

8

7

6

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1

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. RATED DESIGN LOAD +46/-52 PSF.

2. SECTION HEIGHTS MAY VARY TO CREATE VARIOUS DOOR HEIGHTS, 20.8" MAXIMUM SECTION HEIGHT.

3. FOAMSTOP OR JAMB SEAL ON ALL JAMBS REQUIRED TO MEET NEGATIVE DESIGN PRESSURES NAILED 6" O.C..

4. TESTED IN ACCORDANCE WITH DADE COUNTY PROTOCOLS TAS 201-94, TAS 202-94, & TAS 203-94.

5. DOOR SKIN MUST BE 25,000 PSI MIN. YIELD STRENGTH.

6. JAMB LOAD CALCULATIONS:
(1/2 DOOR WIDTH)(1 FT OF HEIGHT)(DESIGN PRESSURE)
(4.567)(1 FOOT)(46.00 AND -52.00)(210.082/-237.484) LB.

7. JAMB FASTENER REQUIREMENTS:
 $F_x = (1/2 \text{ DOOR WIDTH})(1 \text{ FT OF HEIGHT})(DESIGN PRESSURE)$
 $F_x = 237.484 \text{ LBS.}$

8. DOOR SKIN MATERIAL SHALL BE GALVANIZED ACCORDING TO ASTM A-525 TO G90 MIN, WITH BAKED-ON PRIMER, AND BAKED-ON POLYESTER PAINT TOP COAT.

9. FOR ANCHORING INTO WOOD,USE ONE 5/16" LAG SCREW PER JAMB BRACKET WITH 1-1/2" EMBEDMENT INTO SOUTHERN PINE (G=0.55) OR BETTER.

10. APPROVED INSULATED AND NON-INSULATED: 170 (25GA), 171(25GA), 175(25GA), 180 (25GA), 181(25GA), 185(25GA), 1400(25GA), 1500(25GA), 0.0209" MIN STEEL.

11. WELD SLOT ON ANGLE AND 3/32" X 1" LONG ON 12" CENTERS. "IF WELDING MOUNTING OPTION IS CHOSEN."

12. LIFT UP MECHANISM-MANUAL, CHAIN LIFT, OR OPERATOR IS NOT PART OF THIS APPROVAL.

13. STANDARD LIFT, HIGH LIFT, VERTICAL LIFT, AND LOW HEADROOM TRACK IS AVAILABLE. FOR LOW HEADROOM LIFT CONDITIONS TOP BRACKET SHALL BE 13 GA LHR 7/4 TOP BRACKET WITH A MIN OF (3) 1/4 - 14 X 7/8" SELF DRILLING CRIMPTITE SCREWS IN LIEU OF THE BRACKET SHOWN ON DRAWING. U-BAR ON TOP SECTION SHALL BE INSTALLED ON TOP OF LHR TOP BRACKETS.

14. ATTACH STRUTS WITH (2) 1/4-14x7/8" SELF DRILLING CRIMPTITE SCREWS AT ALL STILE LOCATIONS, TYP. LOCATED WITHIN 6" , +/- 3" FROM TOP OF SECTION.

15. KEY LOCK, SLIDE LOCK, OR DRAWBAR OPERATOR REQUIRED.

16. IMPACT RESISTANT GLAZING OPTION- IMPACT RESISTANT GLAZING SYSTEM MAY BE INSTALLED INTERMEDIATE SECTION OR TOP SECTION. GLAZING SHALL BE 1/4" POLYCARBONATE. 13-3/4" X 20-1/8" MAXIMUM SIZE, FASTENED WITH # 8 X 1" SMS: 3X MIN ALONG THE HORIZONTAL AND 2X MIN ALONG THE VERTICAL. SEE DETAIL F-F ON SHEET 2 FOR ASSEMBLY DETAILS.

17. THE DESIGN OF THE SUPPORTING STRUCTURAL ELEMENTS SHALL BE THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD FOR THE BUILDING OR STRUCTURE AND IN ACCORDANCE WITH CURRENT BUILDING CODES FOR THE LOADS LISTED ON THIS DRAWING.

18. DOORS ARE DESIGNED AND MANUFACTURED TO COMPLY WITH REGULATIONS PER BUILDING CODES: 2018 IRC AND 2018 IBC.

ER

REV

DESCRIPTION

DATE

APVL

32537

A

ADD NOTE 18: IBC/IRC

11/30/20

JQ

32769

B

UPDATED PER PCR

2/28/22

SW

NON-INSULATION

OPTIONAL INSULATION

30 GAUGE STEEL COVER SHEET

20.80

2.00

1 PCF EXPANDED POLYSTYRENE (EPS)

SECTION C-C
SCALE 1 : 4

END BEARING BRACKET, STANDARD LIFT SHOWN, LOW HEADROOM CLEARANCE AVAILABLE (SEE TRACK DETAILS ON SHEET 3)

15 GAUGE HORIZONTAL TRACK

FLAG ANGLE

15" MAX (TOP TRACK CLIPS ONLY)

