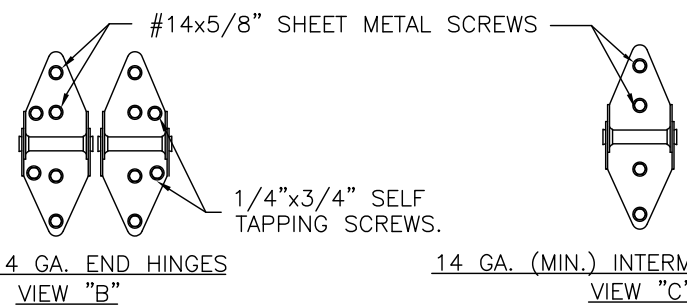
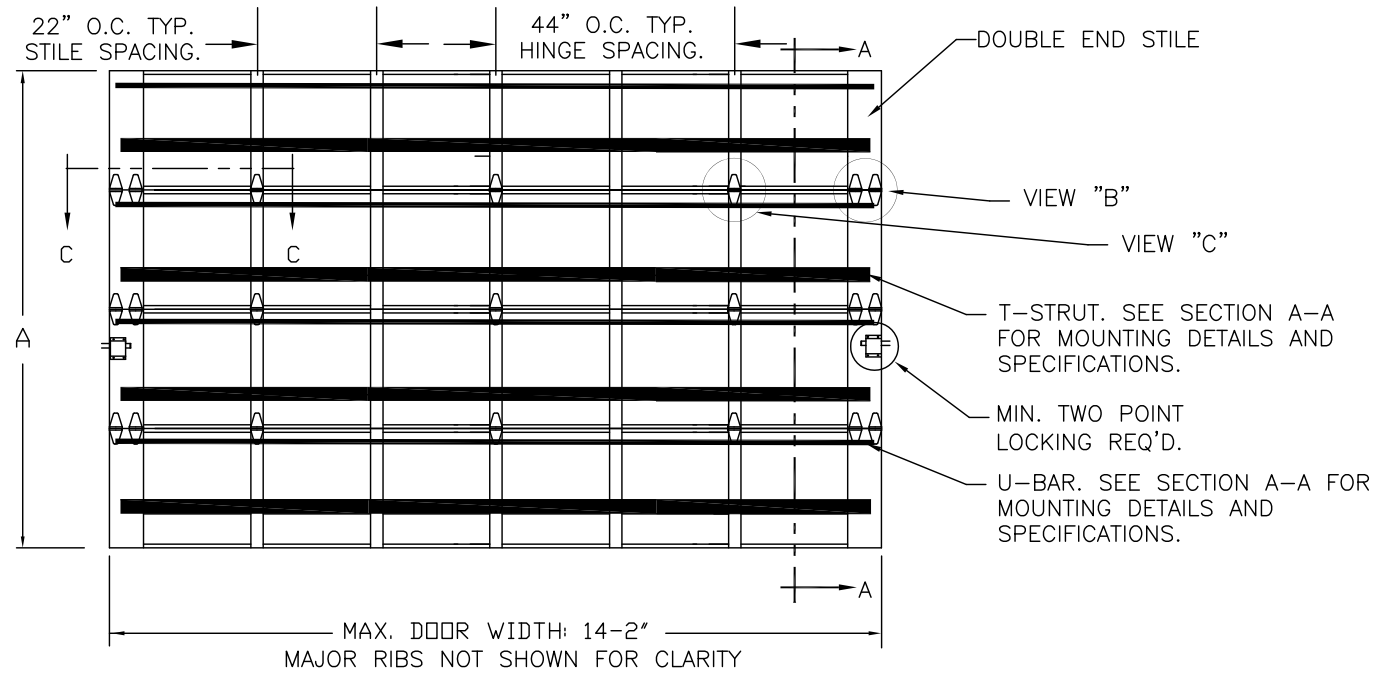


