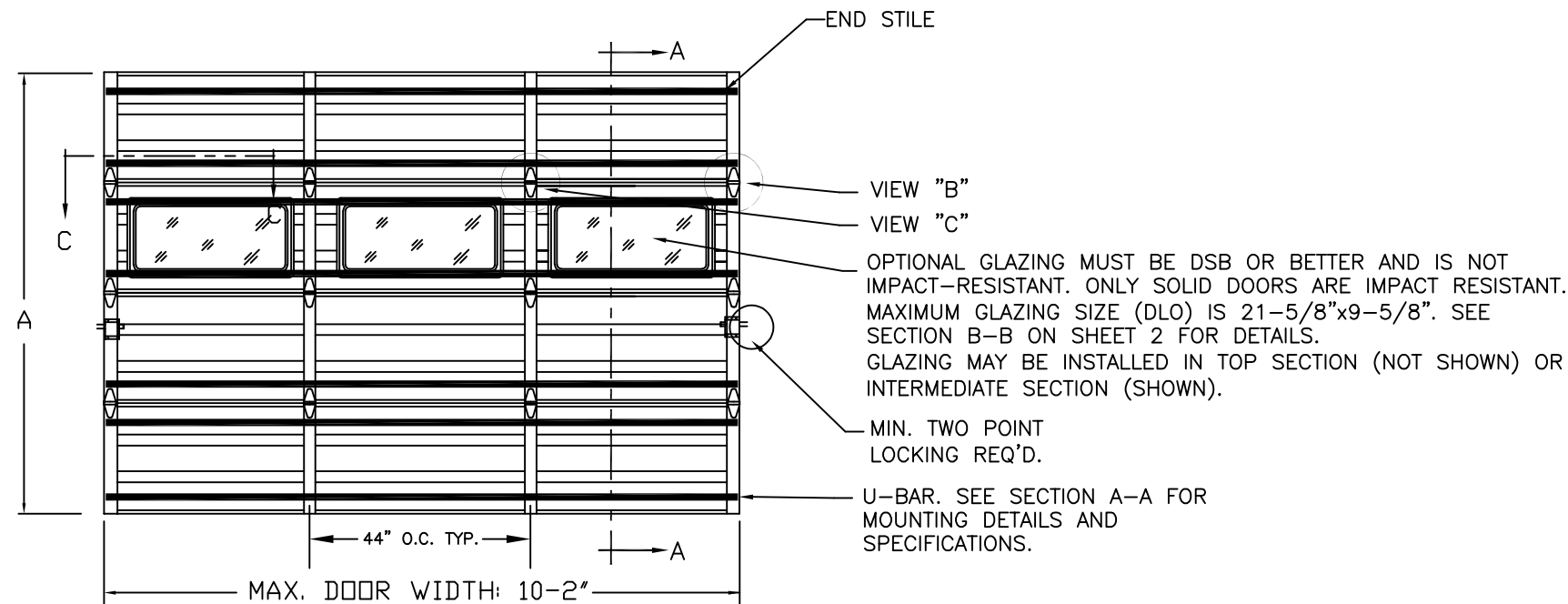


MODELS AVAILABLE (CLOPAY/ HOLMES/ IDEAL)
MODELS 524, 520/ 224/ C4ST, COST
INSULATED MODELS 524S, 520S, 524V/ 224S/ C4SS, COSS, C4SV

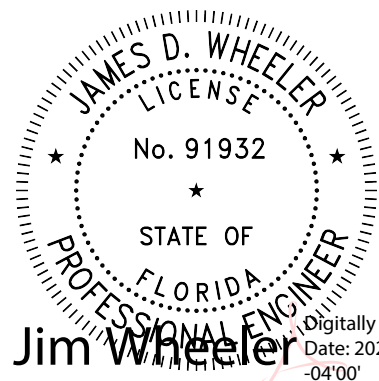
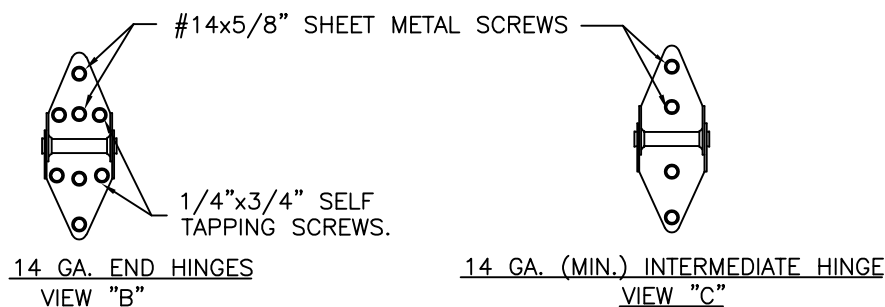
SHEET:
1 OF 4