12" MAX

12" MAX

12" MAX

12" MAX

12" MAX

10.65

2.00

JAMB BRACKET PLACEMENT VARIES ON DOOR HEIGHT

15 GAUGE VERTICAL TRACK

SECTION D-D
SCALE 1 : 4

2" TRACK

ANGLE

STEEL SECTION SKIN

RETAINER

WEATHERSEAL (ASTRAGAL)

DETAIL B
SCALE 1 : 4

SECTION A-A
SCALE 1 : 12

FOAMSTOP/ JAMB SEAL MIN 7/16" THICK, NAILED EVERY 6" ON CENTER

16GA X 3" ENDSTILES ATTACHED TO THE DOOR WITH ADHESIVE AND (4) 8-15X9/16" SCREWS

20GA X 3" CENTER STILES ATTACHED TO THE DOOR WITH ADHESIVE AND (4) 8-15X9/16" SCREWS

DOOR JAMB

17.125

14.125

8.25

2.875

1.00

SHAFT

TORSION SPRING COUNTERBALANCE

TOP FIXTURE

2" TRACK

15" MAX O.C (TOP ONLY)

12"

12"

12"

12"

12"

12"

10"

2.31

9'0" MAX WIDTH

OPTIONAL GLAZING MAX 1 WINDOW PER STAMPED PANEL (ONE ROW ONLY)

3" STRUT, 3"x20GA

SLIDE LOCK

END HINGE

ROLLER

END STILE

BOTTOM FIXTURE

JAMB BRACKET

THIRD ANGLE PROJECTION

INTERPRET DIMS & TOLS PER ASME Y14.5M
ALL DIMS ARE IN INCHES
DO NOT SCALE
DIM CIRCLED WITH SYMBOL ARE CRITICAL TO QUALITY DESIGN FEATURES & MUST MEET APPLICABLE IN-PROCESS INSPECTION STANDARDS.

TOLERANCES:
.X = ±.1
.XX = ±.03
.XXX = ±.010
ANGULAR = ±.5°
HOLES:
< Ø.251 =+.004/- .003
Ø.251-Ø.500 =+.006/- .003
> Ø.500 =+.008/- .003
ALL GEOMETRY GOVERNED BY 3D CAD DATABASE:

APPROVALS

DATE

DRAWN G.CLARK 4-11-19

CHECKED D. KORNISH 2-18-20

APPROVED

MATERIAL

FINISH

WINDLOAD SPECIFICATION OPTION CODE 1104

The Genuine. The Original.

2501 S, TX-121 BUS LEWISVILLE, TEXAS

DESCRIPTION 170/171/175/180/181/185/1400/1500 9'0" MAX WIDTH

SIZE DWG NO. D-411043

REV B

SCALE 1:12

UOM = EA

SHEET 1 OF 4

JOHN E. SCATES

LICENSE

No. 51737

STATE OF FLORIDA

PROFESSIONAL ENGINEER

Digitally signed by John E Scates
Date: 2023.10.07 18:49:29 -05'00'

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JOHN E. SCATES, PE
2560 KING ARTHUR BLVD #124-54
LEWISVILLE, TX 75056
FL PE 51737 TX PE 56308/F2203

PROFESSIONAL ENGINEER'S SEAL PROVIDED ONLY FOR VERIFICATION OF WINDLOAD CONSTRUCTION DETAILS.

ENG F.20.0410--(FORM REV A)

8

7

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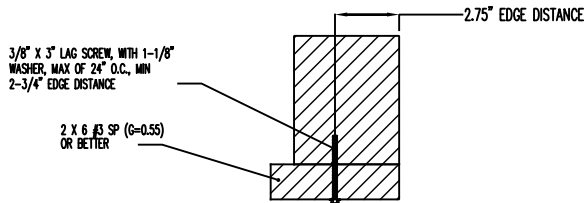
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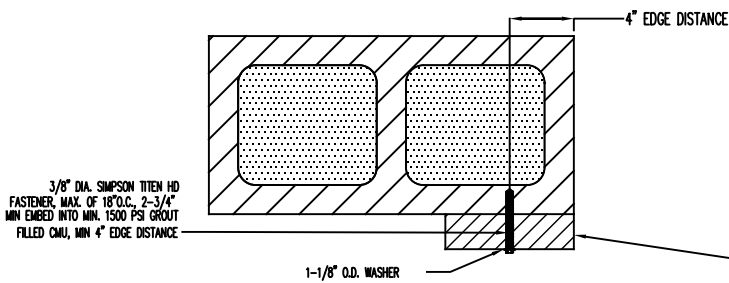
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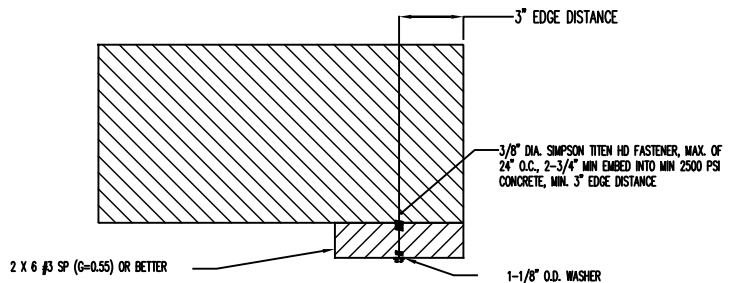
NOTES: (UNLESS OTHERWISE SPECIFIED)



