5470(B) X M107 SURFACE VERTICAL ROD MAY INCLUDE 900 SERIES TRIMS 9600, 9700, 9800 SERIES ACCESS CONTROL TRIMS OR THE 9900 SERIES ELECTRIFIED TRIMS.

THE MP9800 (A/B) X M107 SERIES CONCEALED MULTI-POINT LOCK MAY INCLUDE THE OPTIONS: M91, M92, M93, 903, 904, IN, INB, SE.

USE CRFE722A, CRFE708A OR CRWS700AKM HARDWARE MULLION WITH THE ED5200(S)A / ED4200(S)A X M107 RIM EXIT

ON PAIRS OF DOORS, ONE LEAF OF THE PAIR UTILIZING WITH THE ED5470(B) X M107 SURFACE VERTICAL ROD OR MP9800 (A/B) X M107 SERIES CONCEALED MULTI-POINT LOCK MAY BE REPLACED WITH TWO 988CR SURFACE BOLTS. THE LOCAL BUILDING OFFICIAL
MUST APPROVE THIS CONFIGURATION OF HARDWARE FOR USE IN A MEANS OF EGRESS.

THE ML2000 SERIES MORTISE LOCKS, SERIES CLX3300 SERIES CYLINDRICAL LOCKS, ED5200(S)A X M107 RIM EXIT, AND ED5470(B) X M107 SURFACE VERTICAL ROD MAY BE PREFIXED IN-IP, IN-IPS, IN-CP, IN-IP-MB, IN-IP-MW, IN-IPS-MB, IN-IPS-MW, IN-CP-MP, AND IN-CP-MW.

THE ML2000 SERIES MORTISE LOCKS, SERIES CLX3300 SERIES CYLINDRICAL LOCKS, ED5200(S)A X M107 RIM EXIT MAY BE PREFIXED PIP1-IPSKM, PWI1-IPSKM, PIP1-CPKM, PWI1-CPKM, PIP1-IPSM, PWI1-IPSM, PIP1-CPM, AND PWI1-CPM.

THE IN 120 ACCESS CONTROL MAY BE USED WITH CLX3300 CYLINDRICAL LOCK OR ML2000 MORTISE LOCK.

HES

THE 1006 SERIES ELECTRIC STRIKE MAYBE USED ON 4'0" X 8'0" AND SMALLER SINGLE OR 8'0" X 8'0" AND SMALLER PAIRS OUT SWINGING DOORS OF 70 PSF OR LESS.

THE 9600 SERIES ELECTRIC STRIKE MAY BE USED WITH THE SARGENT HC8800 SERIES RIM EXIT AT DESIGN PRESSURES OF 70 PSF OR LESS.

THE 9700 SERIES ELECTRIC STRIKE MAY BE USED WITH THE CORBIN RUSSWIN ED5200(S)A AND THE YALE 7150(F)WS / 7250M(F)WS RIM EXITS AT DESIGN PRESSURES OF 70 PSF OR LESS.

SECURITRON 1500 / 1500E STRIKE MAY BE USED ON 3'0" X 7'0" AND SMALLER SINGLE OUT SWINGING ASSEMBLIES WITH MORTISE LOCKS AND LATCH BOLT ONLY AT DESIGN PRESSURES OF 60 PSF OR LESS.

SECURITRON 1600 / 1600E STRIKE MAY BE USED ON 4'0" X 8'0" AND SMALLER SINGLE OUT SWINGING ASSEMBLIES WITH MORTISE LOCKS WITH LATCH BOLT AND DEAD BOLT OF 70 PSF AND LESS.

SARGENT

THE HC8800 SERIES RIM EXIT, WS 8800 SERIES RIM EXIT, AND WS-8900 SERIES MORTISE EXIT MAYBE PREFIXED 53, 55, 55-56, 56, 57, 58, AWE, B, BT, ET, KP, LK, LU, M1, N1, N2, PA, PK, P1, P2, IPSKM, CPKM, IPSM, CPM, IM, IKM, PRX, S1, S2, S3, IA, IK, IN, TK, TL, TP AND TU.

USE HC980, 12-HC980, HCL980, 12-HCL980 HARDWARE MULLION WITH THE HC8800 SERIES RIM EXIT.

SERIES HT-56- CAN BE USED SAME AS THE 53-56- ON THE 80 SERIES DEVICES. EXCEPTIONS INCLUDE THE FOLLOWING PREFIXES EITHER USED ALONE OR IN COMBINATION: 53-, 55-, 57-, 58-, 59- AND AL.
ALL 80 SERIES EMPLOYING HIO TECHNOLOGY AND THE 55 OPTION ARE DESIGNATED HT-55-.

THE MD8600 SERIES CONCEALED VERTICAL ROD EXIT AND 7000 SERIES CONCEALED MULTI-POINT LOCK MAY BE PREFIXED 53, 55, 56, 58, 59, BT & ET.

