

REPUBLIC DOORS AND FRAMES

DL416 FLUSH STEEL DOOR



155 REPUBLIC DRIVE
MCKENZIE, TN 38201
PH: (800) 799-3667 FX: (731) 352-2556

INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN, UNLESS OTHERWISE STATED.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/16 INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- FOR INSTALLATION INFORMATION AND ANCHOR LAYOUTS ON JAMBS AND SILL, REFER TO SHEET 5.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- FOR GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
- INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 - WOOD - MINIMUM SPECIFIC GRAVITY OF 0.42.
 - CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
 - GROUT-FILLED CMU - UNIT STRENGTH CONFORMS TO ASTM C-90 & GROUT CONFORMS TO ASTM C 476. GROUT SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.

GENERAL NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC) AND INTERNATIONAL RESIDENTIAL CODE (IRC) AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - TAS 201-94
 - TAS 202-94
 - TAS 203-94
- ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X AND STEEL STUD FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- 1X OR 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
- APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** TO PROTECT THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- STEEL COMPONENTS SHALL BE COATED OR PROVIDED WITH CORROSION RESISTANCE PROTECTION.
- DOOR & FRAME MATERIAL: STEEL 16 GAUGE (0.053") MIN.
FY MIN. = 45.7 KSI
- DESIGNATION "X" STANDS FOR THE FOLLOWING:
X: OPERABLE PANEL
- ALTERNATE LOCKING AND OPERATING HARDWARE MAY BE USED SUCH THEY ARE CURRENTLY APPROVED UNDER A SEPARATE APPROVAL. INSTALLATION SHALL MAINTAIN THE MINIMUM REQUIREMENTS & LIMITATIONS OF USE OF THE SEPARATE COMPONENT APPROVAL AND THE DETAILS HEREIN. THE LESSER DESIGN PRESSURE AND RATING OF THE COMPONENT APPROVAL AND APPROVAL HEREIN SHALL GOVERN.

STEEL DOOR CONSTRUCTION:

THE OVERALL PANEL THICKNESS IS 1 3/4 INCH THICK. THE DOOR HINGE AND LOCK CHANNELS ARE 1.677" X 0.62" X 94.875" INCH WIDE AND ARE CONSTRUCTED FROM 16 GAUGE (0.053") COLD-ROLLED STEEL. THE DOOR TOP AND BOTTOM END CHANNELS ARE 1.677" X 0.62" X 47.563" AND ARE CONSTRUCTED FROM 16 GAUGE (0.053") COLD-ROLLED STEEL. THE DOOR SKINS / FACE SHEETS ARE CONSTRUCTED OF **16 GAUGE** (0.053") COLD-ROLLED STEEL AND ATTACHED TO THE END, HINGE AND LOCK CHANNELS. THE DOOR CORE IS CONSTRUCTED OF TYPE 99-0-3/4 KRAFT PAPER HONEYCOMB CORE AND ATTACHED TO THE FACES WITH GLUE. THE DOOR HINGE REINFORCEMENTS ARE 1.375" X 4.5" AND ARE CONSTRUCTED FROM 9 GAUGE (0.132") COLD-ROLLED STEEL. THE MORTISE DOOR LOCK REINFORCEMENTS ARE 1.677" X 5.313" X 14" AND ARE CONSTRUCTED FROM 14 GAUGE (0.072") COLD-ROLLED STEEL. THE CONTINUOUS DOOR HARDWARE REINFORCEMENTS ARE 1.677" X 6" X 85" AND ARE CONSTRUCTED FROM 14 GAUGE (0.072") COLD-ROLLED STEEL. THE DOOR EXIT DEVICE REINFORCEMENTS ARE 1.677" X 5.313" X 14" AND ARE CONSTRUCTED FROM 14 GAUGE (0.072") COLD-ROLLED STEEL. THE DOOR CLOSER REINFORCEMENTS ARE 1.677" X 6" X 18" AND ARE CONSTRUCTED FROM 14 GAUGE (0.072") COLD-ROLLED STEEL. THE DOOR INACTIVE LEAF ASTRAGAL IS 1.70" X 95.125" AND IS CONSTRUCTED FROM 14 GAUGE (0.072") COLD-ROLLED STEEL. THE DOOR DEAD LOCK REINFORCEMENTS ARE 3" X 3" AND ARE CONSTRUCTED FROM 16 GAUGE (0.053") FORMED STEEL. THE DOOR CYLINDRICAL LOCK REINFORCEMENTS ARE 3" X 2.5" AND ARE CONSTRUCTED FROM 16 GAUGE (0.053") FORMED STEEL. THE DOOR SURFACE BOLTS ARE ROCKWOOD 585 SURFACE BOLTS LOCATED AT THE TOP AND BOTTOM MEETING EDGE CORNER OF THE INACTIVE LEAF.

FRAME CONSTRUCTION:

THE DOOR FRAMES ARE CONSTRUCTED FROM 16 GAUGE (0.053") COLD-ROLLED STEEL. THE CORNERS ARE MITERED KNOCK DOWN MECHANICALLY FASTENED. THE DOOR FRAME CORNER REINFORCEMENTS ARE KNOCK DOWN. THE DOOR FRAME HINGES ARE PBB 4.5" X 4.5" X 0.134" FULL MORTISE BUTT-TYPE STANDARD WEIGHT HINGES. THE DOOR FRAME HINGE REINFORCEMENTS ARE 7.50" X 1.625" AND ARE CONSTRUCTED OF 9 GAUGE (0.132") COLD/HOT-ROLLED STEEL. THE DOOR FRAME HEADER REINFORCEMENTS (REQUIRED ON PAIR OPENINGS) ARE 5.6875" X 96" AND ARE CONSTRUCTED OF 14 GAUGE (0.072") FORMED STEEL OR OPTIONAL 10 GAUGE (0.125") X 1.5" FLAT BAR STOCK. THE DOOR FRAME BASE ANCHORS ARE 1.875" X 1.875" AND ARE CONSTRUCTED OF 16 GAUGE (0.053") FORMED STEEL.

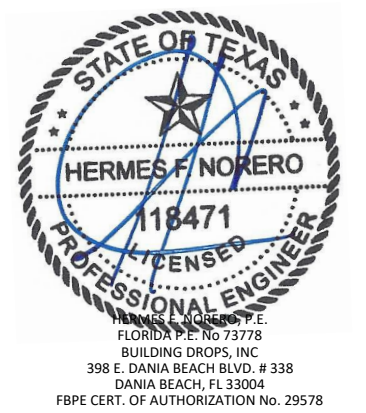
TABLE OF CONTENTS	
SHEET	SHEET DESCRIPTION
1	INSTALLATION & GENERAL NOTES
2	SURFACE VERTICAL ROD ELEVATIONS & DETAILS
3	CYLINDRICAL W/ DEADLOCK ELEVATIONS & DETAILS
4	MORTISE LOCK ELEVATIONS & DETAILS
5	ANCHOR LAYOUT
6	VERTICAL SECTIONS
7	HORIZONTAL SECTIONS
8	CORNER ASSEMBLY & COMPONENTS
9	BILL OF MATERIALS & COMPONENTS

TITLE: DL 416 FLUSH STEEL DOOR
INSTALLATION & GENERAL NOTES

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
2018 IBC UPDATE	CA	3.28.22

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



DATE: **03.16.17**

DWG. BY: **MSS** CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **RDF018**

SHEET: **1** OF 9

DESIGN PRESSURE RATING FOR FLUSH DOOR ASSEMBLY		
DESIGN PRESSURE ALL SIZES		MISSILE IMPACT RATING
+70/-70 PSF	*W/O WATER INFILTRATION	SMALL & LARGE MISSILE IMPACT RATED

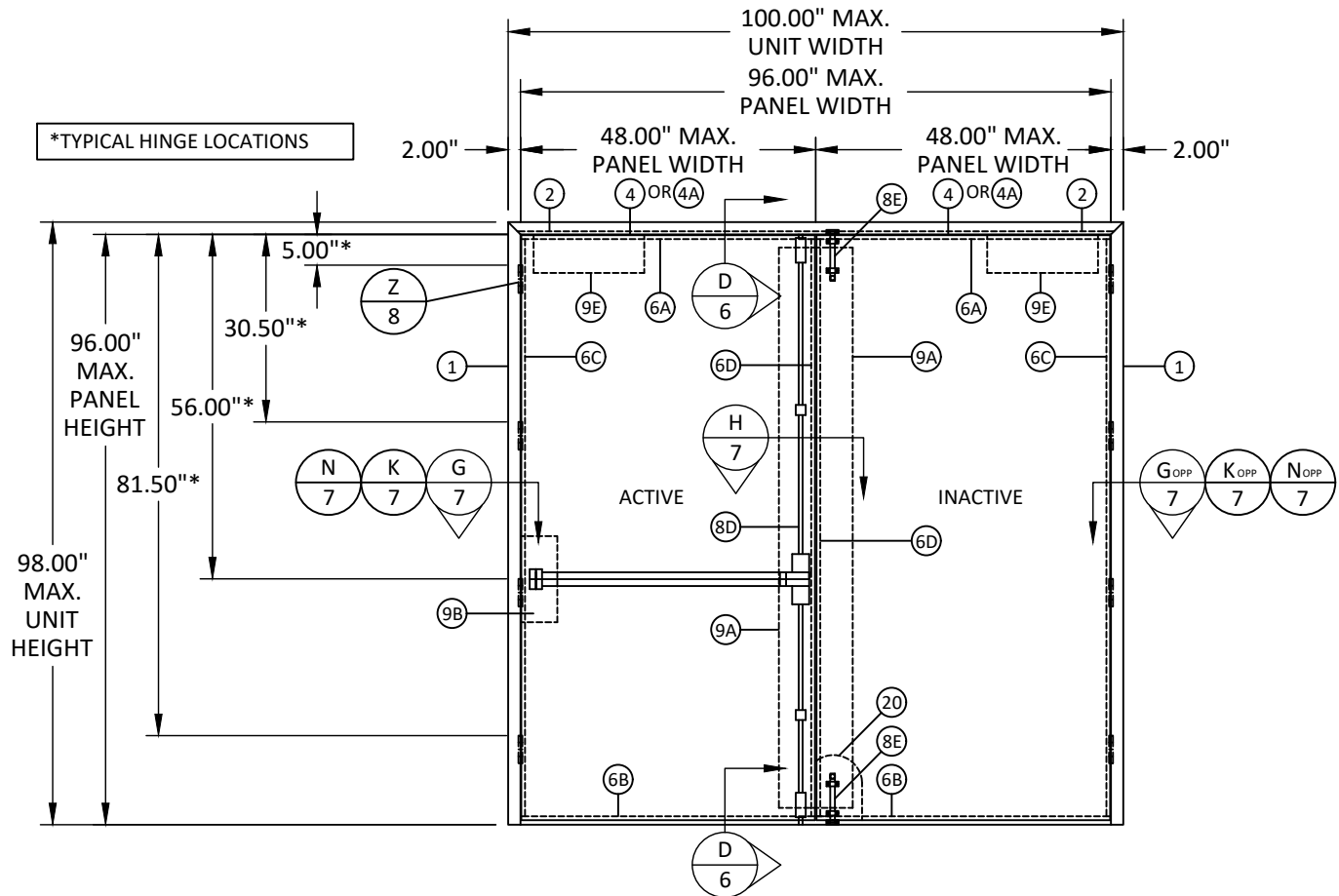
*UNIT SHALL BE INSTALLED AT LOCATION PROTECTED BY OVERHANG SUCH THE OVERHANG RATIO (OH) = OH LENGTH/OH HEIGHT GREATER THAN 1.0 WHERE WATER INFILTRATION IS REQUIRED.