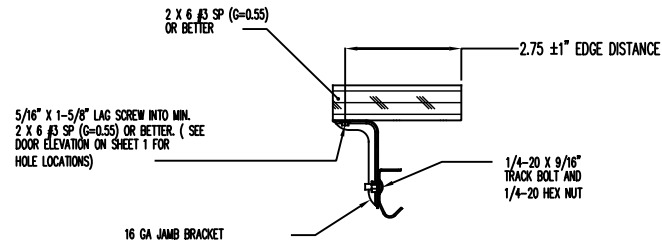
WOOD MOUNTED TO #3 SOUTHERN PINE SUBSTRATE



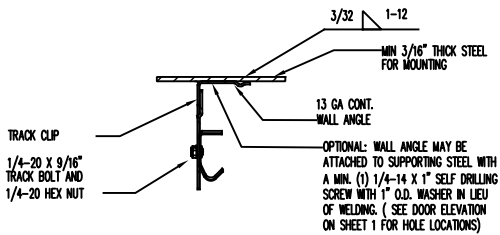
WOOD MOUNTED TO GROUT FILLED
MASONRY BLOCK DETAIL



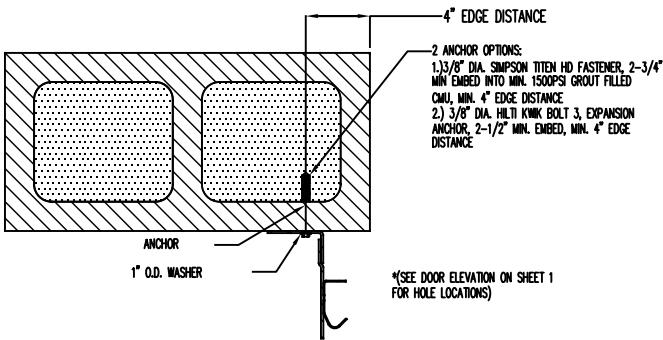
WOOD MOUNTED TO 2500PSI
CONCRETE DETAIL



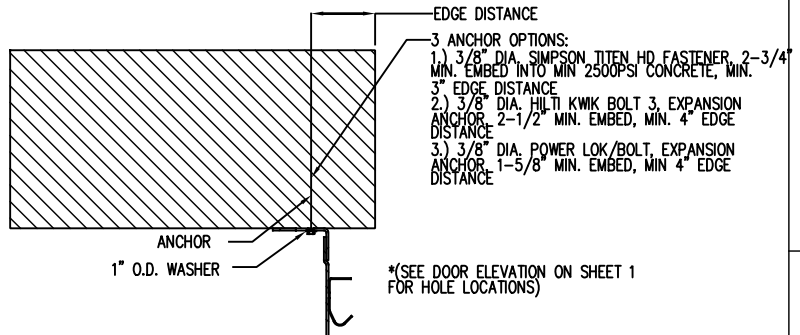
MOUNTING TO WOOD JAMB
DETAIL



MOUNTING TO STEEL JAMB
DETAIL

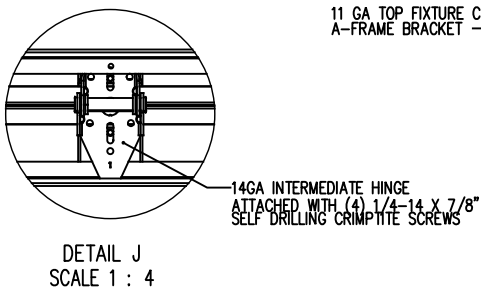


MOUNTING TO GROUT FILLED MASONRY
BLOCK DETAIL

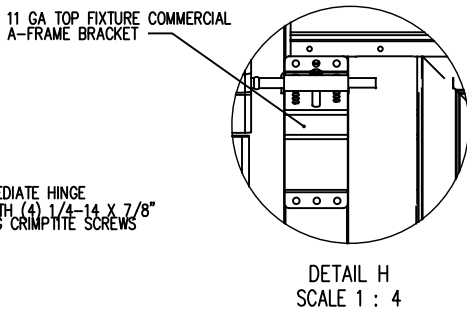


MOUNTING TO 2500PSI CONCRETE
DETAIL

SECTION E - E
SCALE 1 : 4



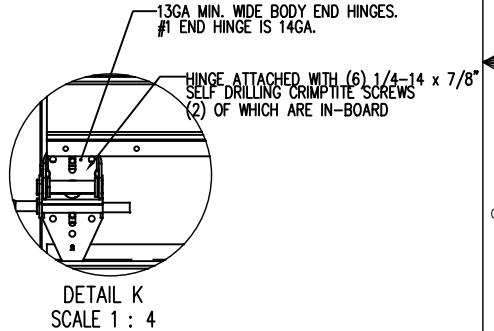
DETAIL J
SCALE 1 : 4



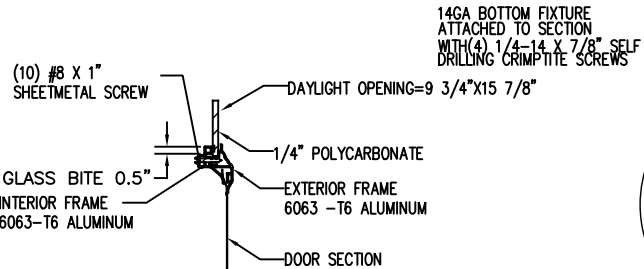
DETAIL H
SCALE 1 : 4

13GA ROLLER SLIDE ATTACHED TO TOP
FIXTURE WITH 1/4-18 BOLT AND NUT IN CENTER
SLOT AND 1/4-20 X 9/16 TRACK BOLT AND