ON PAIRS OF DOORS, ONE LEAF OF THE PAIR UTILIZING WITH THE MD8600 SERIES CONCEALED VERTICAL ROD EXIT,
7000 CONCEALED MULTI-POINT LOCK OR HC4-8700 / HC-8700 SURFACE VERTICAL ROD MAY BE REPLACED WITH TWO 988CR SURFACE BOLTS. THE LOCAL BUILDING OFFICIAL MUST APPROVE THIS CONFIGURATION OF HARDWARE FOR USE IN A MEANS OF EGRESS.

THE IN 10 ACCESS CONTROL MAY BE USED WITH THE 10X CYLINDRICAL LOCK AND THE 8200 AND THE R8200 MORTISE LOCKS

BUTT HINGES

- 2 HINGES ARE REQUIRED FOR DOORS UP TO AND INCLUDING 60 INCHES IN HEIGHT
- 3 HINGES ARE REQUIRED FOR DOORS OVER 60 INCHES IN HEIGHT AND UP TO AND INCLUDING 90" IN HEIGHT
- 4 HINGES ARE REQUIRED FOR DOORS OVER 90 INCHES IN HEIGHT AND UP TO AND INCLUDING 96" IN HEIGHT

ADDITIONAL HINGES BEYOND THOSE REQUIRED MAY BE REQUIRED.

ASSA ABLOY ACCENTRA

7150(F)WS / 7250M(F)WS RIM EXIT AND 7170(F)WS SURFACE VERTICAL ROD MAY BE SUFFIXED WITH ANY COMBINATION OF A, B, O, OR S.

USE M200FWS OR KRM200FWS MULLION WITH THE 7150(F)WS / 7250M(F)WS RIM EXIT.

ON PAIRS OF DOORS, ONE LEAF OF THE PAIR UTILIZING WITH THE 7170(F)WS SURFACE VERTICAL ROD MAY BE REPLACED WITH TWO 988CR SURFACE BOLTS. THE LOCAL BUILDING OFFICIAL MUST APPROVE THIS CONFIGURATION OF HARDWARE FOR USE IN A MEANS OF EGRESS

ACCESS CONTROL MAY BE USED.

SECURITRON

THE MUNL MAY BE USED ON 60 PSF RATED SINGLE 3'0" X 7'0" ASSEMBLIES WITH A MORTISE CORBIN RUSSWIN ML2000, SARGENT 7800/8200/R8200, OR ASSA ABLOY ACCENTRA 8800 MORTISE LOCK. THE UNL MAY BE USED ON 60 PSF RATED SINGLE 3'0" X 7'0" ASSEMBLIES WITH A CORBIN RUSSWIN CL3100 / CLX3300 / CL3800, SARGENT 6500 / 7 /10X, OR ASSA ABLOY ACENTRA / 5300LN / 5400CK / 5400LN CYLINDRICAL LOCKS.

THE HARDWARE MODELS BELOW MAY ALSO BE USED FOR THE SIZES AND DESIGN PRESSURES INDICATED.
CONCEALED VERTICAL RODS AND SURFACE VERTICAL RODS MAY BE USED IN A PAIRED CONFIGURATION.
RIM EXITS MAY BE USED IN PAIRED CONFIGURATION WITH A HURRICANE RATED MULLION

DESIGN PRESSURE	SIZE	HARDWARE TYPE	MIN, GAUGE	CORBIN RUSSWIN	SARGENT
60	3'-0" x 7'-0"	MORTISE EXIT	18	PED5600 M107 PED5600 A M107*	WS-PE8900 WS-12-PE8900*
60	3'-0" x 7'-0"	RIM EXIT	18	PED5200 HC PED5200 A HC* PED5200 M107 PED5200 A M107*	HC-PE8800 12-HC-PE8800* WS-PE8800 WS-12-PE8800*
60	3'-0" x 8'-0" SINGLE 6'-0" x 8'-0" PAIR	CONCEALED VERTICAL ROD	16	PED5800 MD 107 PED5800 MD HC	HC-MD-PE8600 WS-MD-PE8600
60	3'-0" x 8'-0" SINGLE 6'-0" x 8'-0" PAIR	RIM EXIT	16	PED5200 HC PED5200 A HC*	HC-PE8800 12-HC-PE8800*
60	3'-0" x 8'-0" SINGLE 6'-0" x 8'-0" PAIR	SURFACE VERTICAL ROD	16	PED5400 HC	HC-PE8700
70	4'-0" x 8'-0" SINGLE 8'-0" x 8'-0" PAIR	CONCEALED VERTICAL ROD	16	PED5800 MD 107 PED5800 MD HC	HC-MD-PE8600 WS-ME-PE860
70	4'-0" x 8'-0" SINGLE 8'-0" x 8'-0" PAIR	RIM EXIT	16	PED5200 HC PED5200A HC*	HC-PE8800
70	4'-0" x 8'-0" SINGLE 8'-0" x 8'-0" PAIR	SURFACE VERTICAL ROD	16	PED5400 HC	HC-PE8700
150	4'-0" x 8'-0" SINGLE 8'-0" x 8'-0" PAIR	SURFACE VERTICAL ROD	14	PED5400 HC4 PED5400 A HC4*	HC4-8700 12-HC4-PE8700*

*INDICATED A FIRE RATED EXIT HARDWARE MAY BE USED ON A SINGLE DOOR

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