3/30/2022 5:16 PM s:\projects\republic doors\dl416 flush steel door (id 7117)\rdf018.dwg s:\projects\republic doors\dl416 flush steel door (id 7117)\rdf018.dwg s:\projects\republic doors\dl416 flush steel door (id 7117)\rdf018.dwg

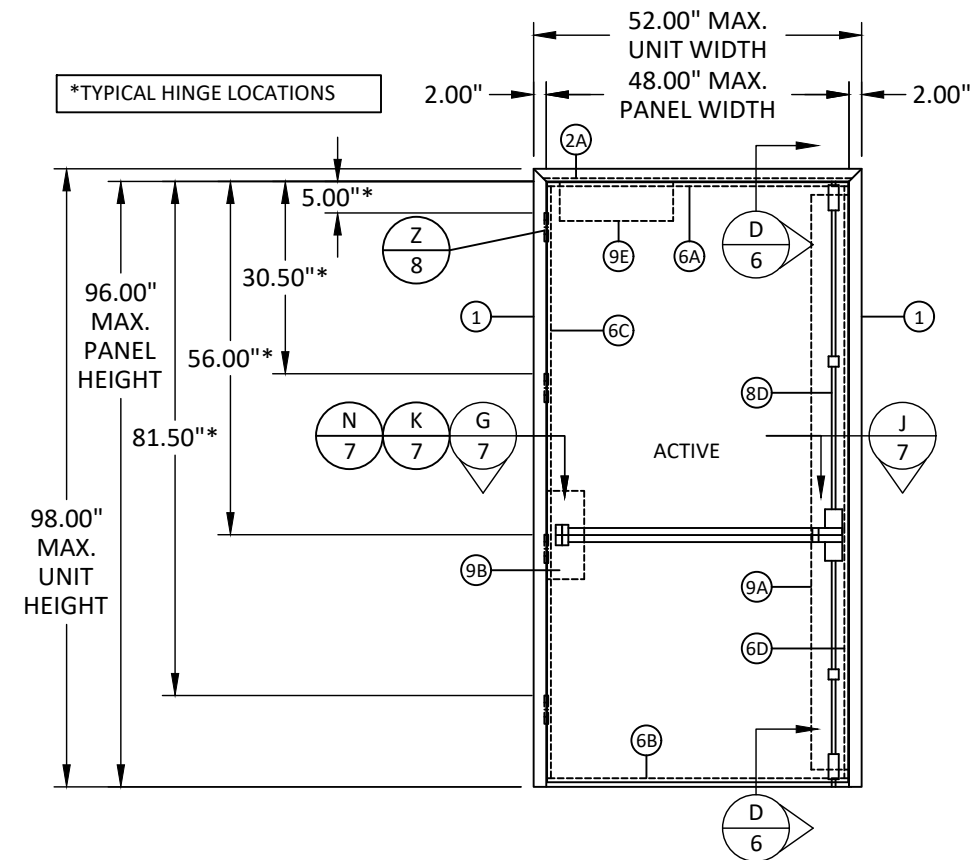
*FASTENERS SHOWN ARE TYPICAL/MINIMUM

Republic
doors · frames

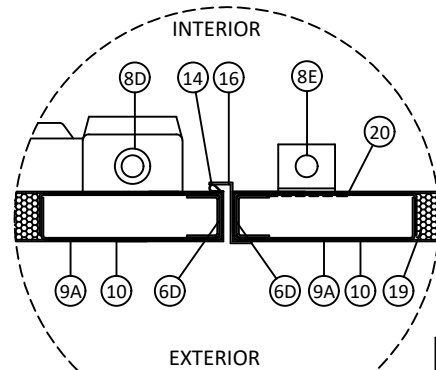
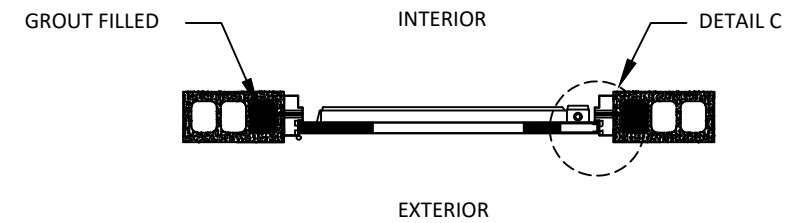
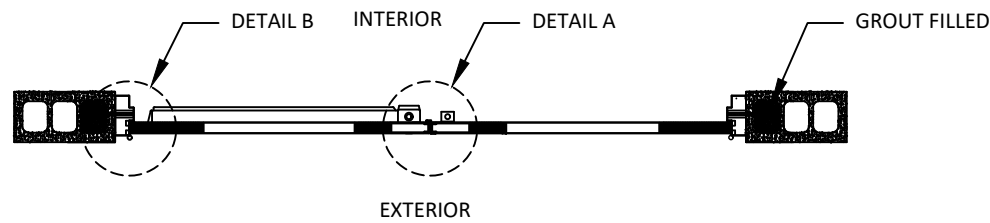
155 REPUBLIC DRIVE
MCKENZIE, TN 38201
PH: (800) 799-3667 FX: (731) 352-2556



ELEVATION DOUBLE
SURFACE VERTICAL ROD
(OUTSWING DOOR - INTERIOR VIEW)

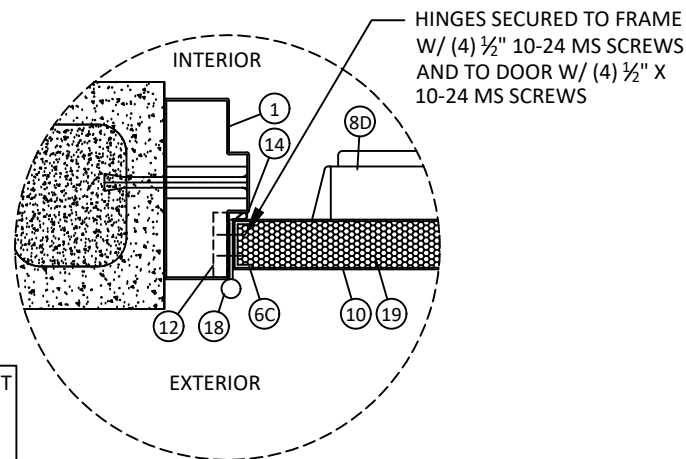


ELEVATION SINGLE
SURFACE VERTICAL ROD
(OUTSWING DOOR - INTERIOR VIEW)

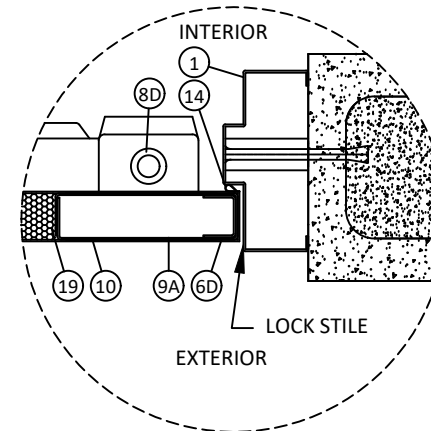


DETAIL A

REFER TO DETAILS ON SHEET
6 FOR STRIKE PLATE AND
FASTENING DETAILS



DETAIL B



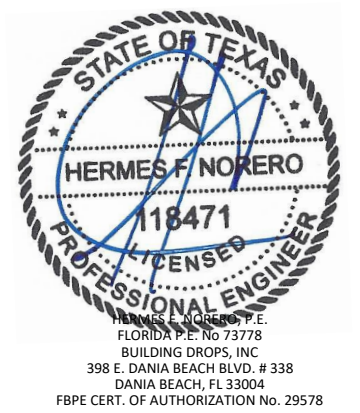
DETAIL C

TITLE:
DL 416 FLUSH STEEL DOOR
SURFACE VERTICAL ROD
ELEVATIONS & DETAILS

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 474-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
2018 IBC UPDATE	CA	3.28.22

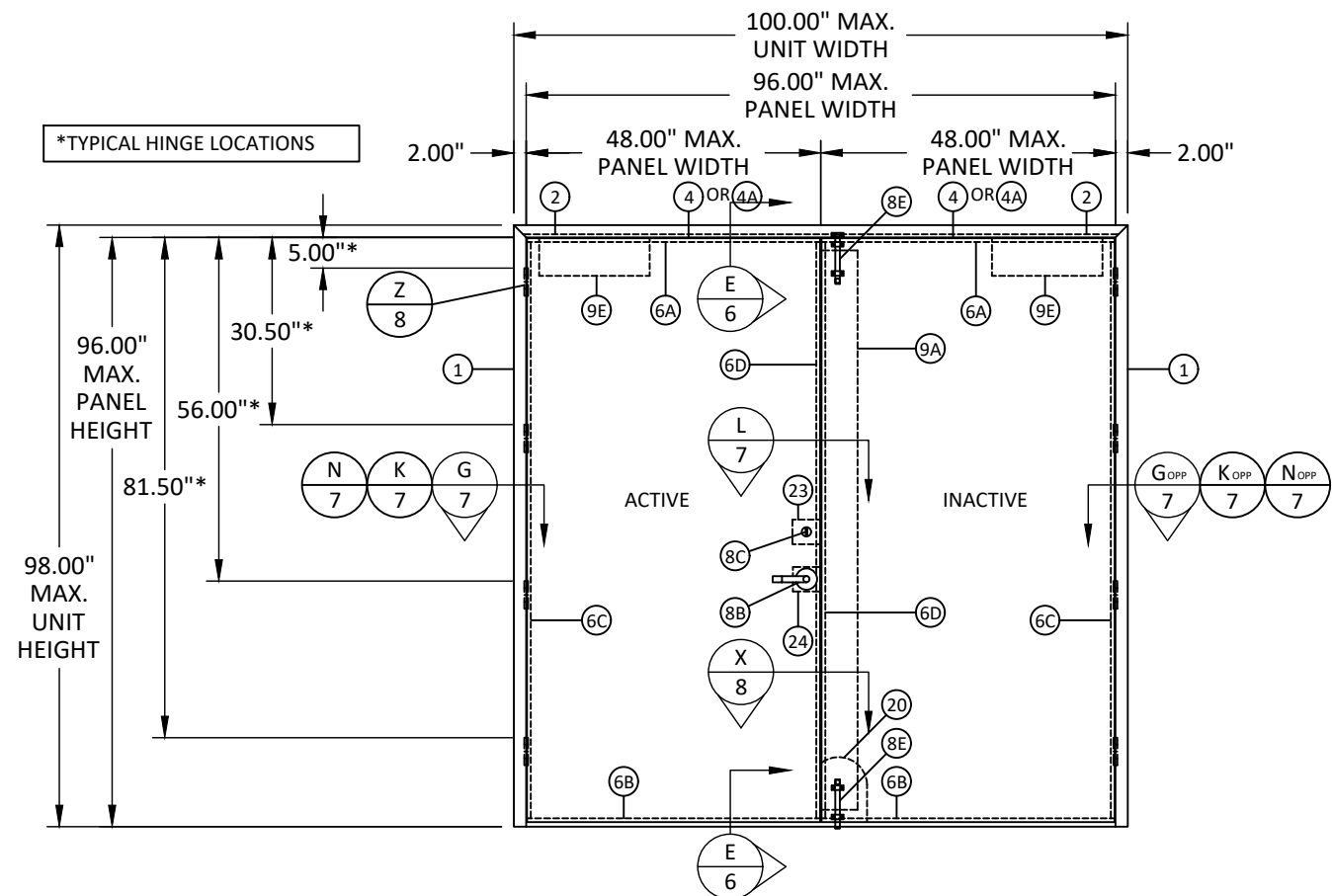
THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



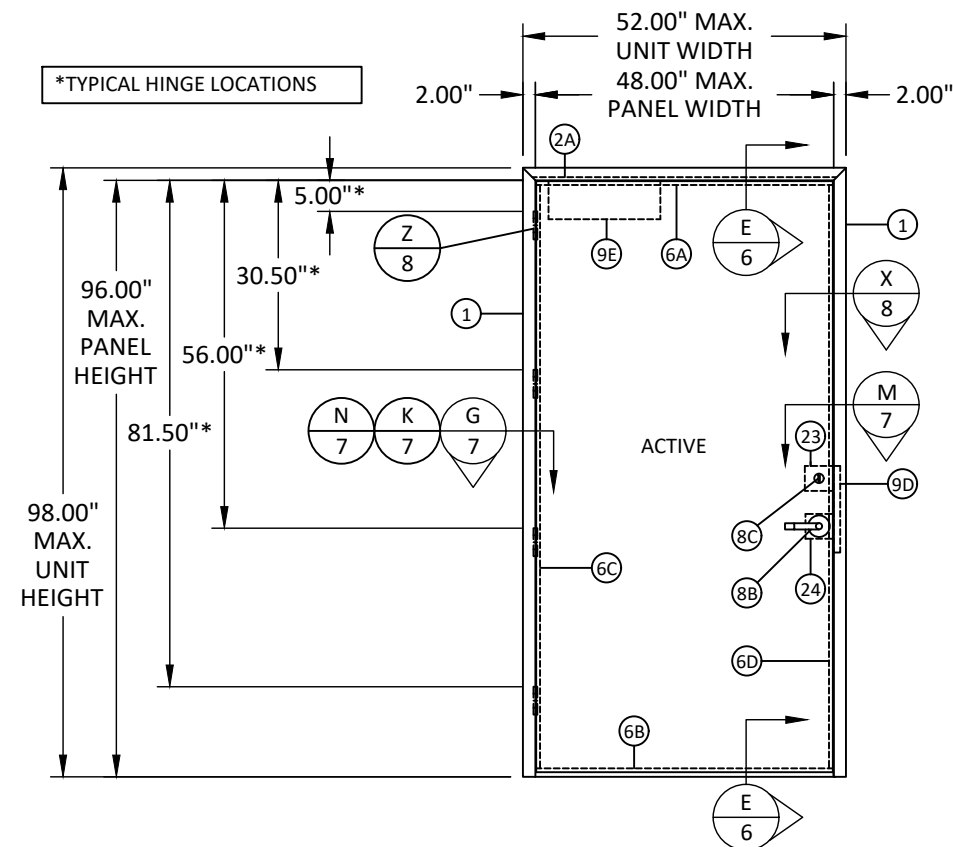
HERMES F. NORERO, P.E.
FLORIDA P.E. No. 73778
BUILDING DROPS, INC
398 E. DANIA BEACH BLVD. # 338
DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