1/4-20 HEX NUT THROUGH ALIGNING HOLES

7/16" DIA. STEM TOP AND BOTTOM ROLLERS

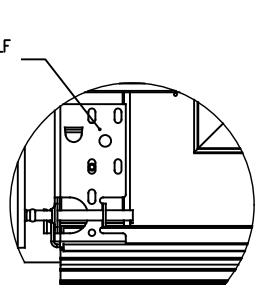


DETAIL K
SCALE 1 : 4

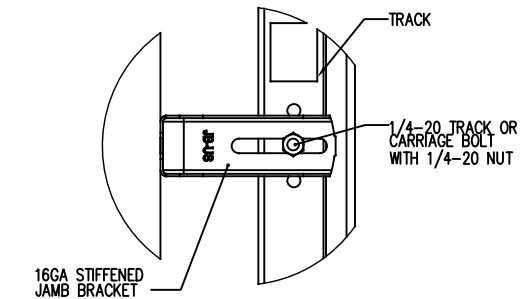


WINDOW DETAIL

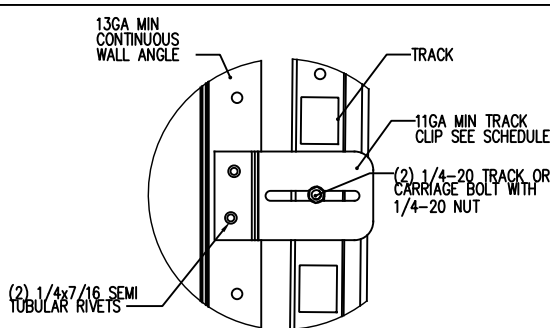
SECTION F - F
SCALE 1 : 4



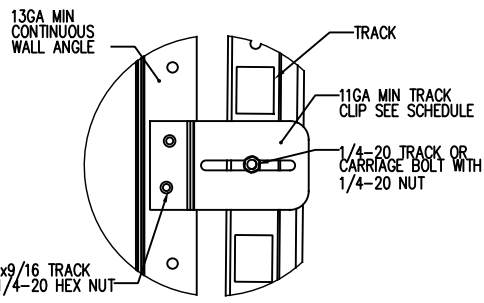
DETAIL K
SCALE 1 : 4



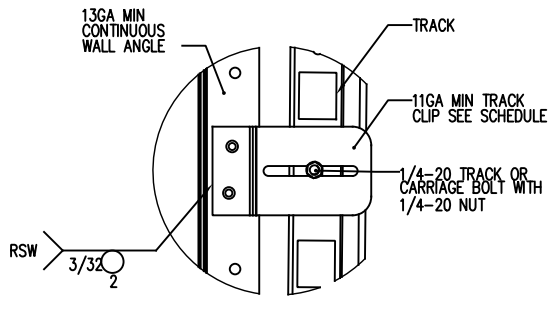
TYPICAL TRACK AND JAMB FASTENERS DETAIL



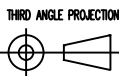
TYPICAL TRACK CLIP RIVETING DETAIL



TYPICAL TRACK CLIP BOLTING DETAIL



TYPICAL TRACK CLIP WELDING DETAIL



INTERPRET DIMS & TOLS
PER ASME Y14.5M
ALL DIMS ARE IN
INCHES
DO NOT SCALE

DIMS CIRCLED WITH SYMBOL 'D' ARE CRITICAL TO QUALITY DESIGN FEATURES & MUST MEET APPLICABLE IN-PROCESS INSPECTION STANDARDS.