CLOPAY / IDEAL / HOLMES
 524 / C4ST / 224 / 24GA 1-7/8" RIBBED
 520 / COST / --- / 20GA 1-7/8" RIBBED

SHEET:
 1 OF 3

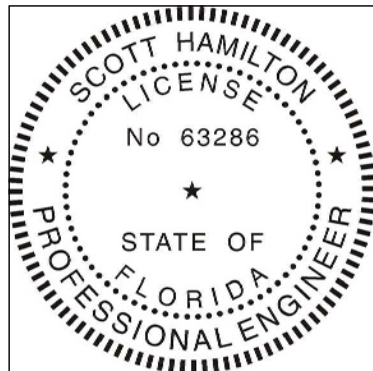
REVISIONS					DESCRIPTION
REV. NO.	ZONE:	DATE:	ECN NO.	APPVD:	
01	-	4/16/15	-	SH	REVISED LAYOUT TO 3 PAGES



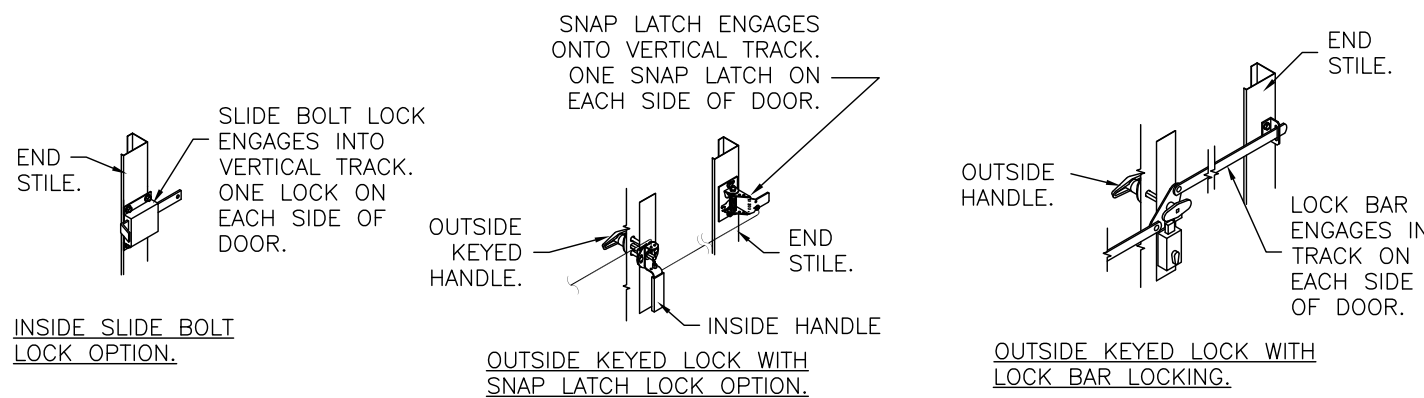
DOOR HEIGHT 'A'	NUMBER OF SECTIONS
UP TO 8'-0"	4
8'-3" THRU 10'-0"	5
10'-3" THRU 12'-0"	6
12'-3" THRU 14'-0"	7
14'-3" THRU 16'-0"	8
16'-3" THRU 18'-0"	9

THIS DOOR MEETS OR EXCEEDS THE DESIGN LOADS FOR THE ULTIMATE WIND SPEEDS LISTED BELOW ACCORDING TO THE FLORIDA BUILDING CODE OR THE INTERNATIONAL BUILDING CODE (BASED ON ASCE7-10) FOR THE FOLLOWING CONDITIONS: 1) ENCLOSED BUILDING, 2) DOOR HAS 2' OF WIDTH IN BUILDING'S END ZONE, 3) ANY ROOF SLOPE, AND 4) TESTING IN ACCORDANCE WITH ANSI/DASMA 108. SITE-SPECIFIC CALCULATIONS BY A QUALIFIED DESIGN PROFESSIONAL MAY DIFFER.