REVISIONS					
REV. NO.	ZONE:	DATE:	ECN NO.	APPVD:	DESCRIPTION
09	-	7/11/14	-	SH	REVISED LOADS, ROLLERS/STILES ON SHT 4.
10	-	8/10/20	-	SH	UPDATED TITLE BLOCK AND REMOVED WIND CHART

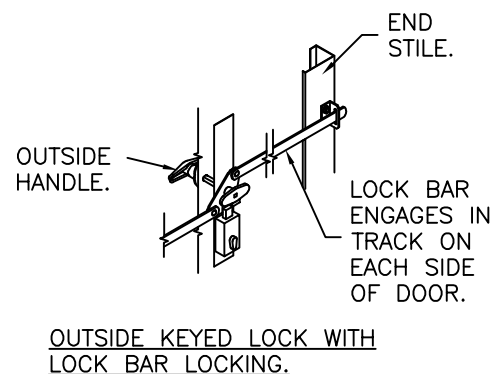
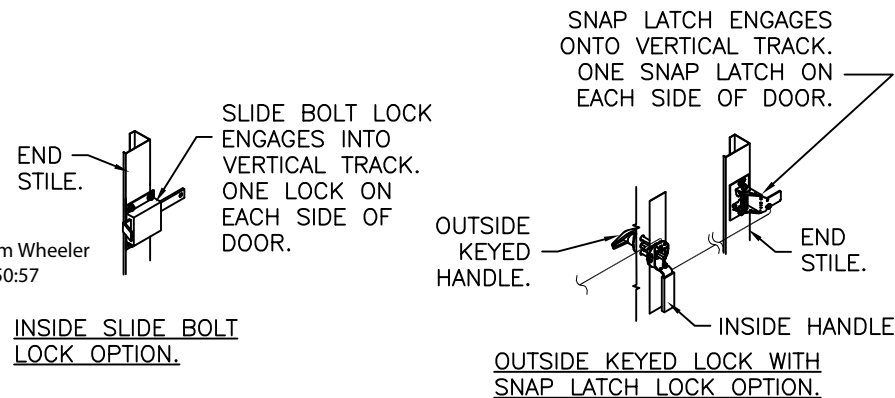
DOOR WIDTH	NUMBER OF CENTER STILES
UP TO 9'-2"	1
9'-3" THRU 12'-2"	2



DOOR HEIGHT 'A'	NUMBER OF SECTIONS
UP TO 8'-0"	4
8'-3" THRU 10'-0"	5
10'-3" THRU 12'-0"	6
12'-3" THRU 14'-0"	7
14'-3" THRU 16'-0"	8
16'-3" THRU 18'-0"	9



DESIGN ENGINEER:
JAMES D. WHEELER, P.E.
FLORIDA LICENSE No. 91932



STANDARD LOADS
DESIGN LOADS: +37.0 P.S.F. & -44.0 P.S.F.
TEST LOADS: +55.5 P.S.F. & -66.0 P.S.F.
IMPACT-RATED LOADS
DESIGN LOADS: +37.0 P.S.F. & -42.0 P.S.F.
TEST LOADS: +55.5 P.S.F. & -63.0 P.S.F.

Unless Stated Otherwise
TOLERANCES are
.0 = ±.031
.00 = ±.015
.000 = ±.005
.0000 = ±.001
Degrees = ±1/2°
Unless Stated Otherwise
DIMENSIONS ARE IN INCHES.

Clopay
CORPORATION

8585 Duke Boulevard
Mason, OH 45040 USA
Tel. No. 513-770-4800
Fax No. 513-770-4853

DESCRIPTION: COMMERCIAL RIBBED DOORS UP TO 10'2"W (SEE TABLE)			
DRAWN BY: SH	DATE: 1/10/14	SCALE: NTS	DWG. SIZE B
CHECKED BY: SH	DATE: 1/10/14	SHEET 1 OF 4	
DWG. NO.: 102445 - A/B		VER: IBC	

MANUFACTURING PRODUCT CODE C-PAN-1E448
PART NO.: N/A
WINDLOAD RATING W6 DP37

FLORIDA PRODUCT APPROVAL 48404.17

MODELS AVAILABLE (CLOPAY/ HOLMES/ IDEAL)
MODELS 524, 520/ 224/ C4ST, COST
INSULATED MODELS 524S, 520S, 524V/ 224S/ C4SS, COSS, C4SV

SHEET: 2 OF 4	REVISIONS					
	REV. NO.	ZONE:	DATE:	ECN NO.	APPVD:	DESCRIPTION
	10	-	-	-	-	SEE REVISION HISTORY ON SHEET ONE.