TOLERANCES:
.X = ±.1
.XX = ±.03
.XXX = ±.010
ANGULAR = ±.5°
HOLES:
< Ø.251 = +.004/- .003
Ø.251-Ø.500 = +.006/- .003
> Ø.500 = +.008/- .003

ALL GEOMETRY GOVERNED BY 3D CAD DATABASE:

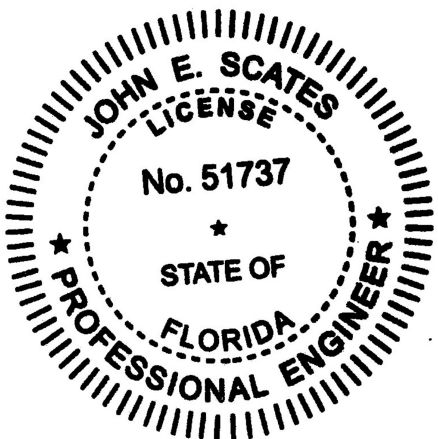
APPROVALS DATE
DRAWN G. CLARK 4-11-19
CHECKED D. KORNISH 2-18-20
APPROVED -
MATERIAL -
FINISH -
WINDLOAD SPECIFICATION
OPTION CODE 1104

The Genuine. The Original. 2501 S, TX-121 BUS
LEWISVILLE, TEXAS

DESCRIPTION
170/171/175/180/181/185/
1400/1500 9'0" MAX WIDTH

SIZE DWG NO. REV
D D-411043 B

SCALE 1:12 UOM = EA SHEET 2 OF 4



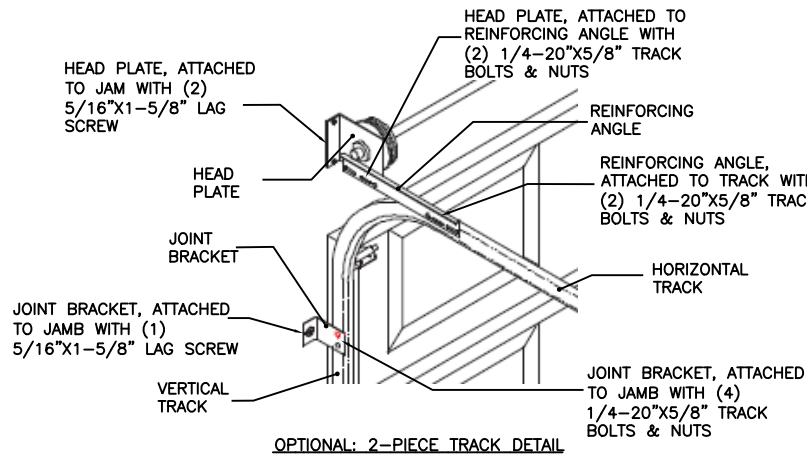
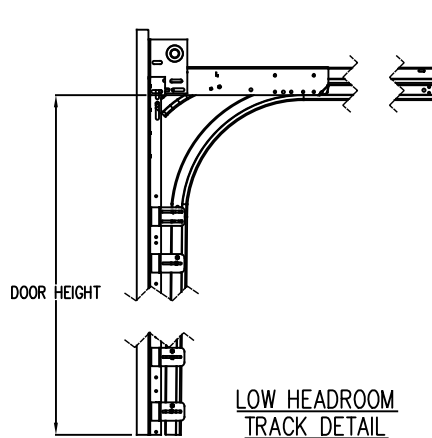
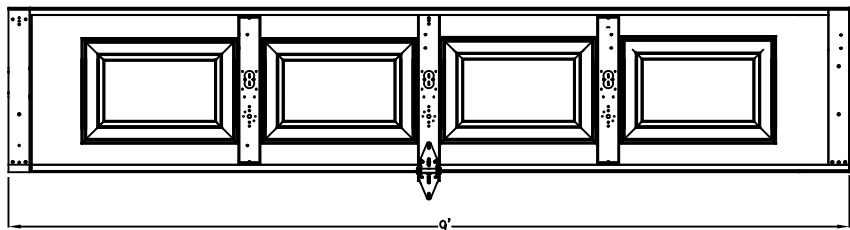
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JOHN E. SCATES, PE
2560 KING ARTHUR BLVD #124-54
LEWISVILLE, TX 75056
FL PE 51737 TX PE 56308/F2203