ULTIMATE WIND SPEED (MPH)	190	195	200	200+	200+
EXPOSURE CATEGORY	B, C, D	B, C, D	B, C	B, C	B
MEAN ROOF HEIGHT	25'	15'	25'	15'	30'



DESIGN ENGINEER:
 SCOTT HAMILTON, P.E.
 FLORIDA LICENSE No. 63286



IMPACT-RESISTANT CONSTRUCTION:
 SOLID DOORS (NO GLAZING) MEET THE WIND LOAD REQUIREMENTS OF THE FLORIDA BUILDING CODE AND INTERNATIONAL BUILDING CODE AND ARE LARGE- AND SMALL-MISSILE IMPACT RESISTANT.

DESIGN LOADS: +52 & -58 P.S.F.
 TEST LOADS +75 & -87 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.



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

MANUFACTURING PRODUCT CODE
 C-PAN-1E448

PART NO.: N/A

WINDLOAD RATING
 W8 DP52T

DESCRIPTION: COMMERCIAL RIBBED DOORS UP TO 14'2"W			
DRAWN BY: SH	DATE: 3/14/14	SCALE: NTS	DWG. SIZE B
CHECKED BY: MWW	DATE: 1/2/15	SHEET 1 OF 3	
DWG. NO.: 104812	VER: IBC		

CLOPAY / IDEAL / HOLMES
 524 / C4ST / 224 / 24GA 1-7/8" RIBBED
 520 / COST / --- / 20GA 1-7/8" RIBBED

SHEET:
 2 OF 3

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

D

C

B

A

D

C

B

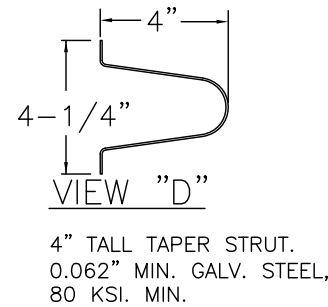
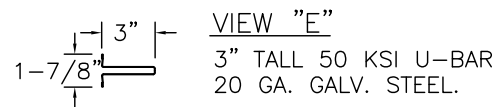
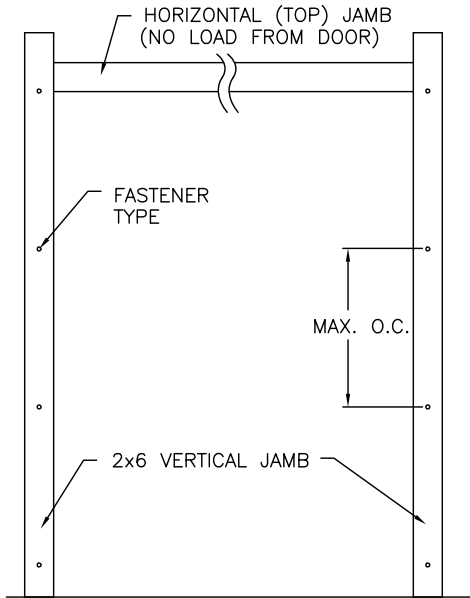
A

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 +364 LB & -406 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.

