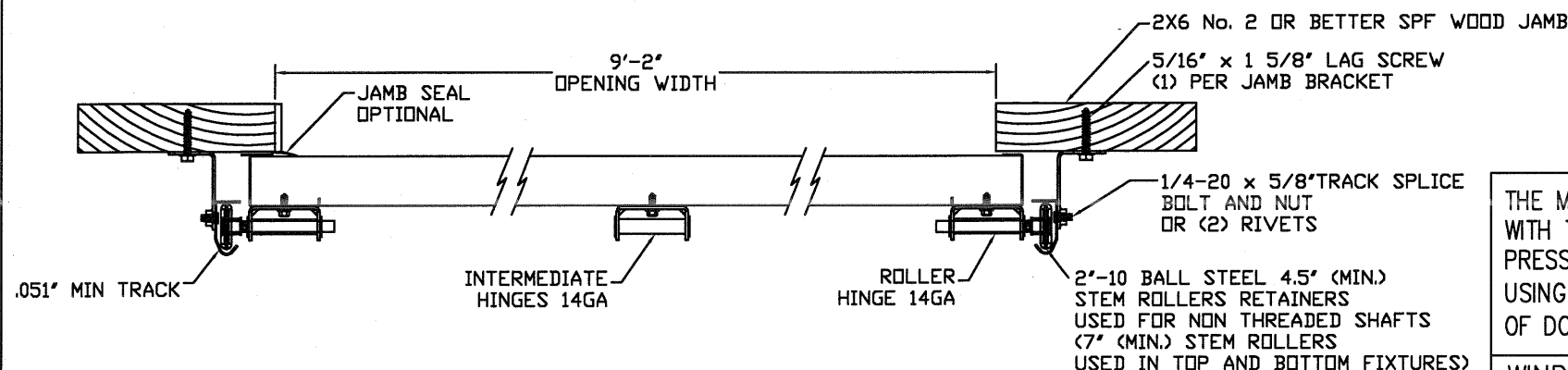
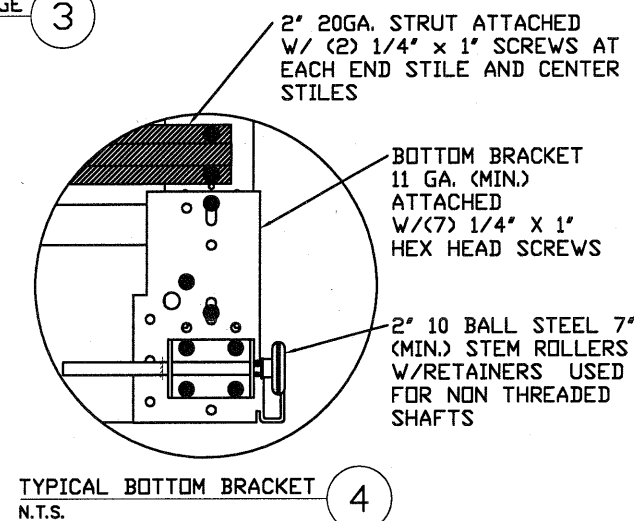