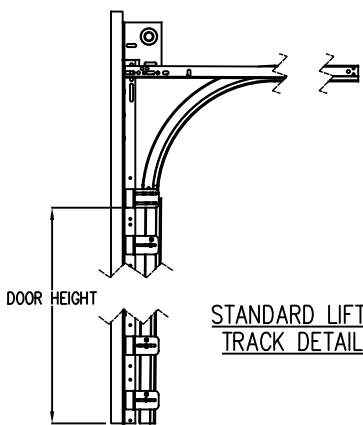
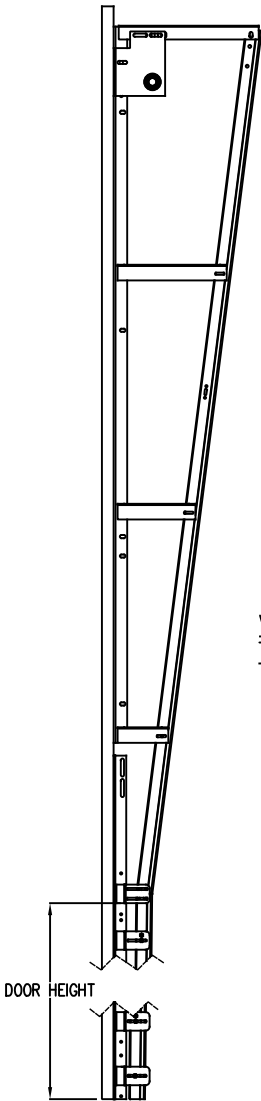
PROFESSIONAL ENGINEER'S SEAL PROVIDED ONLY FOR
VERIFICATION OF WINDLOAD CONSTRUCTION DETAILS.

NOTES: (UNLESS OTHERWISE SPECIFIED)

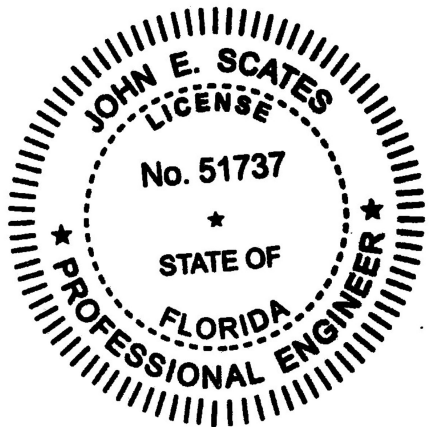
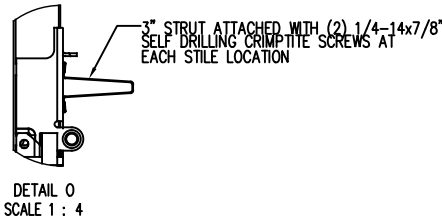
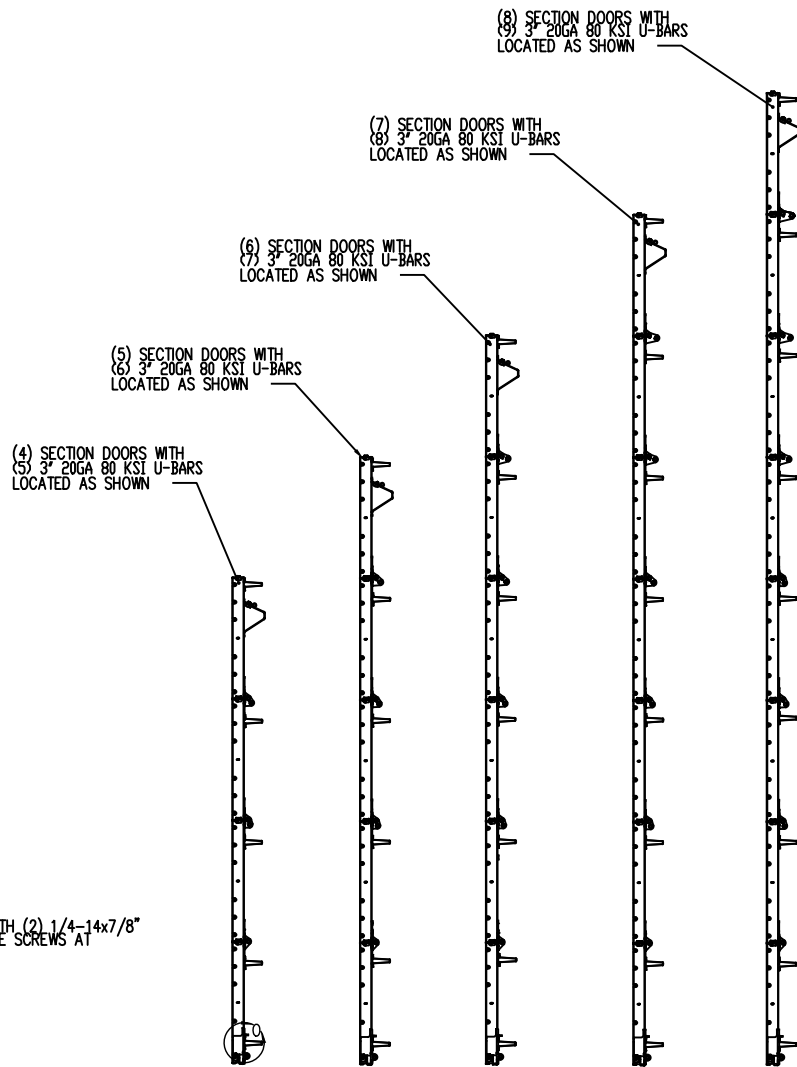
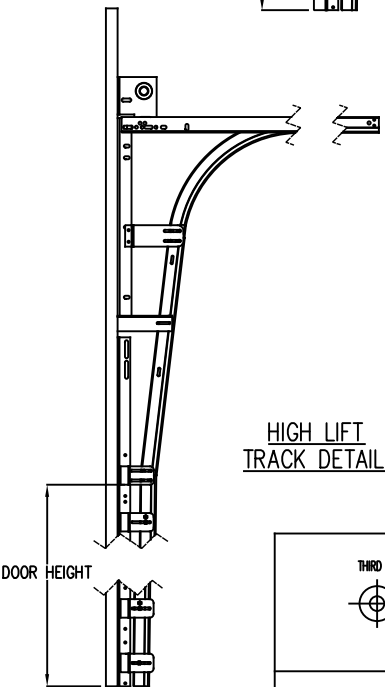
CENTER STILE AND INTERMEDIATE HINGE LOCATIONS