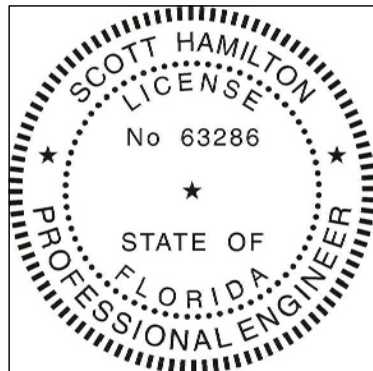
NOTE: 2x6 WOOD JAMBS ARE NOT REQUIRED WITH CONTINUOUS ANGLE MOUNT TRACK. HOWEVER, IF DESIRED ON STEEL JAMBS OR CONCRETE OR BLOCK WALLS, APPROVED FASTENERS AS DETAILED BELOW SHOULD BE INCREASED IN LENGTH BY 1-1/2" AND INSTALLED DIRECTLY THROUGH THE ANGLE AND 2x6 WOOD JAMBS INTO THE STEEL JAMBS OR CONCRETE 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	4-1/2"	1" O.D.
GROUT FILLED BLOCK WALL	1/4" x 1-3/4" MIN. EMBED ULTRACON CONCRETE ANCHOR	7-1/2"	1" O.D.
2000 PSI MIN. CONCRETE	1/4" x 1" MIN. EMBED ULTRACON CONCRETE ANCHOR	6-1/2"	1" O.D.
2000 PSI MIN. CONCRETE	1/4" x 1" MIN. EMBED TAPCON CONCRETE ANCHOR	5-1/2"	1" O.D.
2000 PSI MIN. CONCRETE	3/8" x 1-3/4" MIN. EMBED WEJ-IT ANKR TITE SLEEVE ANCHOR	13-3/4"	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	14-3/4"	1" O.D.
14GA STEEL (0.060" MIN.)	1/4"-14 x 1" ITW BUILDEX TEKS SELF-DRILLING FASTENER	6-1/4"	1" O.D.
12GA STEEL (0.105" MIN.)	1/4"-14 x 1" ITW BUILDEX TEKS SELF-DRILLING FASTENER	11"	1" O.D.
1/8" STEEL	1/4"-14 x 1" ITW BUILDEX TEKS SELF-DRILLING FASTENER	13"	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:
 SCOTT HAMILTON, P.E.
 FLORIDA LICENSE No. 63286

SECTIONS ARE 1-7/8" THICK PANELS ROLL FORMED OF .022" MIN. HOT DIPPED G-40 GALVANIZING, ROLL FORMED STEEL.

(1) 3" x U-BAR AT THE TOP OF EVERY SECTION, (SEE VIEW "E") ATTACHED WITH (2) 1/4"x3/4" SELF-TAPPING SCREWS PER STILE LOCATION.

ADJUSTABLE TOP ROLLER BRACKET OF 12 GA. GALV. STEEL, INSTALLED ON DOOR WITH (4) #14 X 5/8" LG SHEET METAL SCREWS

ONE 4" T-STRT PER SECTION. (SEE VIEW "D") EACH T-STRT ATTACHED AT EACH STILE LOCATION WITH (2) 1/4"x3/4" SELF TAPPING SCREWS.

TONGUE & GROOVE JOINT.

END HINGE. SEE DETAILS AT VIEW "B" ON SHEET 1.

BOTTOM SECTION REINFORCED WITH TEMPERED ALUMINUM EXTRUSION WITH INTEGRAL RETAINER FOR FLEXIBLE VINYL ASTRAGAL

(2) STACKED LHR BRACKETS USED AS INNER BOTTOM BRACKET (NOT SHOWN).

BOTTOM ROLLER BRACKET OF 12 GA. MIN. GALV. STEEL, FASTENED WITH (4) #14 X 5/8" LG SHT. MTL. SCREWS

SECTION A-A (SIDE VIEW)

DESIGN LOADS: +52 & -58 P.S.F.
 TEST LOADS +75 & -87 P.S.F.

Unless Stated Otherwise TOLERANCES are
 .0 = ±.031
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 .000 = ±.005
 .0000 = ±.001
 Degrees = ±1/2"

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Glopay
 Building Products Company
 8585 Duke Boulevard
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MANUFACTURING PRODUCT CODE
 C-PAN-1E448