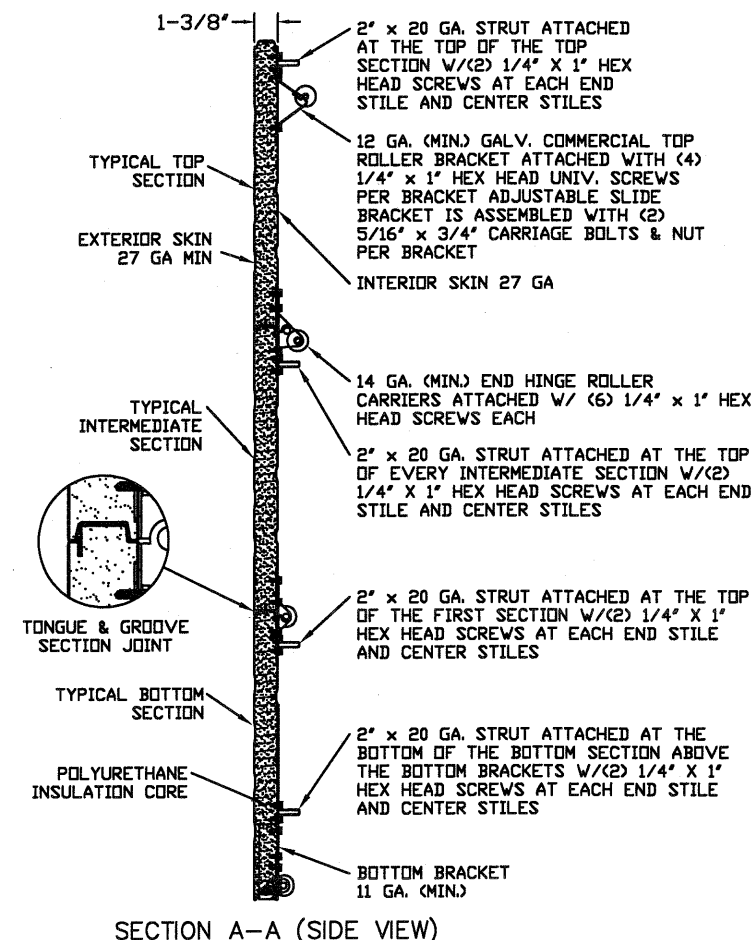
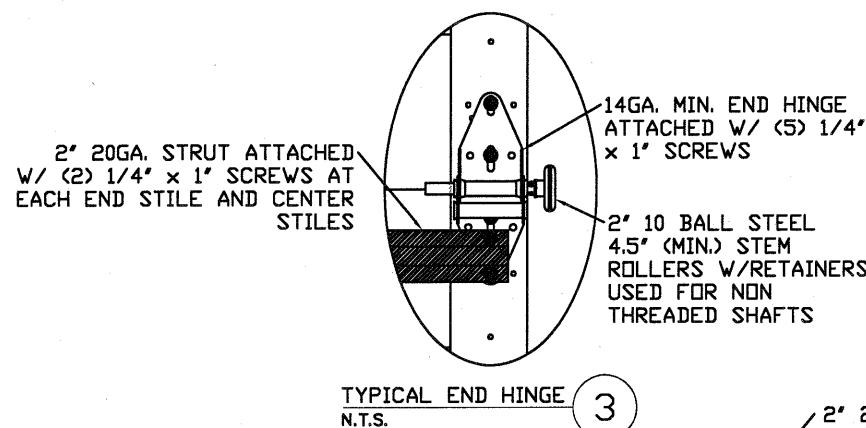
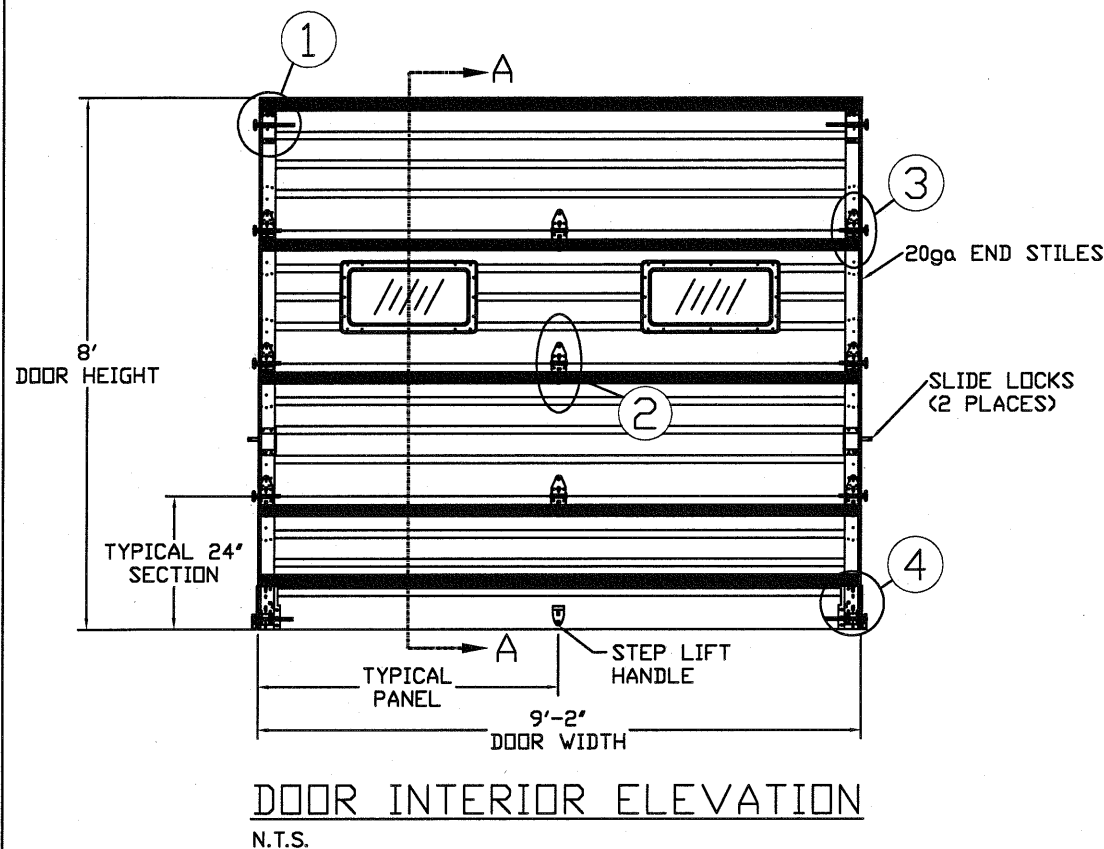