VERTICAL LIFT TRACK DETAIL

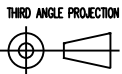


HIGH LIFT TRACK DETAIL

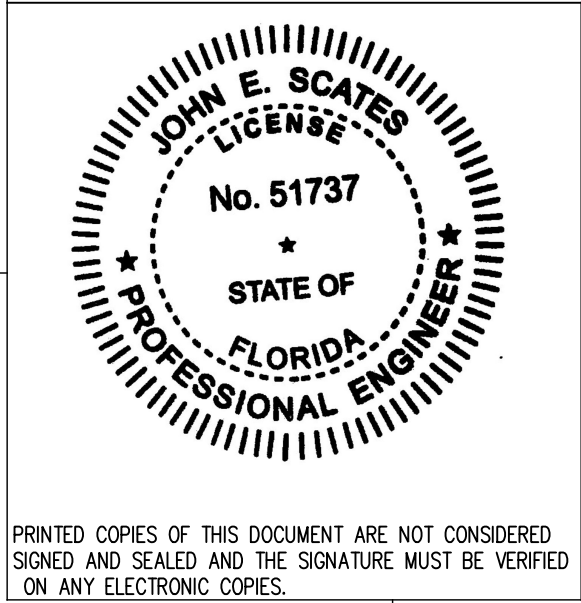
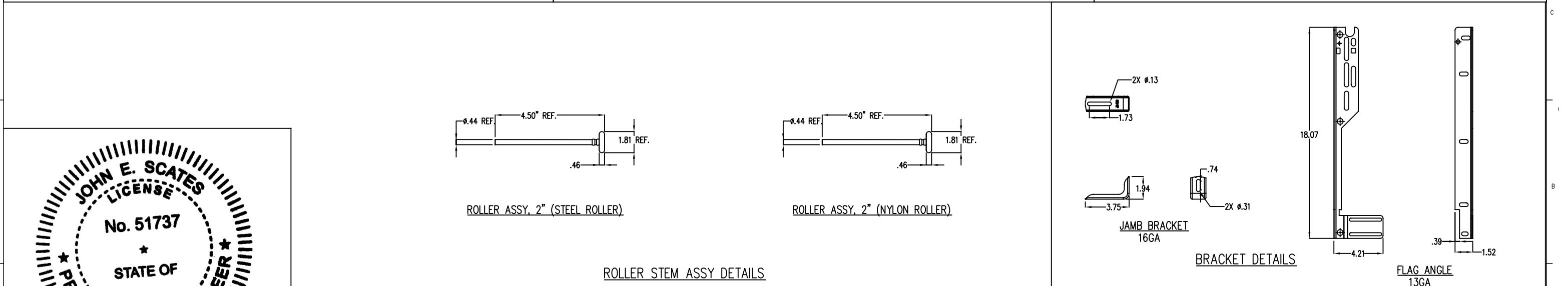
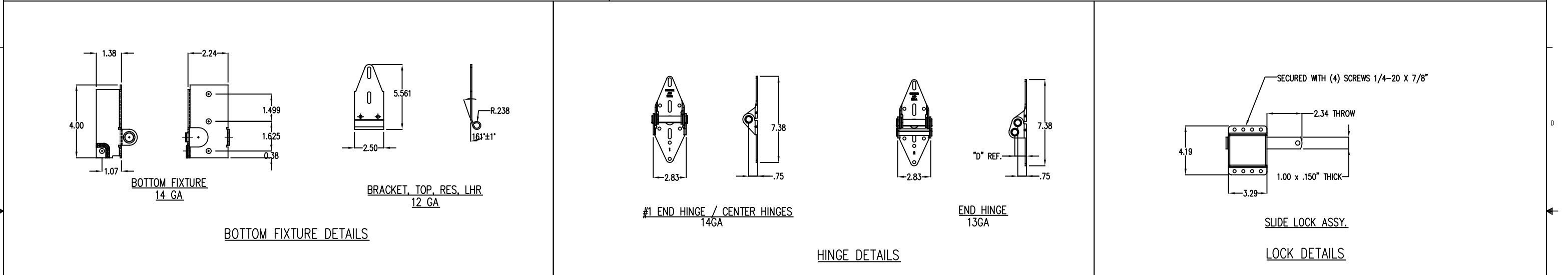
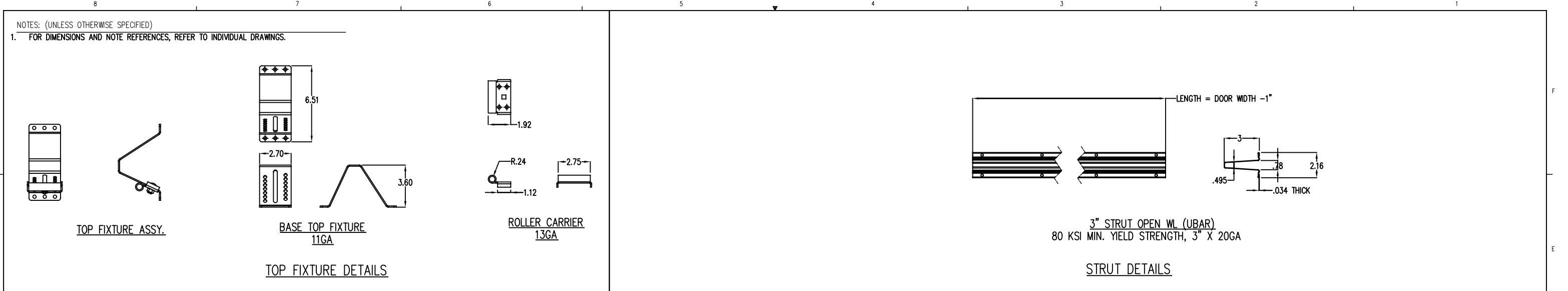