PART NO.: N/A

WINDLOAD RATING
 W8 DP52T

DESCRIPTION: COMMERCIAL RIBBED DOORS UP TO 14'2"W

DRAWN BY: SH	DATE: 3/14/14	SCALE: NTS	DWG. SIZE B
CHECKED BY: MWW	DATE: 1/2/15	SHEET 2 OF 3	
DWG. NO.: 104812	VER: IBC		

4

3

2

1

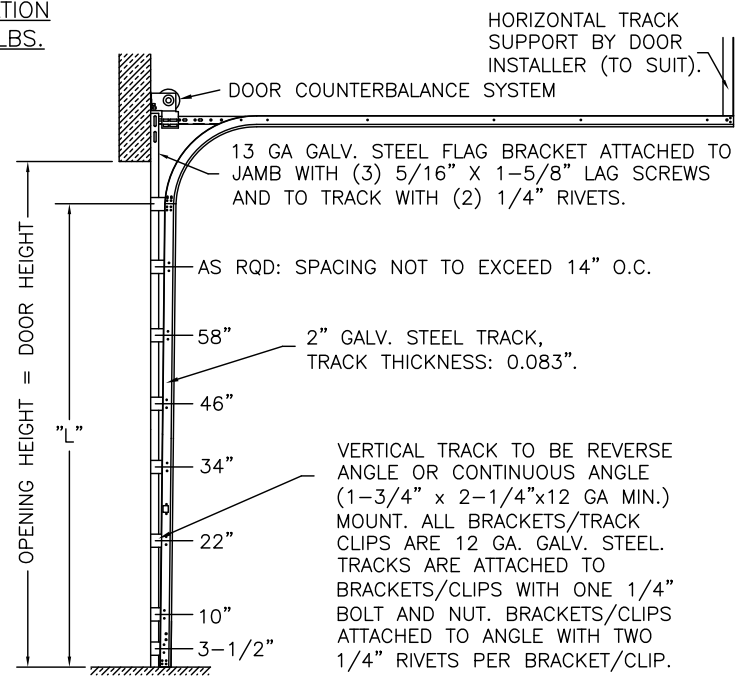
CLOPAY / IDEAL / HOLMES
 524 / C4ST / 224 / 24GA 1-7/8" RIBBED
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SHEET:
 3 OF 3

REVISIONS					DESCRIPTION
REV. NO.	ZONE:	DATE:	ECN NO.	APPVD:	
01	-	-	-	-	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"

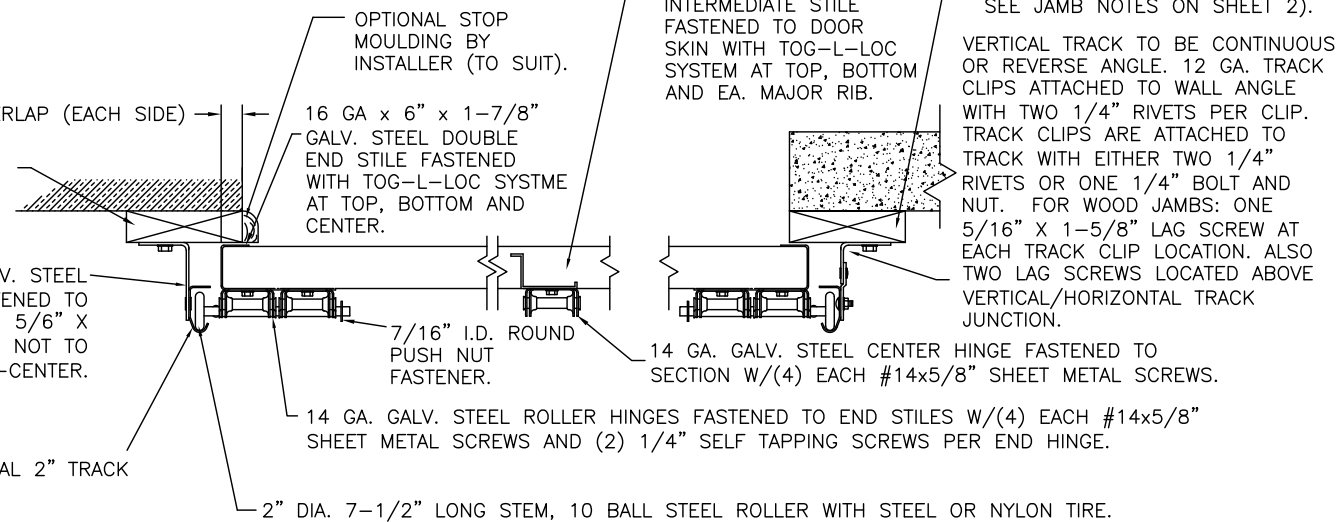
JAMB CONFIGURATION
 DOORS UP TO 800 LBS.