DATE:	03.16.17	
DWG. BY:	MSS	CHK. BY: HFN
SCALE:	NTS	
DWG. #:	RDF018	
SHEET:	2	

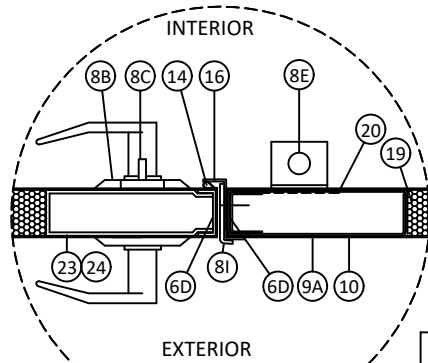
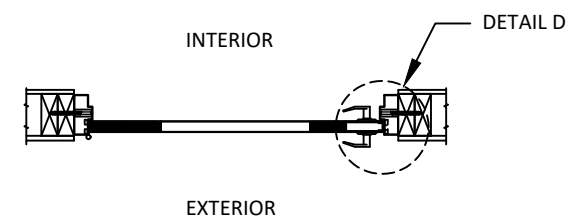
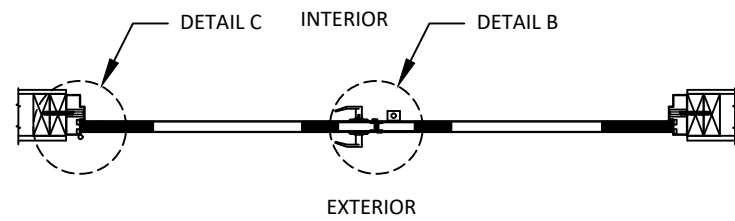
*FASTENERS SHOWN ARE TYPICAL/MINIMUM



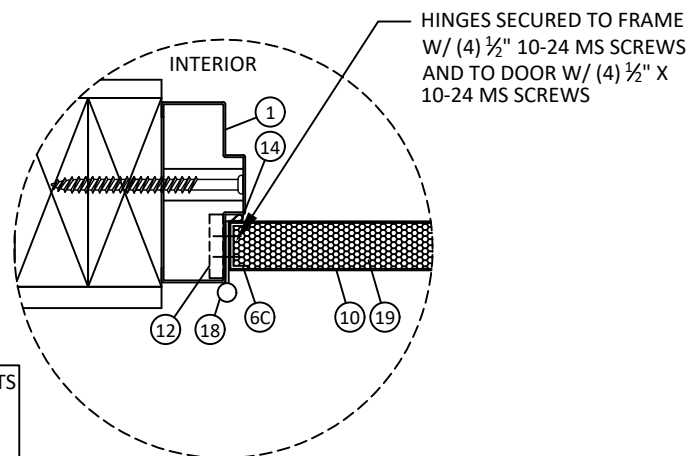
ELEVATION DOUBLE
CYLINDRICAL WITH DEADLOCK
(OUTSWING DOOR - INTERIOR VIEW)



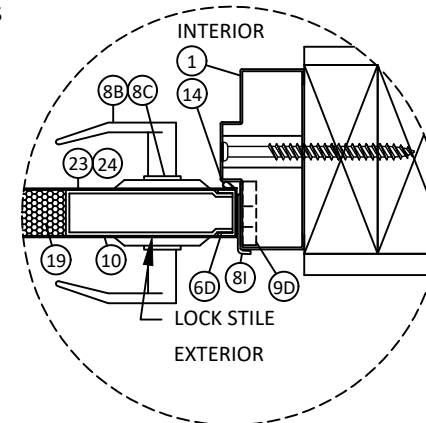
ELEVATION SINGLE
CYLINDRICAL WITH DEADLOCK
(OUTSWING DOOR - INTERIOR VIEW)



DETAIL B



DETAIL C



DETAIL D

REFER TO DETAILS ON SHEETS 6 AND 7 FOR STRIKE PLATE AND FASTENING DETAILS

Republic
doors · frames

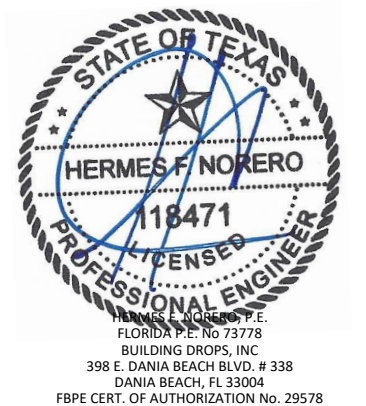
155 REPUBLIC DRIVE
MCKENZIE, TN 38201
PH: (800) 799-3667 FX: (731) 352-2556

TITLE:
DL 416 FLUSH STEEL DOOR
CYLINDRICAL W/ DEADLOCK
ELEVATIONS & DETAILS

PREPARED BY:
B.D.
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
2018 IBC UPDATE	CA	3.28.22

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



DATE: 03.16.17

DWG. BY: MSS
CHK. BY: HFN

SCALE: NTS

DWG. #: RDF018

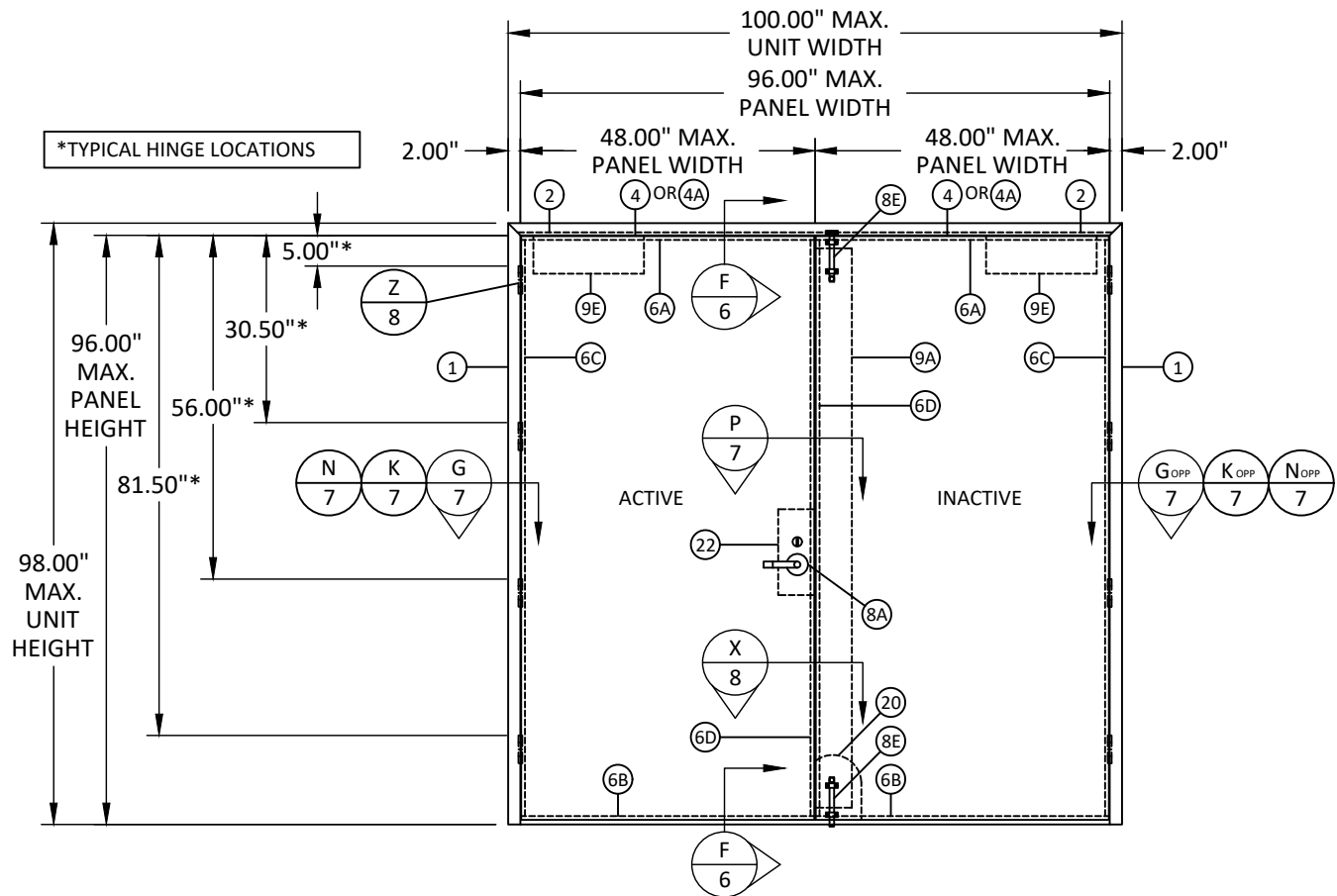
SHEET:

3

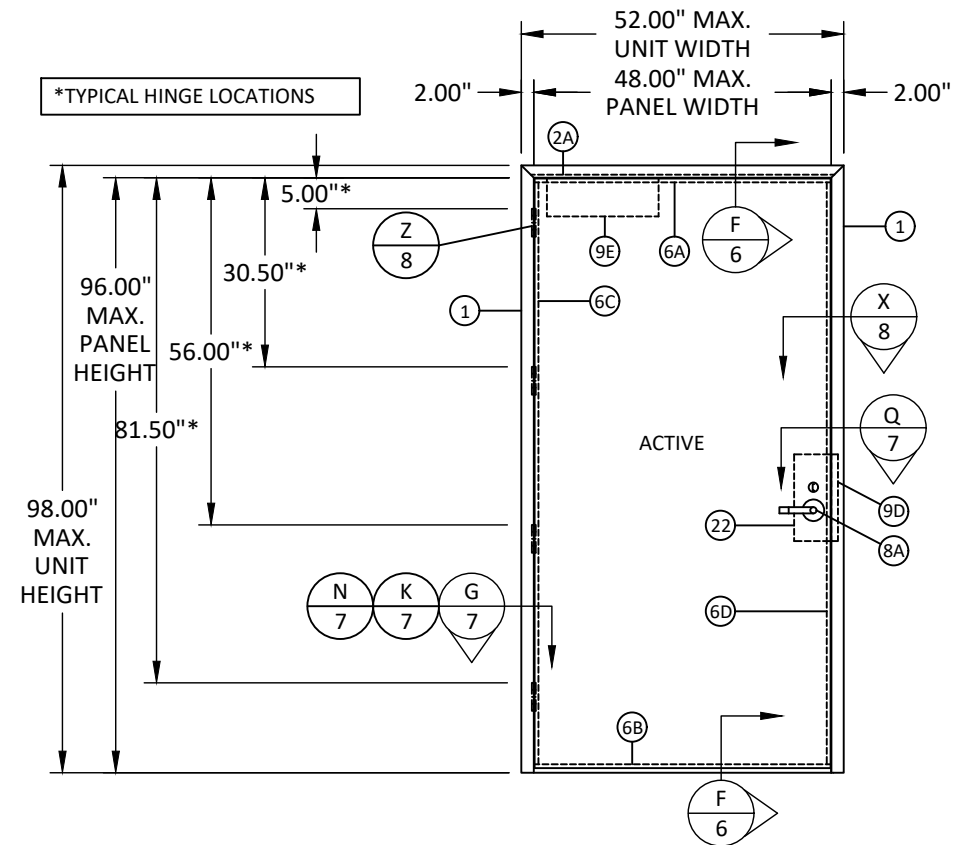
OF 9

3/30/2022 5:16 PM s:\projects\republic doors\dl-22-0116 rdi submittal - dr551, dr999, dr1000, dr1001, dr1002\dwg\3. dl416 outswing flush door (dl 7117)\rfd018.dl416 outswing flush door (dl 7117).dwg