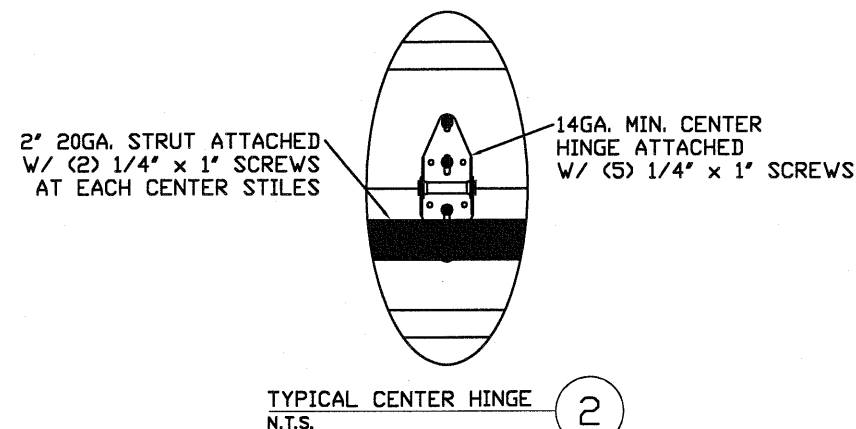
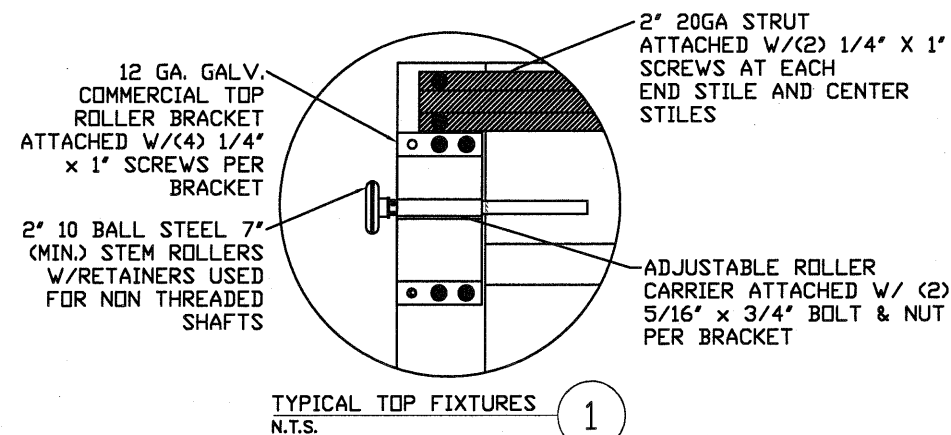




THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN DASMA 108. THE PRESSURES SHOWN ON THE DRAWINGS WERE CALCULATED USING ASCE 7-16 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN END ZONE, ROOF SLOPE 10° OR LESS):

WIND SPEED (MPH)	172	156	148	142	136
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
9'2" x 24"

DESIGN LOADS
+25.5 PSF
-30.0 PSF

TEST LOADS
+38.3 PSF
-45.0 PSF

Thomas L. Shelmerdine, PE (FL PE #0048579)
Structural Solutions, PA (FL Firm #29412)

THOMAS L. SHELMERDINE
LICENSE
No. 48579
STATE OF FLORIDA
PROFESSIONAL ENGINEER
FL

dba Structural Solutions of North Carolina, Inc.
5921-G W. Friendly Ave., Greensboro, NC 27410

Amarr

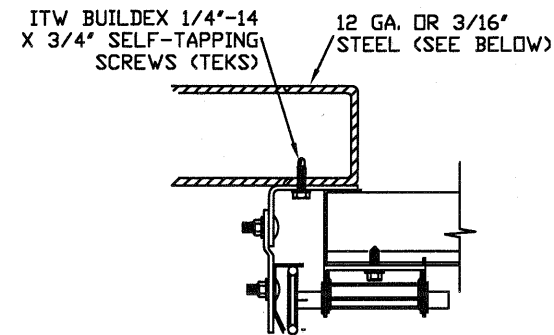
MODEL 1350 AMARR 2741
MODEL 2700 AMARR 2742
MODEL 2720 AMARR 2042

SIZE	DRAWN BY	DRD	DATE	5/1/18	DRAWING NUMBER
B	CHECKED BY	DLJ	DATE	7/23/18	IBC-1309-133-11

ENTREMATIC
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 1 OF 4

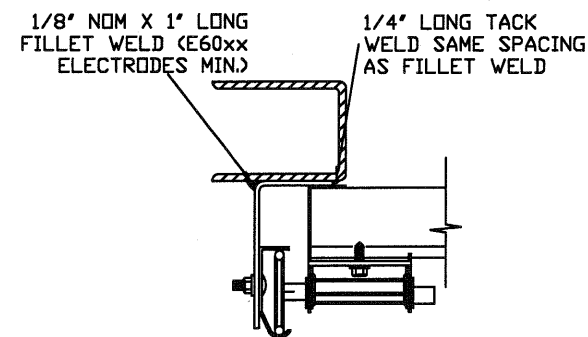
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



CLIP STYLE REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

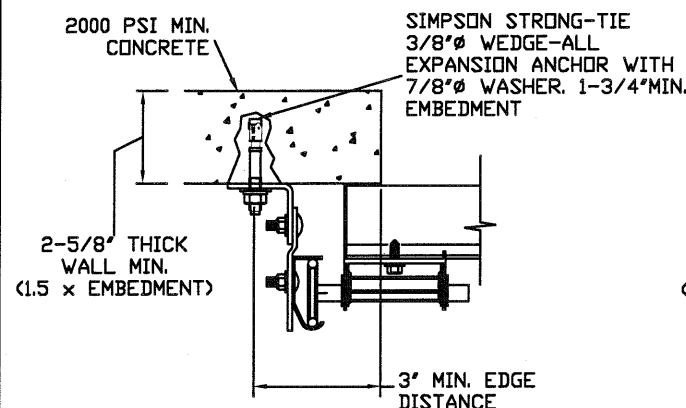
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6'
FROM ENDS AND 22" O.C.
REFER TO NOTES: 1, 2 AND 5