2x6 SYP WOOD JAMB. REQUIRED FOR BRACKET MOUNT.

2-1/2" X 12 GA GALV. STEEL TRACK BRACKETS FASTENED TO WOOD JAMBS WITH 5/6" X 1-5/8" LAG SCREWS NOT TO EXCEED 14" ON-CENTER.

0.083" MIN. THICK VERTICAL 2" TRACK

ANGLE MOUNT JAMB CONFIGURATION

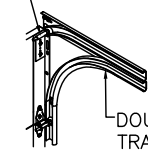


SECTION C-C

PREPARATION OF JAMBS BY OTHERS.

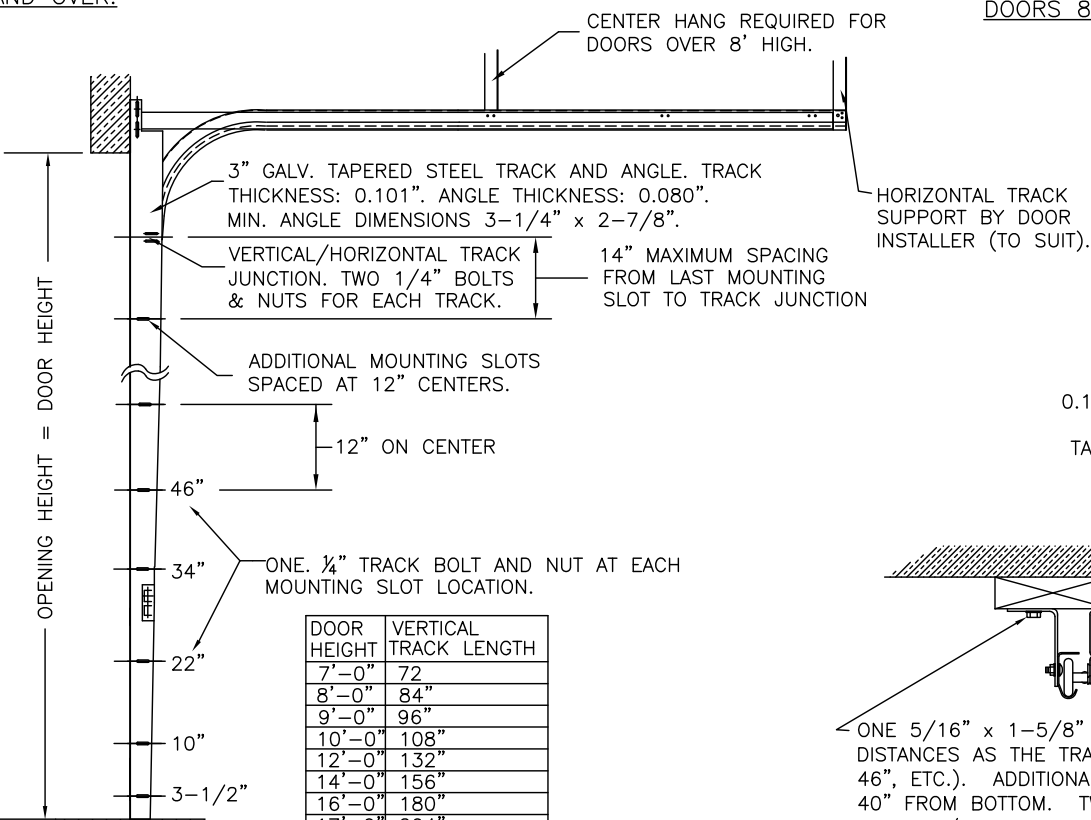
LHR BRACKET (2-1/2" x 5-3/4" x 12GA) ATTACHED WITH (2) 1/4" x 3/4" SELF TAPPING SCREWS. NOTE THAT LHR BRACKETS ARE ALSO USED WITH "DOUBLE END STILE" AS NOTED ON SHEET 2.