IMPACT-RESISTANT CONSTRUCTION:
SOLID DOORS (NO GLAZING) ARE IMPACT-RESISTANT.

THE ENTIRE DOOR ASSEMBLY INSTALLED IN COMPLIANCE WITH THIS SECTION MEETS THE WIND LOAD REQUIREMENTS OF THE FLORIDA BUILDING CODE AND INTERNATIONAL BUILDING CODE AND IS LARGE- AND SMALL-MISSILE IMPACT RESISTANT.

IMPACT-RESISTANT ASSEMBLY DETAILS
DRAWING 102445-A

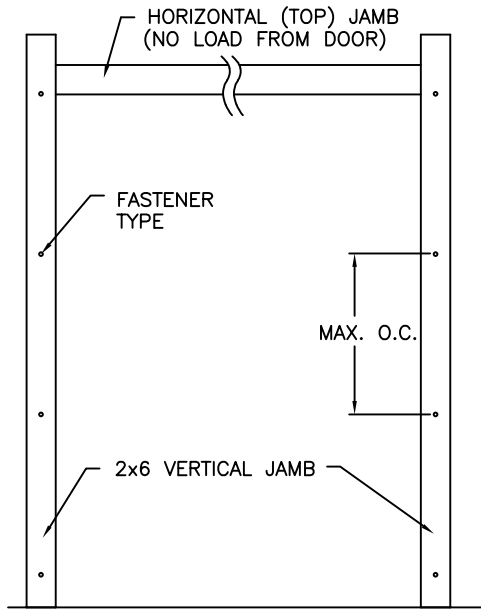
DESIGN ENGINEER:
JAMES D. WHEELER, P.E.
FLORIDA LICENSE No. 91932

STANDARD LOADS DESIGN LOADS: +37.0 P.S.F. & -44.0 P.S.F. TEST LOADS: +55.5 P.S.F. & -66.0 P.S.F. <u>IMPACT-RATED LOADS</u> DESIGN LOADS: +37.0 P.S.F. & -42.0 P.S.F. TEST LOADS: +55.5 P.S.F. & -63.0 P.S.F.	MANUFACTURING PRODUCT CODE C-PAN-1E448	
	PART NO.: N/A	
	WINDLOAD RATING W6 DP37	
	DESCRIPTION: COMMERCIAL RIBBED DOORS UP TO 10'2"W (SEE TABLE)	
Unless Stated Otherwise TOLERANCES are .0 = ±.031 .00 = ±.015 .000 = ±.005 .0000 = ±.001 Degrees = ±1/2' Unless Stated Otherwise DIMENSIONS ARE IN INCHES.	8585 Duke Boulevard Mason, OH 45040 USA Tel. No. 513-770-4800 Fax No. 513-770-4853	
	CORPORATION	
	DRAWN BY: SH	DATE: 1/10/14
CHECKED BY: SH		DATE: 1/10/14
DWG. NO.: 102445 - A/B		VER: IBC
SCALE: NTS		DWG. B
SHEET 2 OF 4		SIZE

FLORIDA PRODUCT APPROVAL 48404.17

MODELS AVAILABLE (CLOPAY/ HOLMES/ IDEAL)
MODELS 524, 520/ 224/ C4ST, COST
INSULATED MODELS 524S, 520S, 524V/ 224S/ C4SS, COSS, C4SV

SHEET:		REVISIONS					
3 OF 4		REV. NO.	ZONE:	DATE:	ECN NO.	APPVD:	DESCRIPTION
		10	-	-	-	-	SEE REVISION HISTORY ON SHEET ONE.