3/16" STEEL FRAMING
569 LBS./SCREW ALLOWABLE LOAD - 6'
FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5



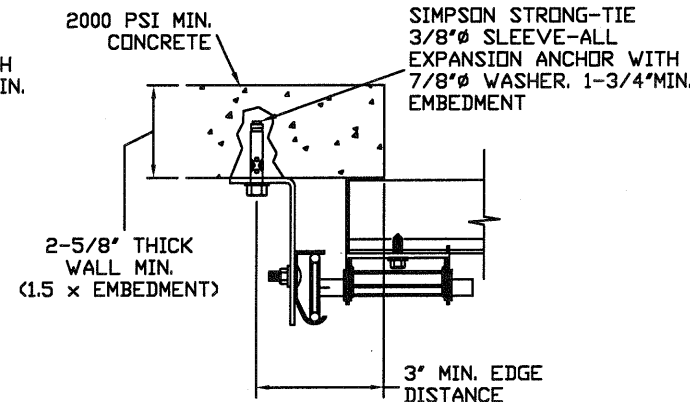
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND
TAPERED ANGLE MOUNT AVAILABLE

STEEL FRAMING 12GA OR BETTER
1590 LBS./IN. ALLOWABLE LOAD -
6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 5, 6, 7, 8
AND 9



CLIP STYLE CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, REVERSE AND TAPERED ANGLE MOUNT
AVAILABLE

2000 PSI CONCRETE OR GREATER
351 LBS./EXPANSION ANCHOR ALLOWABLE LOAD -
6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

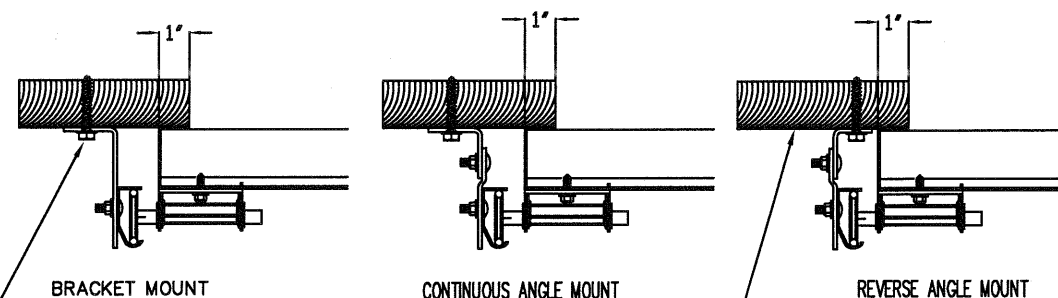


CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE
LOAD - 6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

TRACK CONNECTION TO WOOD JAMB OPTIONS

FOR LAG SCREWS & BRACKET SPACING SEE TRACK CONFIGURATION DETAIL



5/16" x 1 5/8" LAG SCREW (1)
PER JAMB BRACKET (1-1/2"
EMBEDMENT MINIMUM) (TYP.)

CONTINUOUS ANGLE MOUNT

2x6 WOOD JAMB SYP OR SPF
(NO.2) OR BETTER (TYP.)

WOOD JAMB ATTACHMENT TO STRUCTURE (OPTIONAL)

2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE

5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/2" EMBEDMENT)

2 X 6 VERTICAL JAMB ATTACHMENT TO 2,000 PSI CONCRETE

HILTI KWIK BOLT 3/8" X 4" STARTING 6" FROM ENDS
THEN 24" O.C. (2 1/2" EMBEDMENT)

HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/4" EMBEDMENT)

ITW/RAMSET REDHEAD (TRU-BOLT) 3/8" X 4" STARTING 6" FROM ENDS
THEN 24" O.C. (2 1/2" EMBEDMENT)

2 X 6 VERTICAL JAMB ATTACHMENT TO HOLLOW C-90 BLOCK

SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS,
USE PAIRS OF FASTENERS (3" APART)