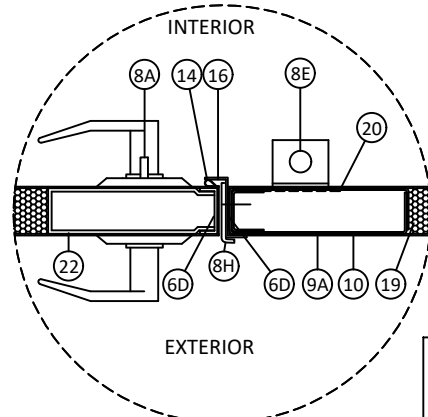
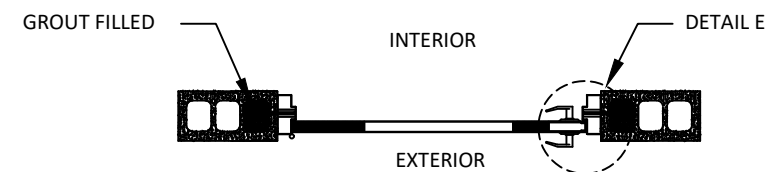
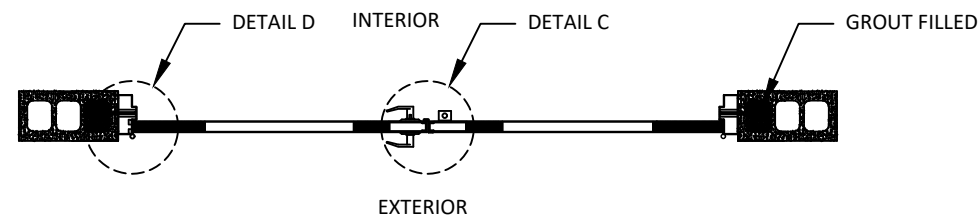
*FASTENERS SHOWN ARE TYPICAL/MINIMUM



ELEVATION DOUBLE
MORTISE LOCK WITH DEADLOCK
(OUTSWING DOOR - INTERIOR VIEW)

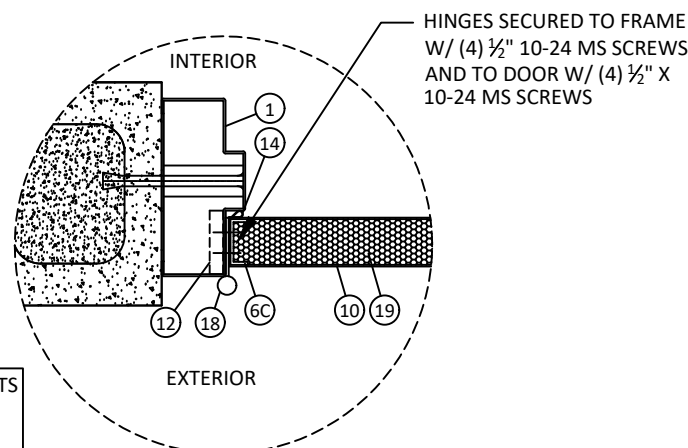


ELEVATION SINGLE
MORTISE LOCK WITH DEADLOCK
(OUTSWING DOOR - INTERIOR VIEW)

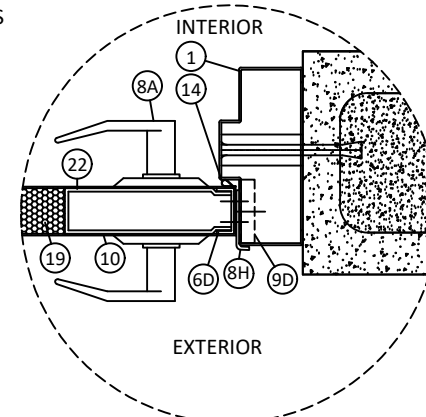


DETAIL C

REFER TO DETAILS ON SHEETS
6 AND 7 FOR STRIKE PLATE
AND FASTENING DETAILS



DETAIL D



DETAIL E

Republic
doors · frames

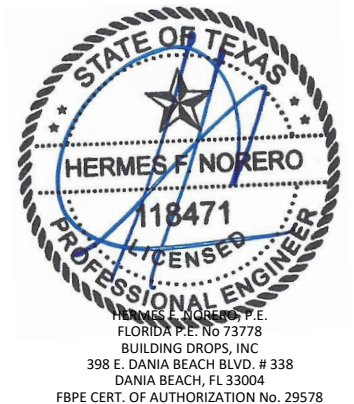
155 REPUBLIC DRIVE
MCKENZIE, TN 38201
PH: (800) 799-3667 FX: (731) 352-2556

TITLE: DL 416 FLUSH STEEL DOOR
MORTISE LOCK
ELEVATIONS & DETAILS

PREPARED BY: **BUILDING DROPS, INC.**
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 474-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
2018 IBC UPDATE	CA	3.28.22

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



DATE: 03.16.17

DWG. BY: MSS
CHK. BY: HFN

SCALE: NTS

DWG. #: RDF018

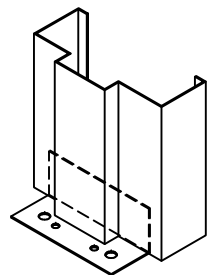
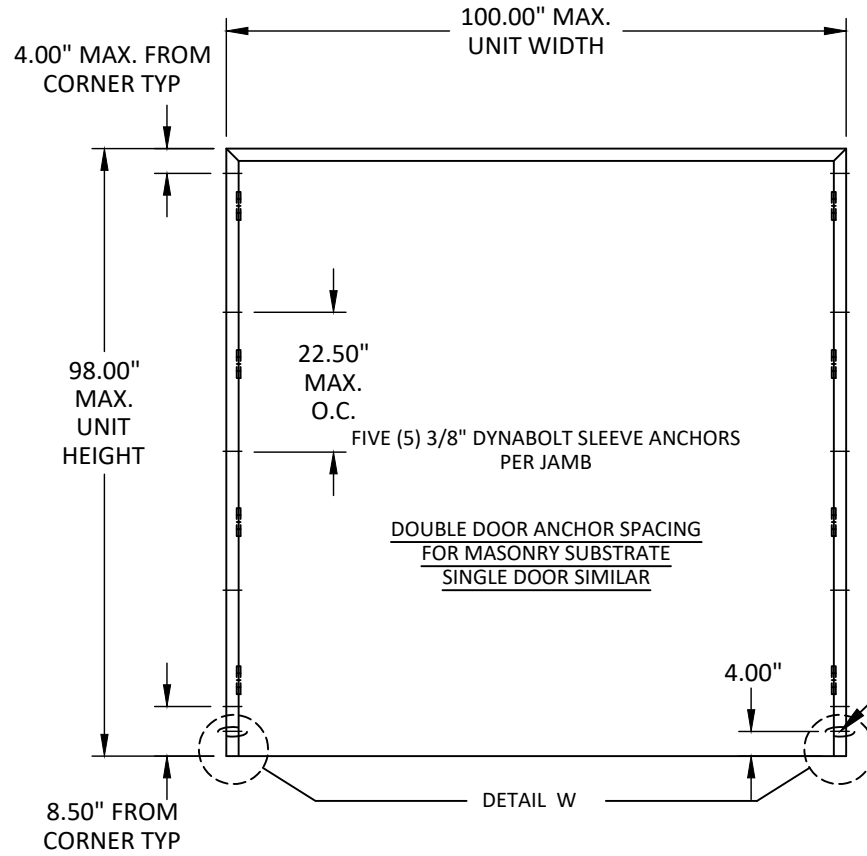
SHEET:

4

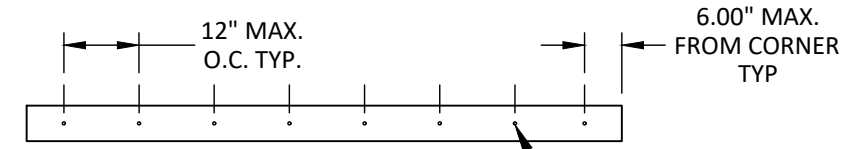
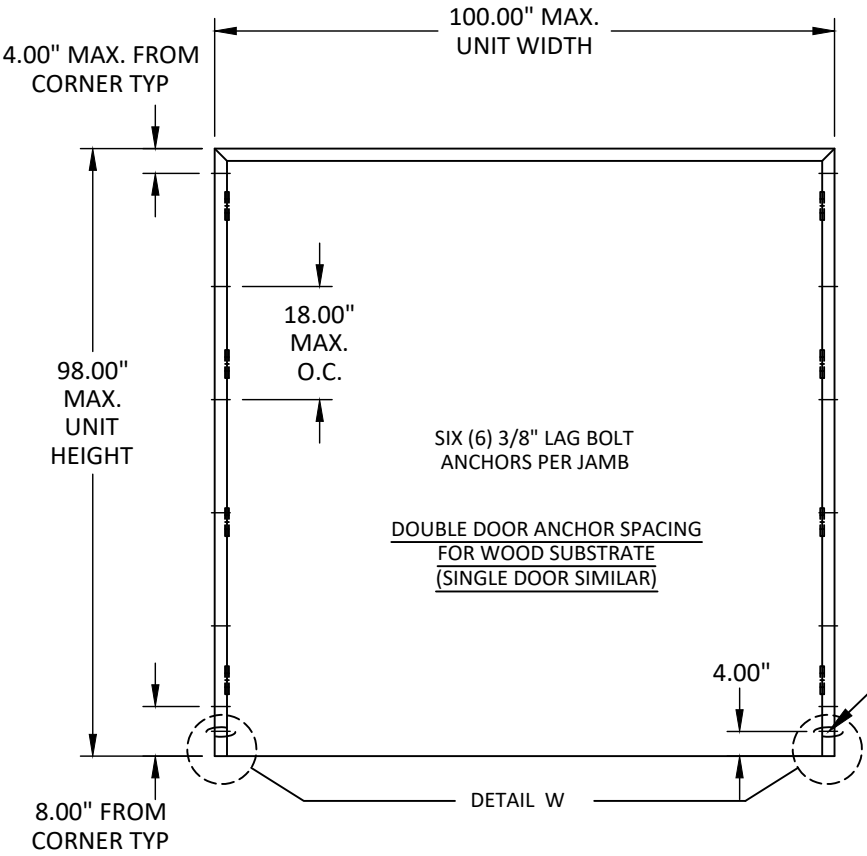
OF 9

s:\projects\republic doors\dl-22-0116 rdi\submittal - dr551 - dr999, dr1000, dr1001, dr1002\dwg\3. dl116 outswing flush door (id 7117)\rd\018 dl116 flush steel door.dwg 3/30/2022 5:16 PM

*FASTENERS SHOWN ARE TYPICAL/MINIMUM

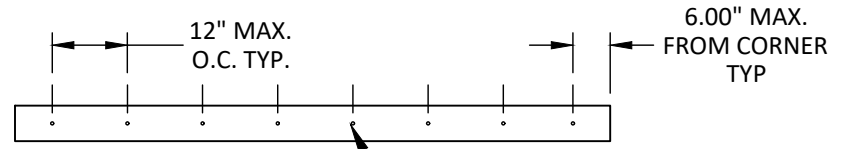


NOTE: REVERSE POSITION OF BASE SILL ANCHOR



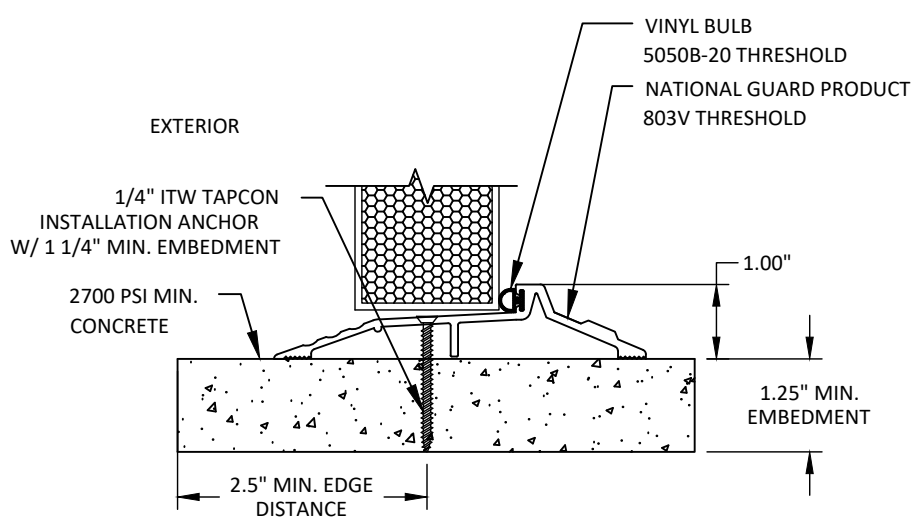
SILL

INSTALLATION ANCHOR SEE TABLE 1, SHEET 5



SILL

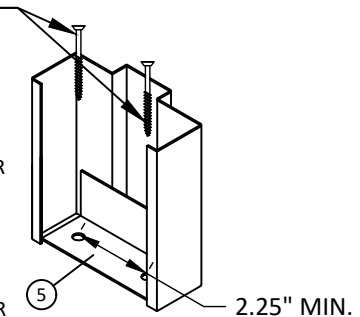
INSTALLATION ANCHOR SEE TABLE 1, SHEET 5