JAMB TO SUPPORTING STRUCTURE ATTACHMENT

NOTES:

1. ALL THE LOAD FROM THE DOOR IS TRANSFERRED TO THE TRACK AND THEN FROM THE TRACK TO THE 2x6 VERTICAL SYP (GRADE #2 OR BETTER) JAMBS. NO LOAD FROM THE DOOR IS TRANSFERRED TO THE HORIZONTAL (TOP) JAMB.
2. EACH VERTICAL JAMB SEES A MAXIMUM DESIGN LOAD OF +185 LB & -220 LB. PER LINEAR FOOT OF JAMB.
3. ALL JAMB FASTENERS MAY BE (BUT ARE NOT REQUIRED TO BE) COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
4. A 1/3 STRESS INCREASE FOR WIND LOAD WAS NOT USED IN THE CALCULATION OF ALLOWABLE LOADS FOR ANCHORS AND FASTENERS FOR STEEL, CONCRETE AND MASONRY.

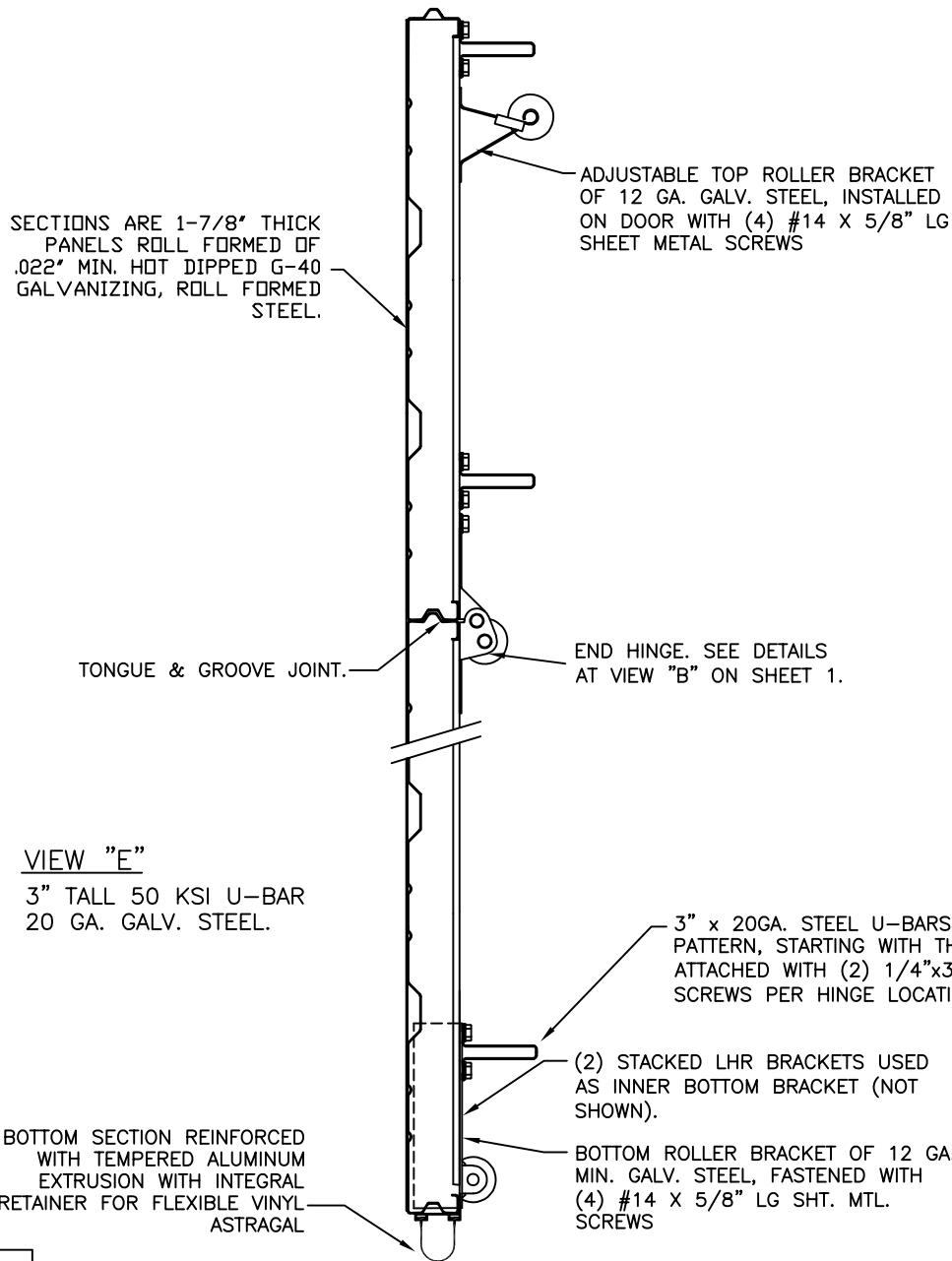
NOTE: 2x6 WOOD JAMBS ARE NOT REQUIRED WITH CONTINUOUS ANGLE MOUNT TRACK. HOWEVER, IF DESIRED ON STEEL JAMBS OR CONCRETE OR BLOCK WALLS, APPROVED FASTENERS AS DETAILED BELOW SHOULD BE INCREASED IN LENGTH BY 1-1/2" AND INSTALLED DIRECTLY THROUGH THE ANGLE AND 2x6 WOOD JAMBS INTO THE STEEL JAMBS OR CONCRETE OR BLOCK WALLS. ANCHORS CAN BE (BUT ARE NOT REQUIRED TO BE) COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE. CONTINUOUS ANGLE TRACK CAN BE ANCHORED DIRECTLY TO GROUT REINFORCED BLOCK WALL OR 3,000 PSI MIN. CONCRETE COLUMN OR STEEL JAMBS.