AT 24" O.C. (1 1/2" EMBEDMENT)

HILTI 1/4" X 2-3/4" KWIK-CON II+ SCREWS STARTING 6" FROM ENDS,
USE PAIRS OF FASTENERS (3" APART) AT 24" O.C. (1 1/4" EMBEDMENT)

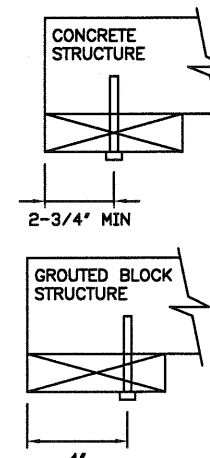
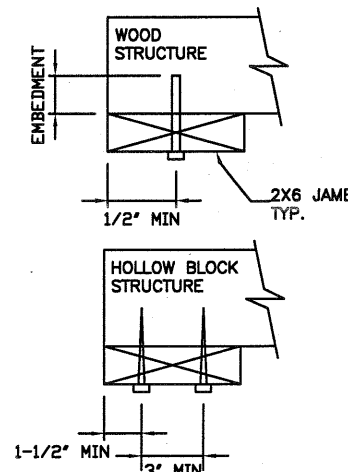
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)

HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/4" EMBEDMENT)

(OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

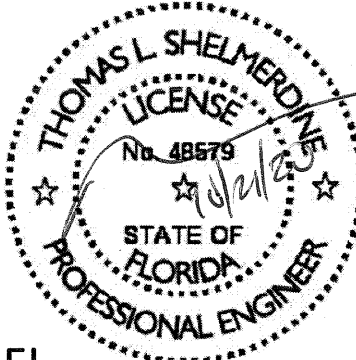
*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.