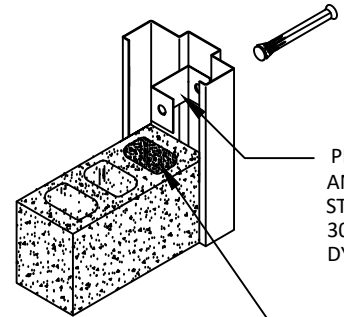
THRESHOLD DETAIL (SILL)

TWO (2) 3/16\"/>

NOTE: JAMB CORNER BASE PLATE IS ONLY USED FOR NEW CONSTRUCTION AND IS NOT POSSIBLE FOR EXISTING CONSTRUCTION. IN LIEU OF BASE PLATE ANCHORS, ADD ONE (1) ADDITIONAL 3/8\"/>

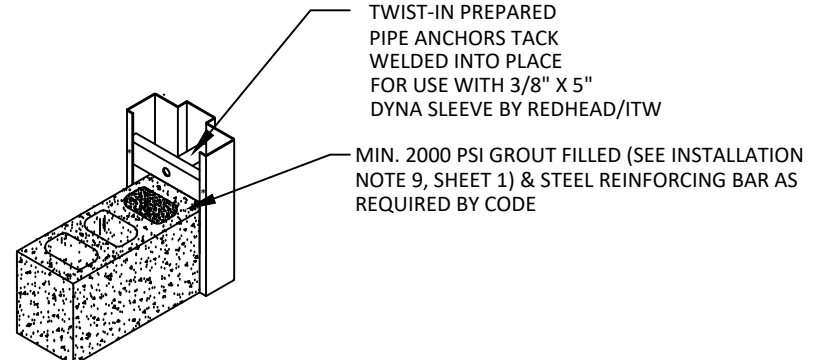


DETAIL W
JAMB CORNER BASE PLATE



PREPARED OPENING CHANNEL ANCHOR MINIMUM CONCRETE STRENGTH AT SILL AND JAMB: 3000 PSI. FOR USE WITH 3/8\"/>

MIN. 2000 PSI GROUT FILLED (SEE INSTALLATION NOTE 9, SHEET 1) & STEEL REINFORCING BAR AS REQUIRED BY CODE



TWIST-IN PREPARED PIPE ANCHORS TACK WELDED INTO PLACE FOR USE WITH 3/8\"/>

MIN. 2000 PSI GROUT FILLED (SEE INSTALLATION NOTE 9, SHEET 1) & STEEL REINFORCING BAR AS REQUIRED BY CODE

TABLE 1: CONCRETE ANCHORS AT THRESHOLD

Anchor	Embedment (in)	Min. Edge Dist. (in)
1/4" ITW Tapcon	1.25	2.25
1/4" Powers Tappers+	1.75	2.5
1/4" Hilti Kwik Con II	1	2
1/4" Elco Ultracon	1	2



155 REPUBLIC DRIVE
MCKENZIE, TN 38201
PH: (800) 799-3667 FX: (731) 352-2556

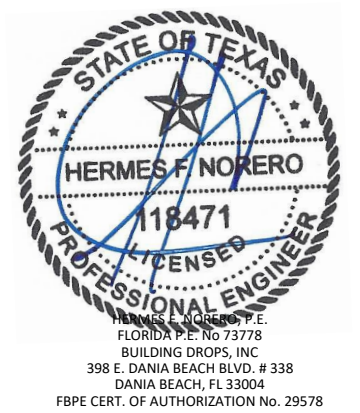
TITLE: DL 416 FLUSH STEEL DOOR ANCHOR LAYOUT

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 44-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
2018 IBC UPDATE	CA	3.28.22

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



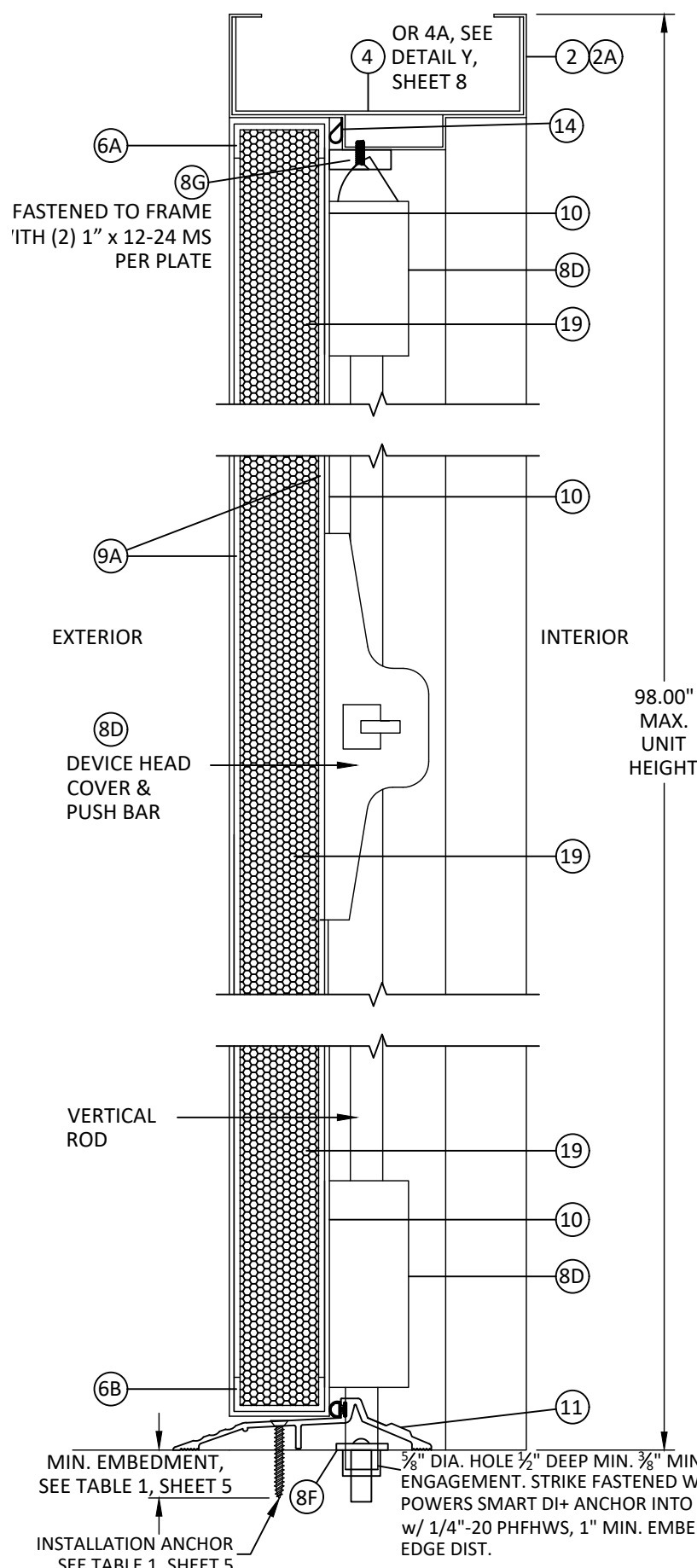
HERMES F. NORERO, P.E.
FLORIDA P.E. No. 73778
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. # 338
DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

DATE: 03.16.17	
DWG. BY: MSS	CHK. BY: HFN
SCALE: NTS	
DWG. #: RDF018	

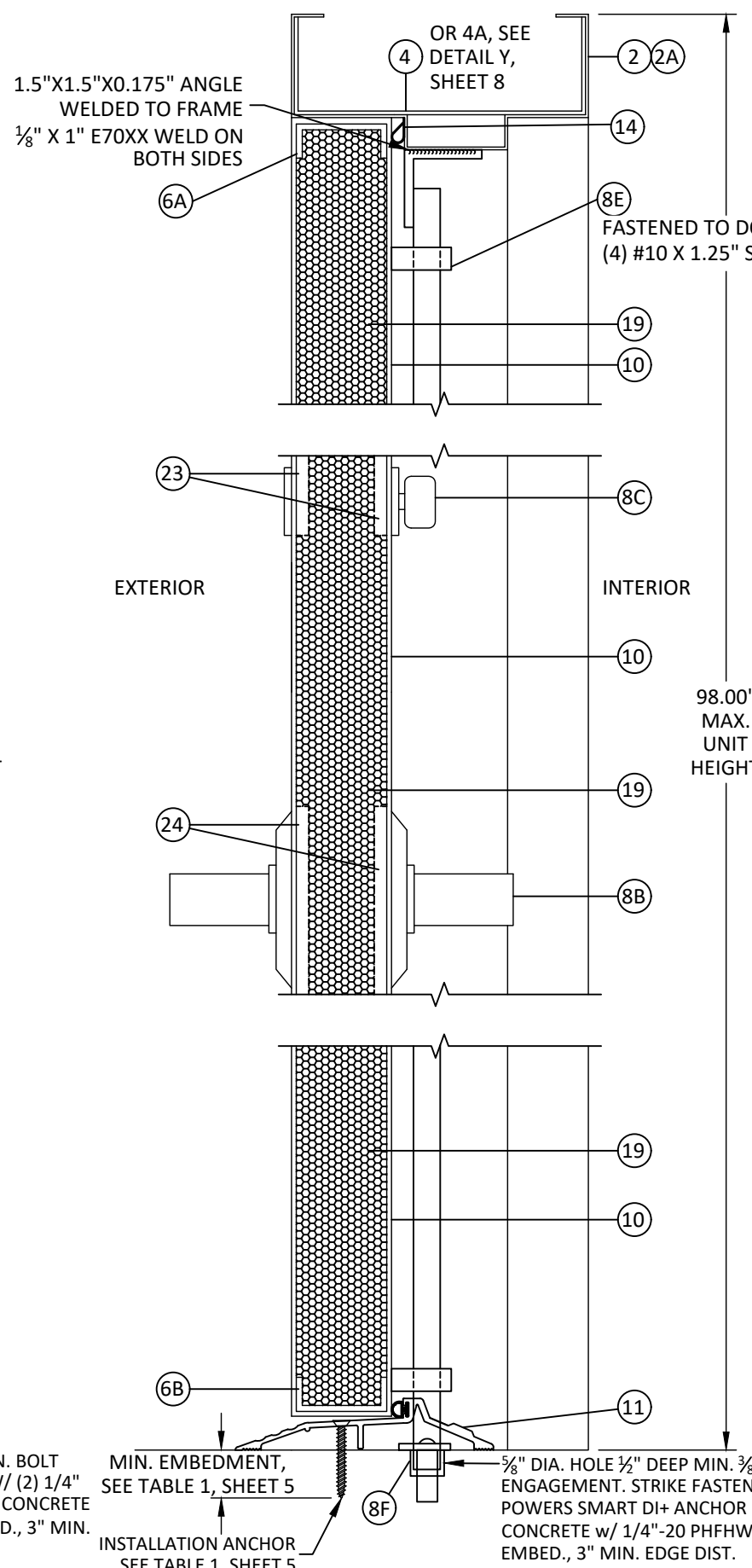
SHEET: 5 OF 9

3/30/2022 5:16 PM
s:\projects\republicdoors\dl-22-0116 rfd submittal - dr551, dr999, dr1000, dr1001, dr1002\dwg\3. dl416 outswing flush door (id 7117)\rfd018 dl416 flush steel door.dwg