FASTENER ATTACHMENT TO SUPPORTING STRUCTURE SCHEDULES

BUILDING TYPE	FASTENER TYPE	MAXIMUM ON-CENTER DISTANCE BETWEEN FASTENERS*	STEEL WASHERS REQUIRED?
HOLLOW BLOCK WALL	1/4" x 1-1/4" MIN. EMBED ULTRACON CONCRETE ANCHOR	9"	1" O.D.
GROUT FILLED BLOCK WALL	1/4" x 1-3/4" MIN. EMBED ULTRACON CONCRETE ANCHOR	14-3/4"	1" O.D.
2000 PSI MIN. CONCRETE	1/4" x 1" MIN. EMBED ULTRACON CONCRETE ANCHOR	12-3/4"	1" O.D.
2000 PSI MIN. CONCRETE	1/4" x 1" MIN. EMBED TAPCON CONCRETE ANCHOR	7-1/2"	1" O.D.
2000 PSI MIN. CONCRETE	3/8" x 1-3/4" MIN. EMBED WEJ-IT ANKR TITE SLEEVE ANCHOR	24"	INCLUDED
4000 PSI MIN. CONCRETE	3/8" x 1-3/4" MIN. EMBED WEJ-IT ANKR TITE SLEEVE ANCHOR	24"	INCLUDED
WOOD FRAME (SYP 0.55 SG)	1/2" x 3" LAG SCREW (ASTM A307, GRADE A) 1-5/8" EMBED INTO STRUCTURE	24"	1" O.D.
14GA STEEL (0.060" MIN.)	1/4"-14 x 1" ITW BUILDDEX TEKS SELF-DRILLING FASTENER	12-1/4"	1" O.D.
12GA STEEL (0.105" MIN.)	1/4"-14 x 1" ITW BUILDDEX TEKS SELF-DRILLING FASTENER	21-1/2"	1" O.D.
1/8" STEEL	1/4"-14 x 1" ITW BUILDDEX TEKS SELF-DRILLING FASTENER	24"	1" O.D.

* FIRST (BOTTOM) ANCHOR STARTING AT NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.
CLOPAY DOES NOT SUPPLY JAMB ATTACHMENT FASTENERS.
MINIMUM DISTANCE BETWEEN CENTER OF ANCHOR AND EDGE OF CONCRETE BLOCK: 2-1/2", EXCLUDING STUCCO THICKNESS.

DESIGN ENGINEER:
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FLORIDA LICENSE No. 91932



SECTION A-A (SIDE VIEW)

STANDARD LOADS

DESIGN LOADS: +37.0 P.S.F. & -44.0 P.S.F.

TEST LOADS: +55.5 P.S.F. & -66.0 P.S.F.

IMPACT-RATED LOADS

DESIGN LOADS: +37.0 P.S.F. & -42.0 P.S.F.

TEST LOADS: +55.5 P.S.F. & -63.0 P.S.F.