DOUBLE TRACK LOW HEADROOM OPTION
 (AVAIL. FOR BOTH 2" AND 3" TRACK)



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.



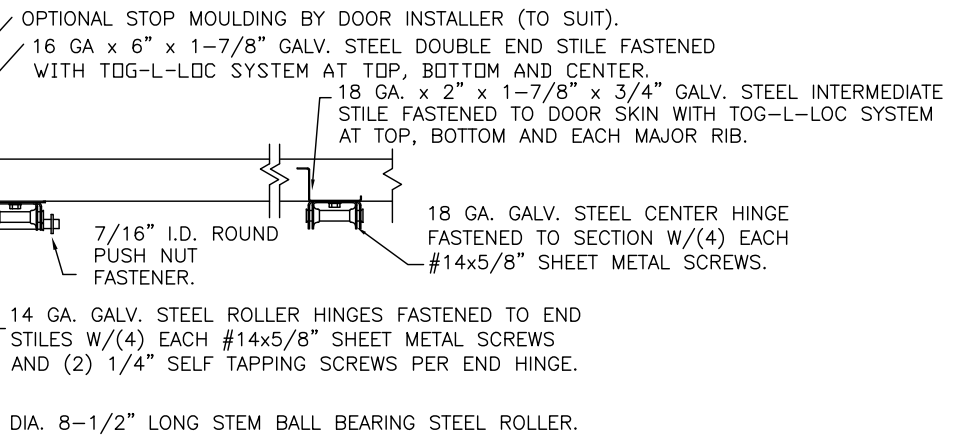
DOOR HEIGHT	VERTICAL TRACK LENGTH
7'-0"	72"
8'-0"	84"
9'-0"	96"
10'-0"	108"
12'-0"	132"
14'-0"	156"
16'-0"	180"
17'-0"	204"
18'-0"	228"

JAMB CONFIGURATION
 DOORS 800 LBS AND OVER.

2x6 SYP JAMB (IF PRESENT; SEE JAMB NOTES ON SHEET 3).

3-1/4" x 2-7/8" MIN. x 0.080" TAPERED ANGLE. SEE LAG BOLT MOUNTING AT TRACK CONFIGURATION BELOW.
 0.101" THICK 3" GALV. STEEL TRACK FASTENED TO TAPERED ANGLE. TRACK ATTACHED TO TAPERED ANGLE WITH ONE 1/4"x5/8" BOLT & NUT AT EACH MOUNTING SLOT.

1" DOOR OVERLAP (EACH SIDE)



SECTION C-C

PREPARATION OF JAMBS BY OTHERS.

DESIGN LOADS: +52 & -58 P.S.F.
 TEST LOADS +75 & -87 P.S.F.

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

WINDLOAD RATING
W8 DP52T

Glopay
 Building Products Company

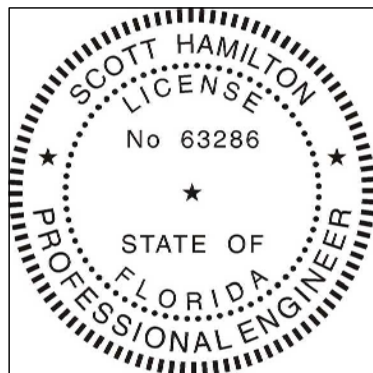
8585 Duke Boulevard
 Mason, OH 45040 USA
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 Fax No. 513-770-4853

DESCRIPTION: COMMERCIAL RIBBED DOORS UP TO 14'2"W

DRAWN BY: SH DATE: 3/14/14 SCALE: NTS DWG. B

CHECKED BY: MWW DATE: 1/2/15 SHEET 3 OF 3 SIZE B

DWG. NO.: 104812 VER: IBC



DESIGN ENGINEER:
 SCOTT HAMILTON, P.E.
 FLORIDA LICENSE No. 63286