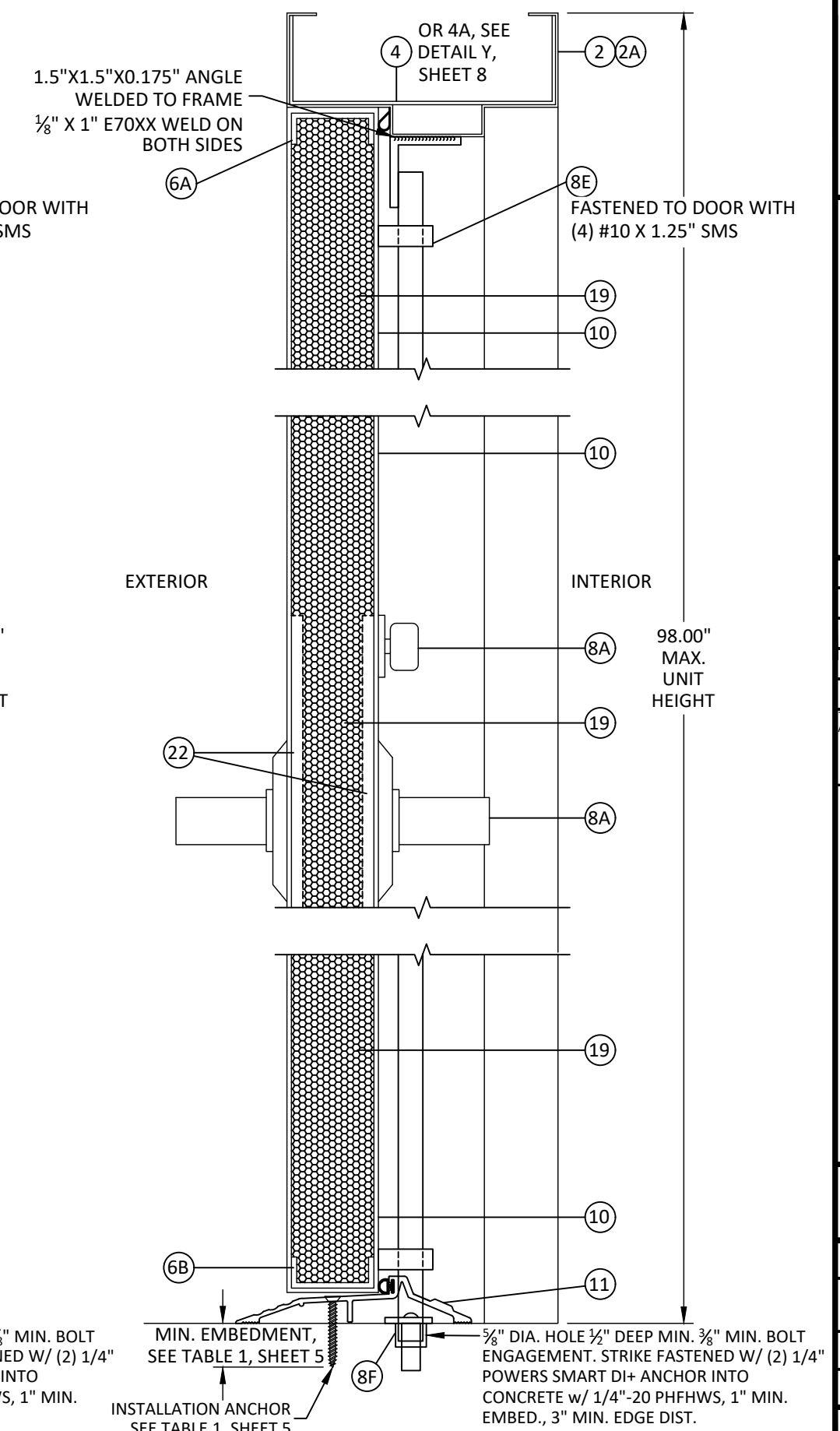
*FASTENERS SHOWN ARE TYPICAL/MINIMUM



D
6 VERTICAL SECTION
HCF SURFACE VERTICAL ROD W/ PANIC EXIT



E
6 VERTICAL SECTION
CYLINDRICAL LOCK WITH DEADLOCK



F
6 VERTICAL SECTION
MORTISE LOCK WITH DEADLOCK



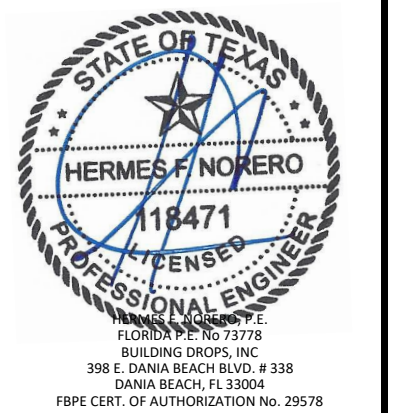
155 REPUBLIC DRIVE
MCKENZIE, TN 38201
PH: (800) 799-3667 FX: (731) 352-2556

TITLE: DL 416 FLUSH STEEL DOOR
VERTICAL SECTIONS

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 44-4738
WEB: www.buildingdrops.com

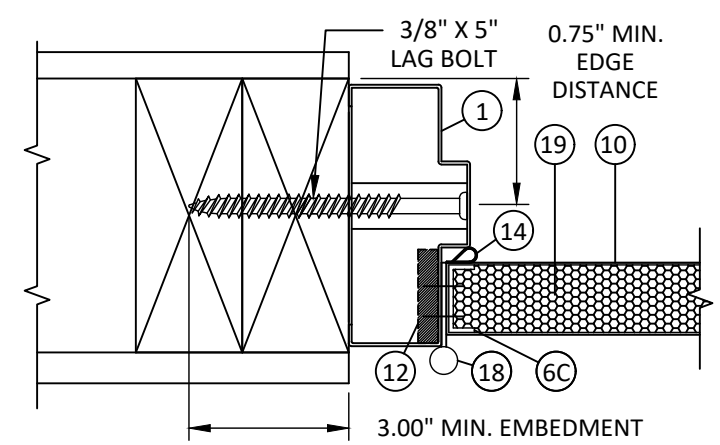
REMARKS	BY	DATE
2018 IBC UPDATE	CA	3.28.22

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.

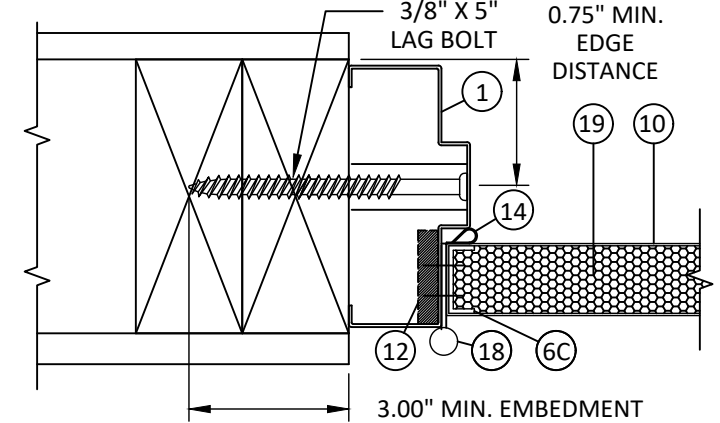


DATE:	03.16.17
DWG. BY:	MSS
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	RDF018
SHEET:	6

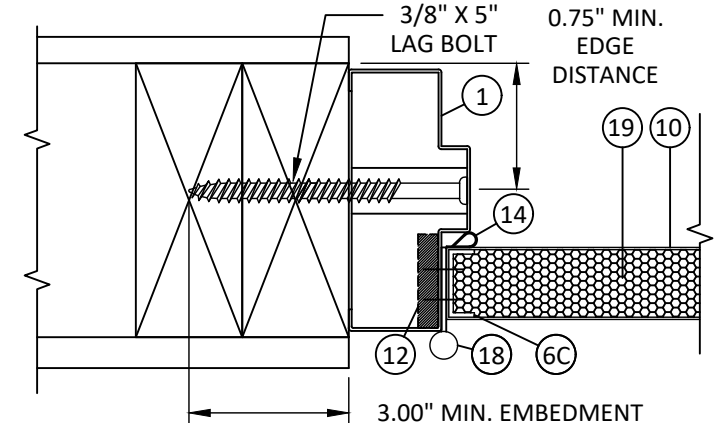
3/30/2022 5:16 PM
 s:\projects\republic-doors\rd-22-0116 rdi-submittal - dr551 - dr999 - dr1000 - dr1001 - dr1002\dwg\3. d1416 outswing flush door (id 7171)\rd18 d1416 flush steel door.dwg



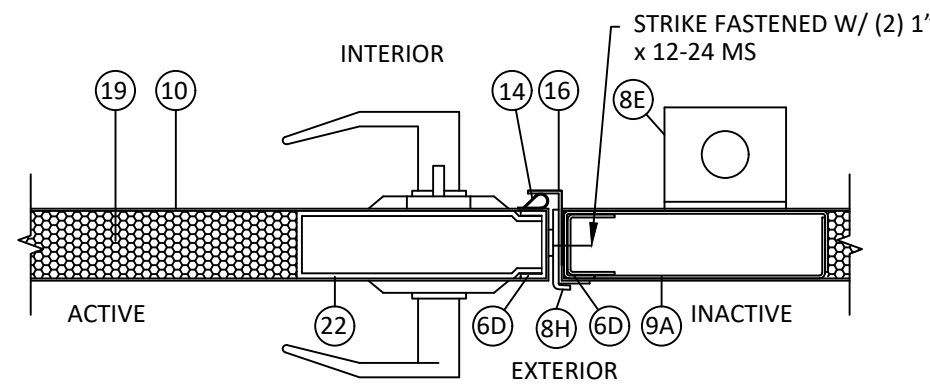
G
7
HORIZONTAL SECTION
3/8" X 6" LAG BOLT
HINGE JAMB - 2X WOOD FRAME



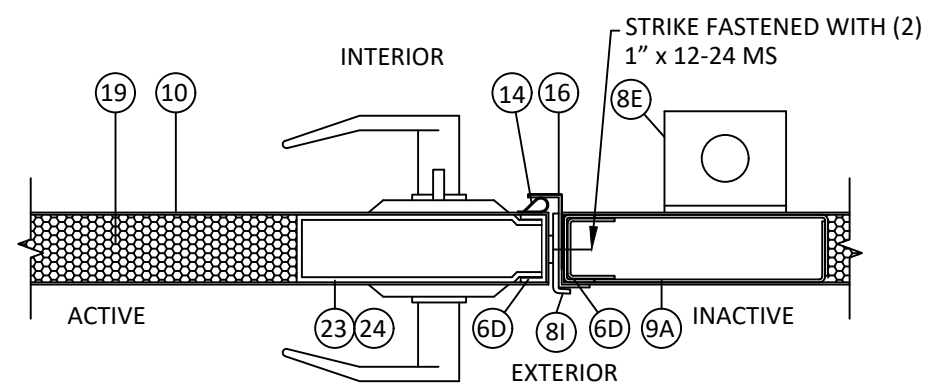
K
7
HORIZONTAL SECTION
3/8" X 6" LAG BOLT
HINGE JAMB - 2X WOOD FRAME



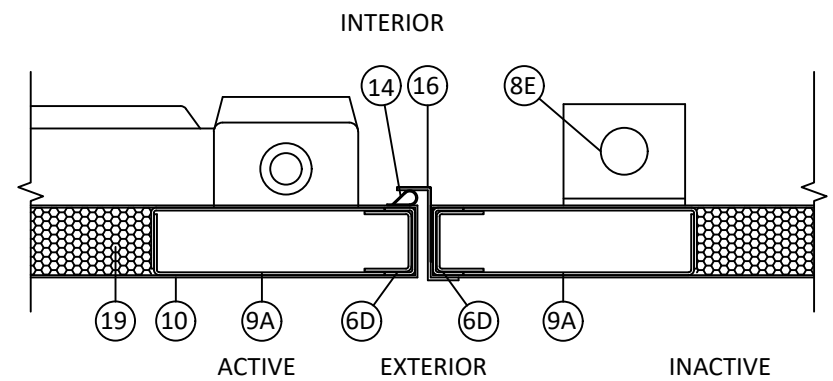
N
7
HORIZONTAL SECTION
3/8" X 6" LAG BOLT
HINGE JAMB - 2X WOOD FRAME



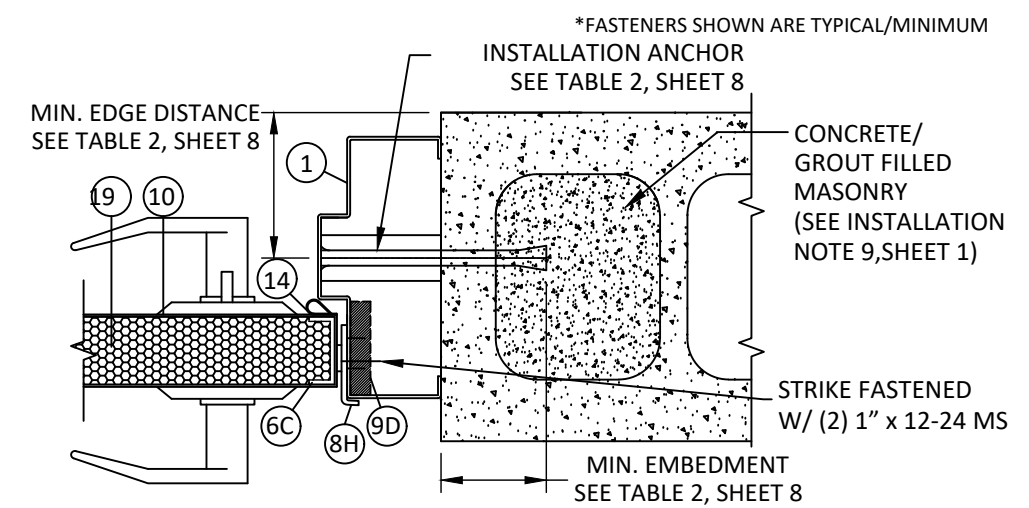
P
7
HORIZONTAL SECTION
MORTISE LOCK WITH DEADLOCK