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MANUFACTURING PRODUCT CODE
C-PAN-1E448

PART NO.: N/A

WINDLOAD RATING
W6 DP37

DESCRIPTION: COMMERCIAL RIBBED DOORS UP TO 10'2"W (SEE TABLE)

DRAWN BY: SH

DATE: 1/10/14

SCALE: NTS

DWG. SIZE B

CHECKED BY: SH

DATE: 1/10/14

SHEET 3 OF 4

DWG. NO.: 102445 - A/B

VER: IBC

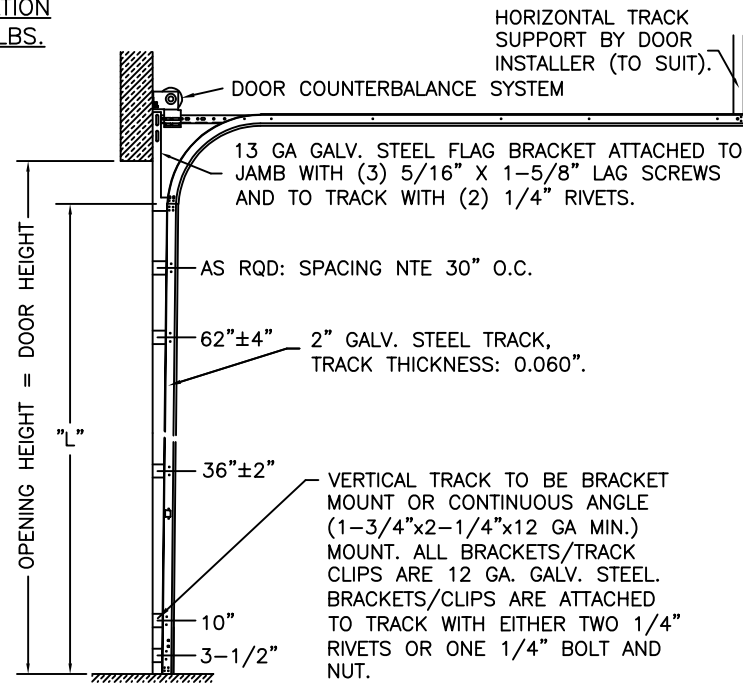
FLORIDA PRODUCT APPROVAL 48404.17

MODELS AVAILABLE (CLOPAY/ HOLMES/ IDEAL)
MODELS 524, 520/ 224/ C4ST, COST
INSULATED MODELS 524S, 520S, 524V/ 224S/ C4SS, COSS, C4SV

SHEET:		REVISIONS					
4 OF 4		REV. NO.	ZONE:	DATE:	ECN NO.	APPVD:	DESCRIPTION
		10	-	-	-	-	SEE REVISION HISTORY ON SHEET ONE.

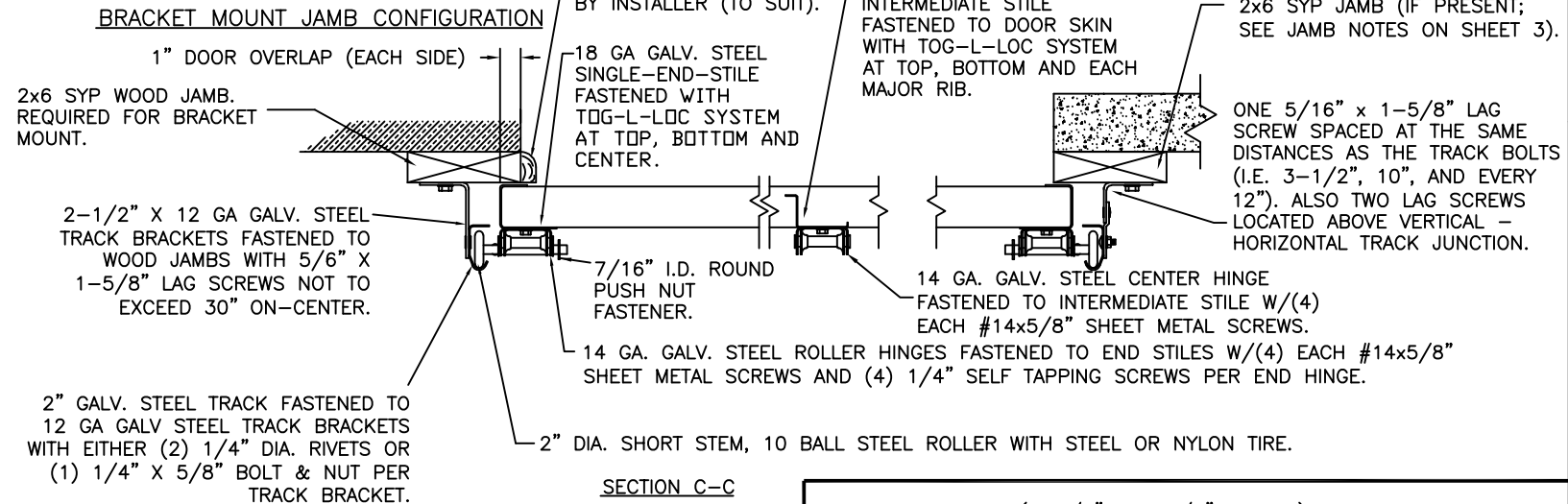
2" TRACK CONFIGURATION
DOORS UP TO 800 LBS.