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JOHN E. SCATES, PE
2560 KING ARTHUR BLVD #124-54
LEWISVILLE, TX 75056
FL PE 51737 TX PE 56308/F2203
PROFESSIONAL ENGINEER'S SEAL PROVIDED ONLY FOR VERIFICATION OF WINDLOAD CONSTRUCTION DETAILS.



UNLESS OTHERWISE SPECIFIED			APPROVALS		DATE	The Genuine. The Original.		2501 S, TX-121 BUS			
INTERPRET DIMS & TOLS PER ASME Y14.5M ALL DIMS ARE IN INCHES DO NOT SCALE DIM. CIRCLED WITH SYMBOL  ARE CRITICAL TO QUALITY DESIGN FEATURES & MUST MEET APPLICABLE IN-PROCESS INSPECTION STANDARDS.			DRAWN		G. CLARK	4-11-19		LEWISVILLE, TEXAS			
			CHECKED		D. KORNISH	2-18-20					
			APPROVED		-	-				DESCRIPTION 170/171/175/180/181/185/ 1400/1500 9'0" MAX WIDTH	
			MATERIAL		-	-					
			FINISH		-	-					
TOLERANCES:			WINDLOAD SPECIFICATION OPTION CODE 1104		SIZE		DWG NO.	REV			
HOLES:					D	D-411043	B				
< Ø.251 = +.004/- .003											
Ø.251-Ø.500 = +.006/- .003											
> Ø.500 = +.008/- .003			ALL GEOMETRY GOVERNED BY 3D CAD DATABASE:		SCALE 1:12		UOM = EA	SHEET 3 OF 4			



JOHN E. SCATES, PE 2560 KING ARTHUR BLVD #124-54 LEWISVILLE, TX 75056 FL PE 51737 TX PE 56308/F2203 PROFESSIONAL ENGINEER'S SEAL PROVIDED ONLY FOR VERIFICATION OF WINDLOAD CONSTRUCTION DETAILS.		THIRD ANGLE PROJECTION		UNLESS OTHERWISE SPECIFIED		APPROVALS		DATE	The Genuine. The Original. 2501 S, TX-121 BUS LEWISVILLE, TEXAS
				INTERPRET DIMS & TOLS PER ASME Y14.5M ALL DIMS ARE IN INCHES DO NOT SCALE		TOLERANCES:		4-11-19	
				DIM CIRCLED WITH SYMBOL 'Ø' ARE CRITICAL TO QUALITY DESIGN FEATURES & MUST MEET APPLICABLE IN-PROCESS INSPECTION STANDARDS.		.X = ±.1 .XX = ±.03 .XXX = ±.010 ANGULAR = ±.5°		CHECKED D. KORNISH 2-18-20	DESCRIPTION 170/171/175/180/181/185/ 1400/1500 9'0" MAX WIDTH
						HOLES: < Ø.251 = +.004/- .003 Ø.251-Ø.500 = +.006/- .003 > Ø.500 = +.008/- .003		APPROVED	
						ALL GEOMETRY GOVERNED BY 3D CAD DATABASE:		MATERIAL -	SIZE DWG NO. D D-411043
								FINISH -	
								WINDLOAD SPECIFICATION OPTION CODE 1104	REV B
								SCALE 1:12	
								UOM = EA	SHEET 4 OF 4