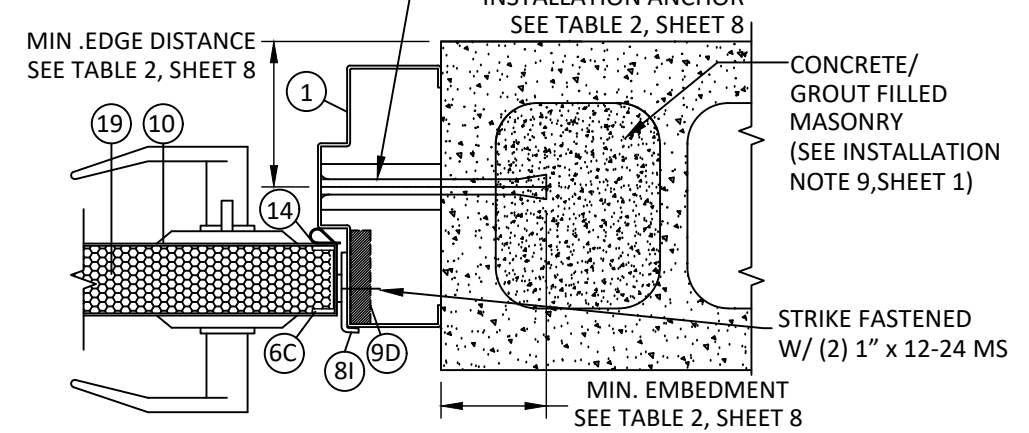
L
7
HORIZONTAL SECTION
CYLINDRICAL LOCK WITH DEADLOCK



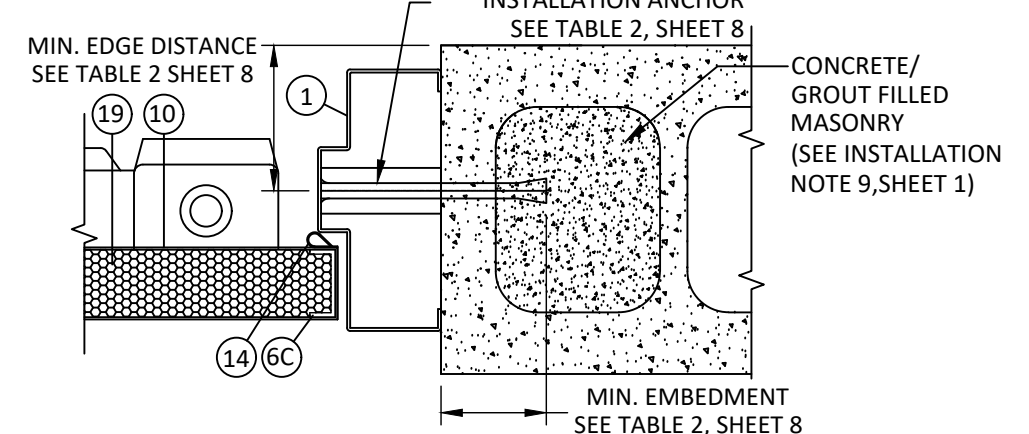
H
7
HORIZONTAL SECTION
HCF SURFACE VERTICAL ROD W/ PANIC



Q
7
HORIZONTAL SECTION
EXPANSION BOLT WITH PIPE AND STRAP
MORTISE LOCK JAMB - CONCRETE/MASONRY



M
7
HORIZONTAL SECTION
EXPANSION BOLT WITH PIPE AND STRAP
CYLINDRICAL LOCK JAMB - CONCRETE/MASONRY



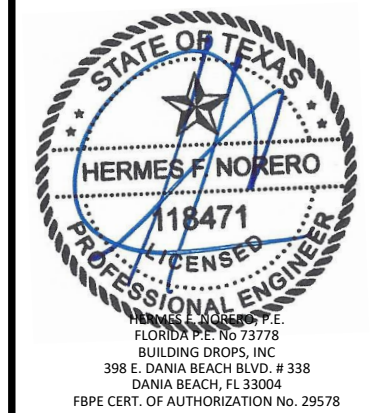
J
7
HORIZONTAL SECTION
EXPANSION BOLT WITH PIPE AND STRAP
SVR LOCK JAMB - CONCRETE/MASONRY

TITLE: DL 416 FLUSH STEEL DOOR
HORIZONTAL SECTIONS

PREPARED BY: **BUILDING DROPS, INC.**
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 474-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
2018 IBC UPDATE	CA	3.28.22

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



HERMES F. NORERO, P.E.
FLORIDA P.E. No. 73778
BUILDING DROPS, INC
398 E. DANIA BEACH BLVD. # 338
DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

DATE:	03.16.17
DWG. BY:	MSS
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	RDF018
SHEET:	7

*FASTENERS SHOWN ARE TYPICAL/MINIMUM



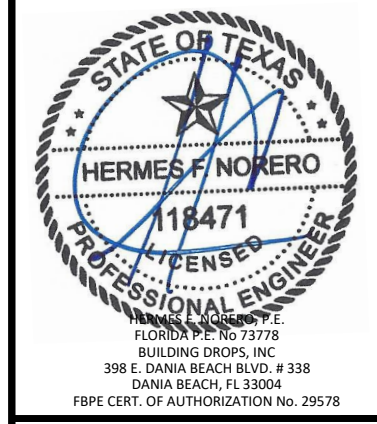
155 REPUBLIC DRIVE
MCKENZIE, TN 38201
PH: (800) 799-3667 FX: (731) 352-2556

TITLE: DL 416 FLUSH STEEL DOOR
CORNER ASSEMBLY & COMPONENTS

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 474-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
2018 IBC UPDATE	CA	3.28.22

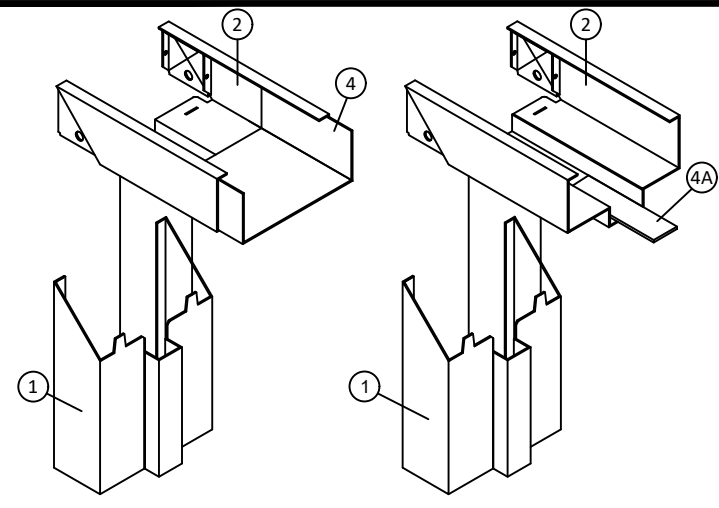
THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



HERMES F. NORERO, P.E.
FLORIDA P.E. No. 73778
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. # 338
DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

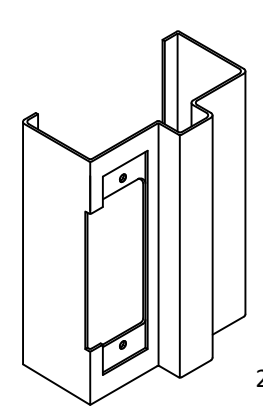
DATE: 03.16.17
DWG. BY: MSS
CHK. BY: HFN
SCALE: NTS
DWG. #: RDF018

SHEET: 8 OF 9

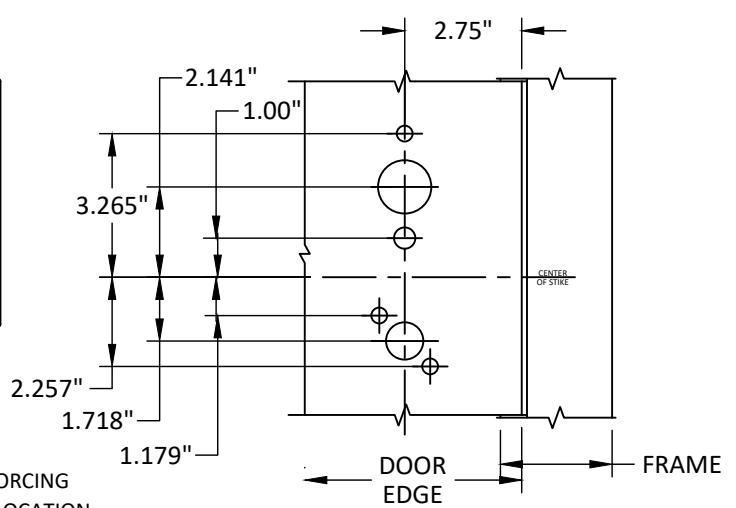


16 GAGE 5 3/4" DEPTH FRAME WITH MITERED CORNER CONSTRUCTION WITH FOUR INTEGRAL TABS WHICH INTERLOCK THE JAMBS TO THE HEAD, WITH REINFORCEMENT, PART # 4 OR 4A

DETAIL Y



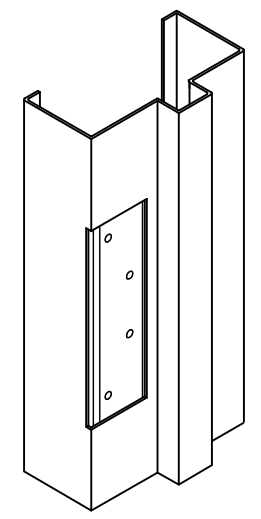
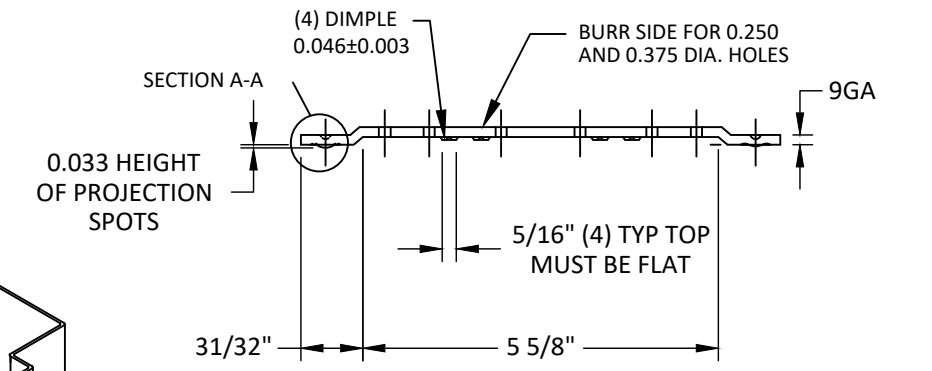
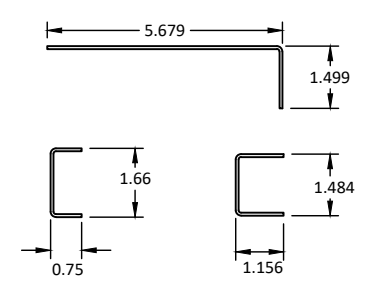
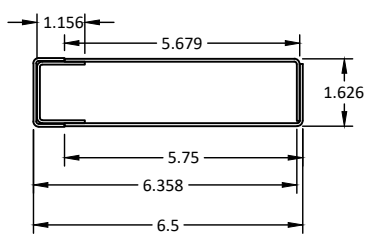
14 GAUGE STEEL REINFORCING PLATE AT LOCK STRIKE LOCATION