NOTE DOUBLE TRACK HEADROOM, HI-LIFT TRACK, FOLLOW-THE- ROOF TRACK, AND VERTICAL LIFT TRACK ARE AVAILABLE OPTIONS. TRACK CONFIGURATION ABOVE THE DOOR OPENING DOES NOT AFFECT THE WIND LOAD RATING.



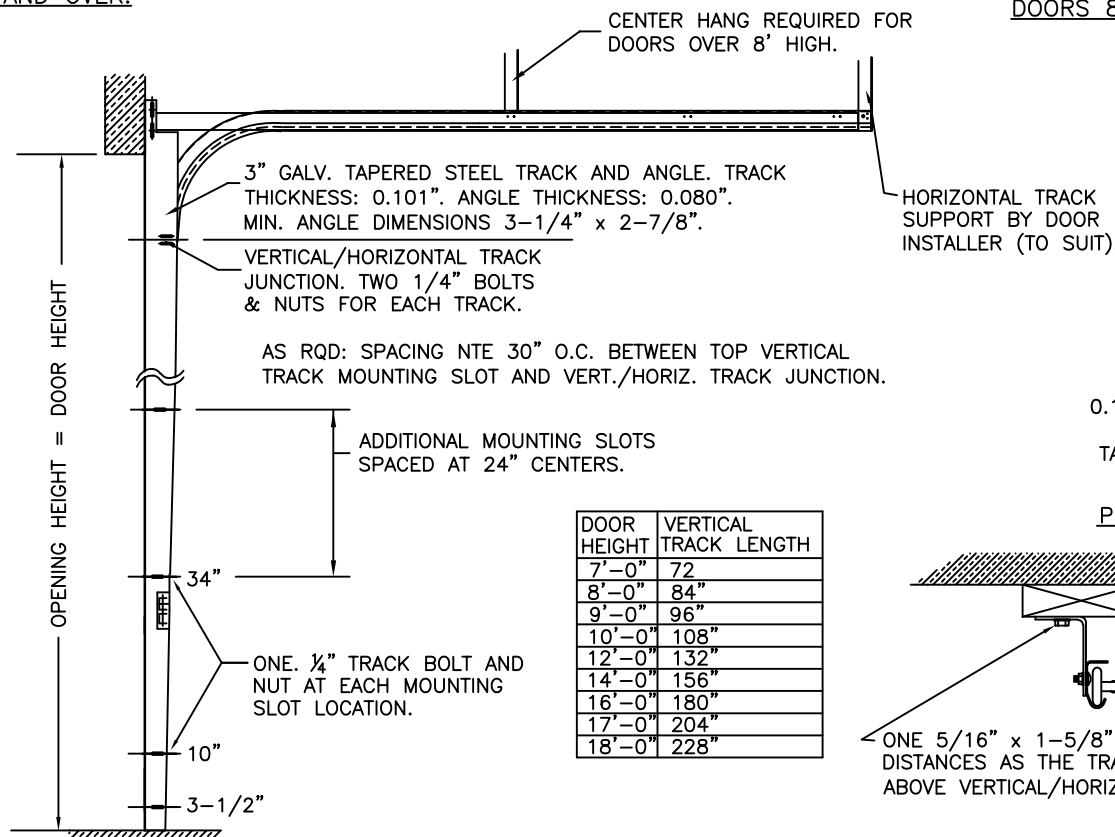
DOOR HEIGHT	"L"
6'-6"	70"
7'-0"	76"
7'-6"	82"
8'-0"	88"
8'-6"	94"
9'-0"	100"
9'-6"	106"
10'-0"	112"
10'-6"	118"
11'-0"	124"
11'-6"	130"
12'-0"	136"
12'-6"	142"
13'-0"	148"
13'-6"	154"
14'-0"	160"
14'-6"	166"
15'-0"	172"
15'-6"	178"
16'-0"	184"
16'-6"	190"
17'-0"	196"
17'-6"	202"
18'-0"	208"

JAMB CONFIGURATION
DOORS UP TO 800 LBS.