DETAIL X

LOCK REINFORCEMENT

9A REINFORCEMENT



DETAIL Z
HINGE REINFORCEMENT

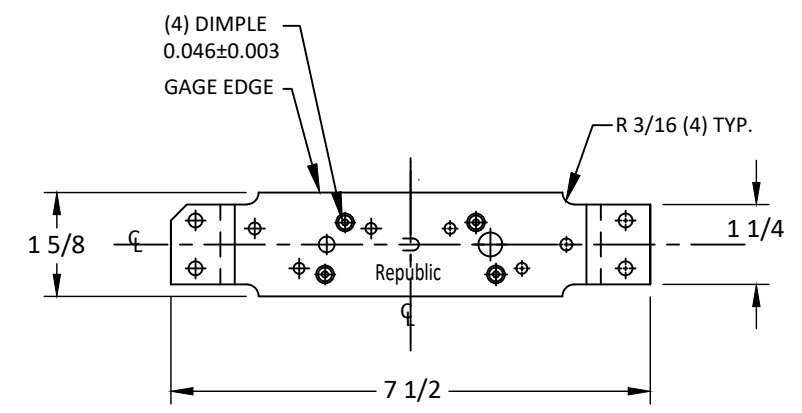
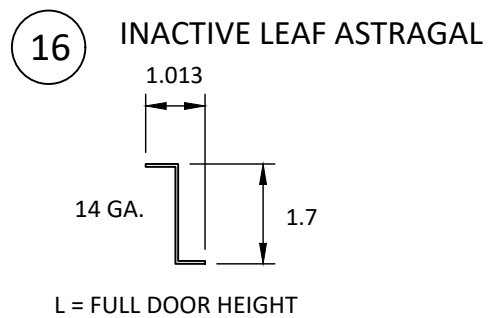
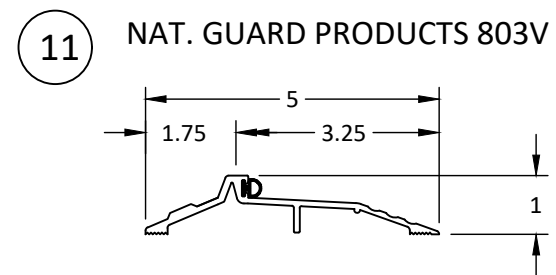
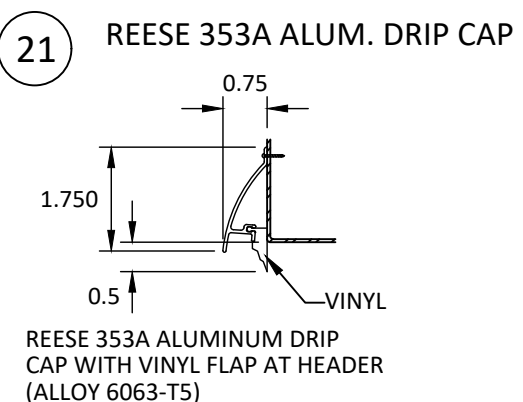
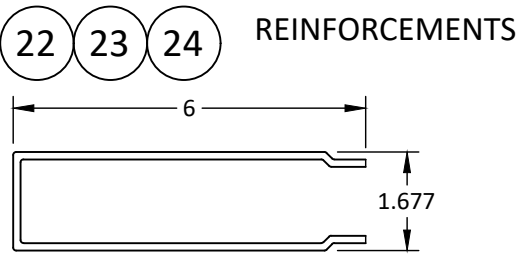
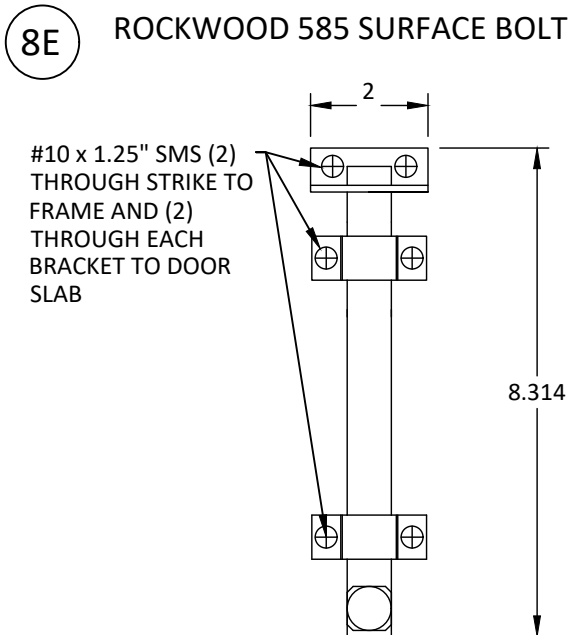
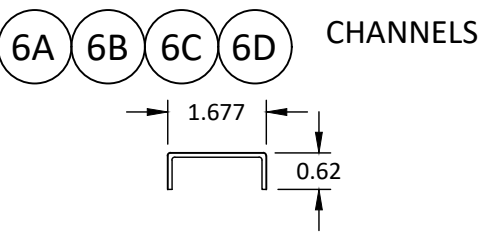
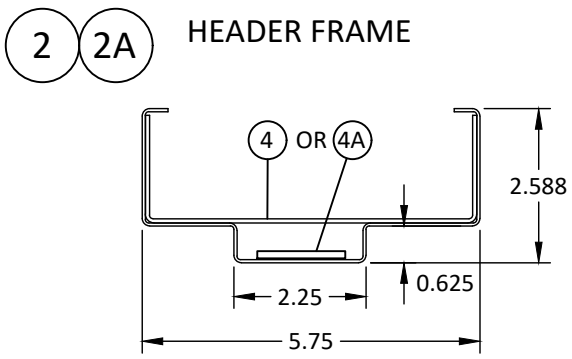
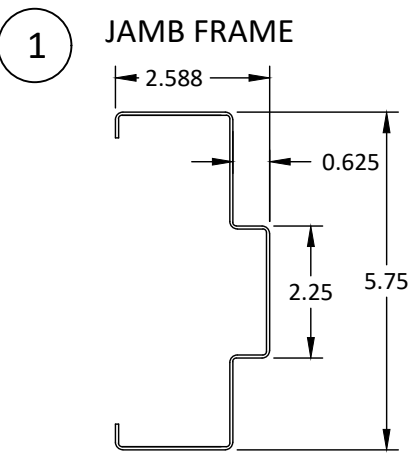


TABLE 2: CONCRETE ANCHORS AT JAMBS

Anchor	Concrete Min. 3000 psi		CMU Min. 2000 Psi	
	Embedment (in)	Min. Edge Dist. (in)	Embedment (in)	Min. Edge Dist. (in)
3/8" ITW/Redhead Dynabolt	1.5	2.25	1.875	2.25
3/8" FH Powers Power-Bolt	2	2.5	1.875	2.5
3/8" FH Powers Lok Bolt AS	1.625	2.5	1.25	2.5
3/8" Hilti HLC-FPH Sleeve Anchor	1.25	2.25	1.25	2.5

3/30/2022 5:16 PM
s:\projects\republic doors\12-22-0116 rdi submittal - dr551, dr999, dr1000, dr1001, dr1002\dwg\3. d1416 outswing flush door (id 7171)\rfd018 d1416 flush steel door.dwg

BILL OF MATERIALS			
ITEM NO.	DESCRIPTION	MATERIAL	MANUFACTURER
1	96" X 5.75" DOUBLE SWING JAMB PAIR OR SINGLE JAMB	0.053" STEEL	REPUBLIC DOOR & FRAMES
2	96" X 5.75" FACE DOUBLE OPENING HEADER	0.053" STEEL	REPUBLIC DOOR & FRAMES
2A	52" X 5.75" SINGLE DOOR HEADER	0.053" STEEL	REPUBLIC DOOR & FRAMES
3	HINGE REINFORCING FRAME	0.132" STEEL	REPUBLIC DOOR & FRAMES
4	HEADER SLEEVE REINFORCEMENT 14 GA. (.072") X 5.6875" X FULL LENGTH HEADER	0.072" STEEL	REPUBLIC DOOR & FRAMES
4A	HEADER FLAT STOCK REINFORCEMENT 10 GA. (.125") X 1.5" X FULL LENGTH HEADER	0.125" STEEL	REPUBLIC DOOR & FRAMES
5	BASE ANCHOR 1.875" X 1.875"	0.053" STEEL	REPUBLIC DOOR & FRAMES
6A	TOP CHANNELS 16 GA. X 1.677" X 0.62" CHANNEL FULL LENGTH DOOR PANEL WIDTH	0.053" STEEL	REPUBLIC DOOR & FRAMES
6B	BOTTOM CHANNELS 16 GA. X 1.677" X 0.62" CHANNEL FULL LENGTH OF DOOR PANEL WIDTH	0.053" STEEL	REPUBLIC DOOR & FRAMES
6C	HINGE CHANNELS 16 GA. X 1.677" X 0.62" CHANNEL FULL DOOR HEIGHT	0.053" STEEL	REPUBLIC DOOR & FRAMES
6D	LOCK CHANNELS 16 GA. X 1.677" X 0.62" CHANNEL FULL DOOR HEIGHT	0.053" STEEL	REPUBLIC DOOR & FRAMES
8A	DORMA ML9953D MORTISE LOCK W/ DEADBOLT	STEEL	DORMA
8B	DORMA CL753D STANDARD LATCH	STEEL	DORMA
8C	DORMA DB660D DEADLOCK	STEEL	DORMA
8D	HCF 9400 SURFACE VERTICAL ROD W/ PANIC DEVICE	STEEL	PRECISION
8E	ROCKWOOD 585 SURFACE BOLTS	STEEL	ROCKWOOD
8F	DORMA 340 STRIKE PLATE	STEEL	DORMA
8G	DORMA 426 STRIKE PLATE	STEEL	DORMA
8H	4 7/8" ASA STRIKE	STEEL	DORMA
8I	STRIKE 5001 118	STEEL	DORMA
9A	CONTINUOUS HARDWARE REINF. 14 GA. (0.072") 1.677" X 6" X (DOOR HEIGHT - 11")	0.072" STEEL	REPUBLIC DOOR & FRAMES
9B	EXIT DEVICE REINFORCEMENT 14 GA. (0.072") 1.677" X 5.313" X 14"	0.072" STEEL	REPUBLIC DOOR & FRAMES
9D	FRAME STRIKE REINFORCEMENT PLATE 14 GA. ANSI/ASA 4.875	0.072" STEEL	REPUBLIC DOOR & FRAMES
9E	CLOSER REINFORCEMENT 14 GA. (0.072") X 1.677" X 6" X 18"	0.072" STEEL	REPUBLIC DOOR & FRAMES
10	DOOR SKINS FY=45.7 KSI MIN.	0.53" STEEL	REPUBLIC DOOR & FRAMES
11	NATIONAL GUARD PRODUCTS 803V	ALUMINUM	NATIONAL GUARD PRODUCTS
12	DOOR HINGE REINFORCEMENT 9 GA. (0.132") X 7.5" X 1.625"	0.132" STEEL	REPUBLIC DOOR & FRAMES
13	ANCHORS (SEE SHEET 5) 3/8" LAG BOLT, 3/8" DYNABOLT ITW/RED HEAD, & 1/4" ITW (SILL ONLY)	VARIES	ITW / RED HEAD
14	NATIONAL GUARD PROD. 5050B-20	VINYL BULB	NATIONAL GUARD PRODUCTS
15	ALL PURPOSE SILICONE CAULK	SILICONE	
16	INACTIVE LEAF ASTRAGAL 14 GA. (0.072") X 1.7" X FULL DOOR HEIGHT	0.072" STEEL	REPUBLIC DOOR & FRAMES
17	16 GA. CUT OUT REINFORCEMENT	0.053" STEEL	REPUBLIC DOOR & FRAMES
18	PBB - STANDARD WT. 4 1/2" X 4 1/2" X .134" THICK HINGES		PBB
19	HONEYCOMB CORE TYPE 99-0-3/4 (SS, POLY OPT.)		REPUBLIC DOOR & FRAMES
20	SURFACE BOLT ANGLE REINFORCEMENT 7 GAUGE X 0.175" X 1.5" X 1.5"	0.175" STEEL	ROCKWOOD
21	REESE 353A ALUMINUM DRIP CAP	ALLOY 6063-T5	RESSE
22	MORTISE LOCK REINFORCEMENT 14 GAUGE X 1.677" X 5.313" X 14"	0.072" STEEL	REPUBLIC DOOR & FRAMES
23	DEAD LOCK REINFORCEMENT 16 GAUGE X 3" X 3"	0.053" STEEL	REPUBLIC DOOR & FRAMES
24	CYLINDRICAL LOCK REINFORCEMENT 16 GAUGE X 3" X 2.5"	0.053" STEEL	REPUBLIC DOOR & FRAMES



NOTE: ALL DIMENSIONS SHOWN ARE IN INCHES.



155 REPUBLIC DRIVE
MCKENZIE, TN 38201
PH: (800) 799-3667 FX: (731) 352-2556

TITLE: DL 416 FLUSH STEEL DOOR
BILL OF MATERIALS & COMPONENTS

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 44-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
2018 IBC UPDATE	CA	3.28.22

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



HERMES F. NORERO, P.E.
FLORIDA P.E. No. 73778
BUILDING DROPS, INC
398 E. DANIA BEACH BLVD. # 338
DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

DATE:	03.16.17	
DWG. BY:	MSS	CHK. BY: HFN
SCALE:	NTS	
DWG. #:	RDF018	

SHEET: **9** OF 9