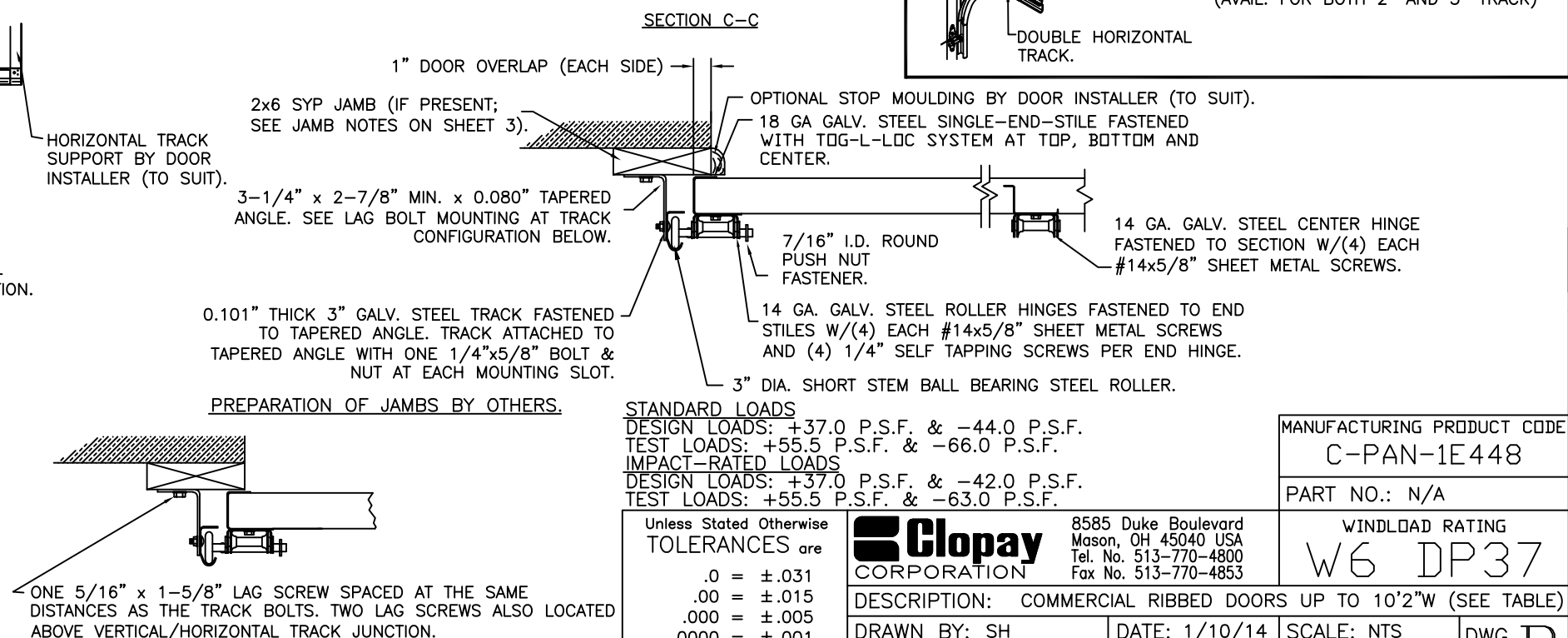
3" TRACK CONFIGURATION
DOORS 800 LBS AND OVER.

NOTE DOUBLE TRACK HEADROOM, HI-LIFT TRACK, FOLLOW-THE- ROOF TRACK, AND VERTICAL LIFT TRACK ARE AVAILABLE OPTIONS. TRACK CONFIGURATION ABOVE THE DOOR OPENING DOES NOT AFFECT THE WIND LOAD RATING.



DOOR HEIGHT	VERTICAL TRACK LENGTH
7'-0"	72"
8'-0"	84"
9'-0"	96"
10'-0"	108"
12'-0"	132"
14'-0"	156"
16'-0"	180"
17'-0"	204"
18'-0"	228"

JAMB CONFIGURATION
DOORS 800 LBS AND OVER.



DESIGN ENGINEER:
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MANUFACTURING PRODUCT CODE C-PAN-1E448		PART NO.: N/A	
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