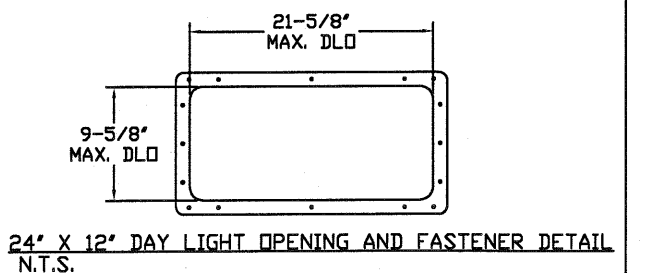
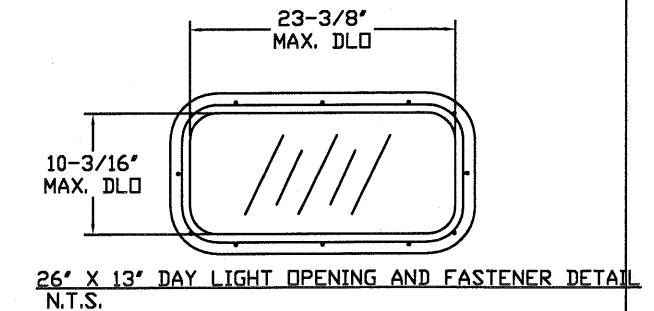
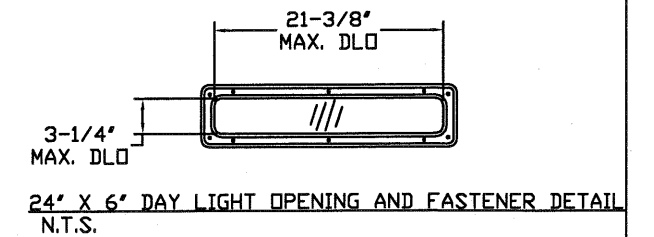
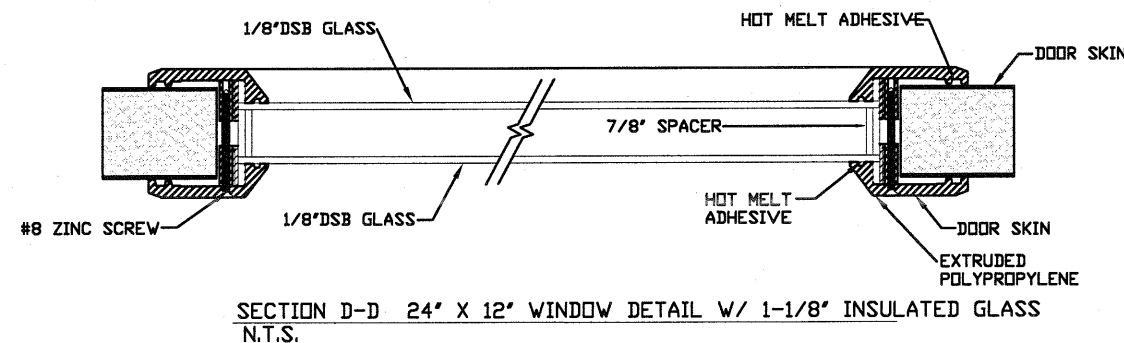
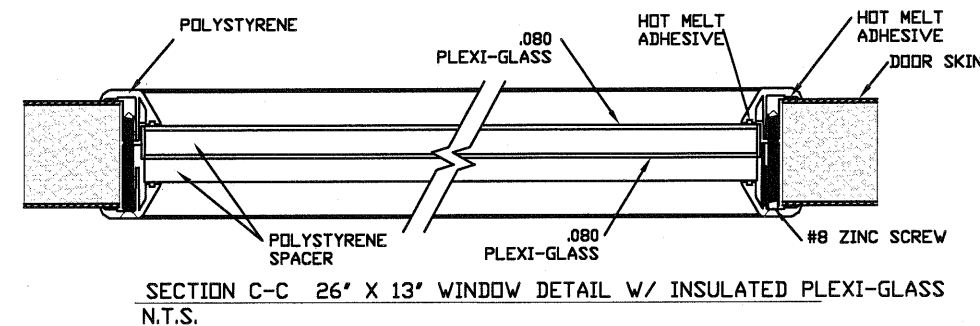
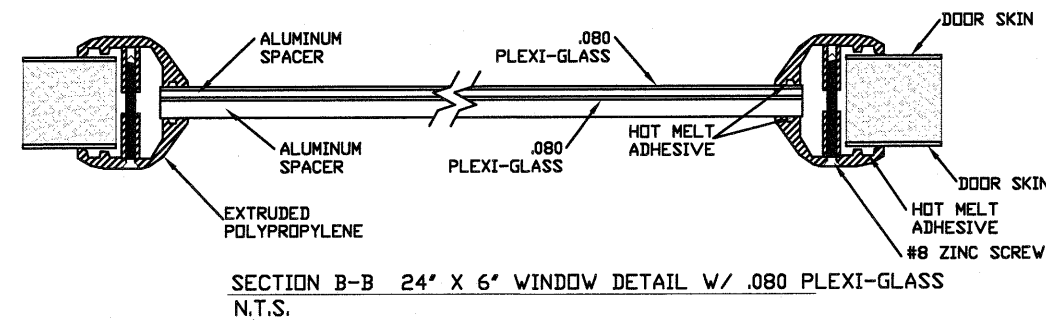
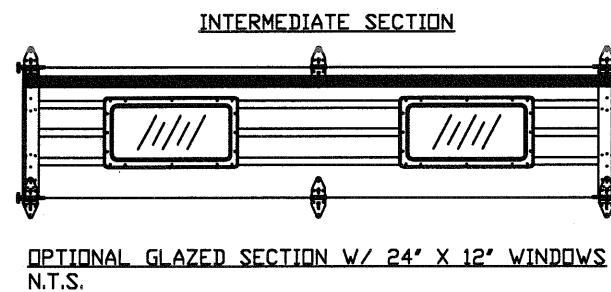
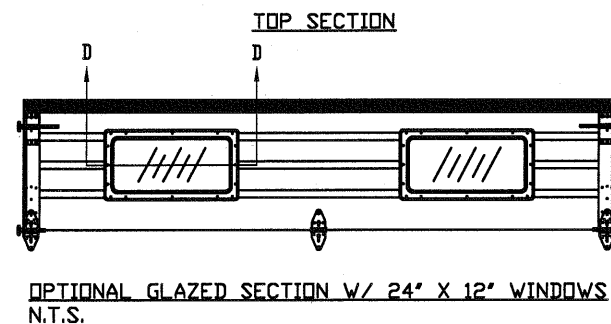
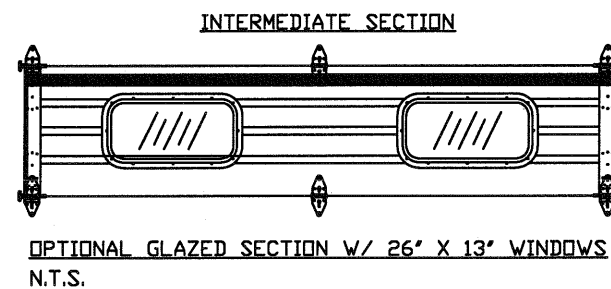
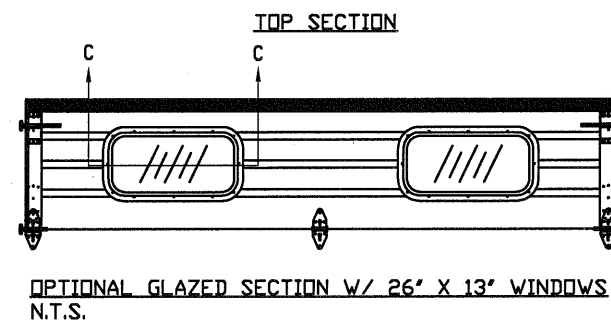
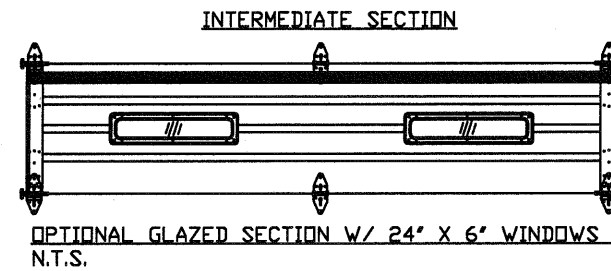
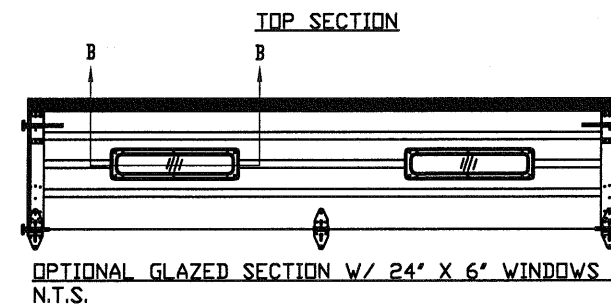
*PREPARATION OF WOOD JAMBS BY OTHERS



NOTES:

1. ANCHORS TO BE EVENLY SPACED BETWEEN THE HEADER AND FLOOR.
2. 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.
3. MIN. EDGE DISTANCE OF 3" REQUIRED.
4. USE WASHERS PROVIDED BY THE ANCHOR MANUFACTURER.
5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS IN ADDITION TO OTHER LOADS.
6. MOST GARAGE DOOR TRACK IS GALVANIZED STEEL. USE ALL NECESSARY PRECAUTIONS WHEN WELDING GALVANIZED STEEL.
7. ALL WELDS SHOULD BE PERFORMED BY A CERTIFIED WELDER OR INSPECTED BY A CERTIFIED WELDING INSPECTOR TO VERIFY THE INTEGRITY OF THE WELD.
8. FILLET WELDS TO HAVE A STRAIGHT OR CONVEX FACE SURFACE.
9. TACK WELD TOE OF ANGLE AT SAME SPACING TO PREVENT ROTATION OF TRACK ANGLE.

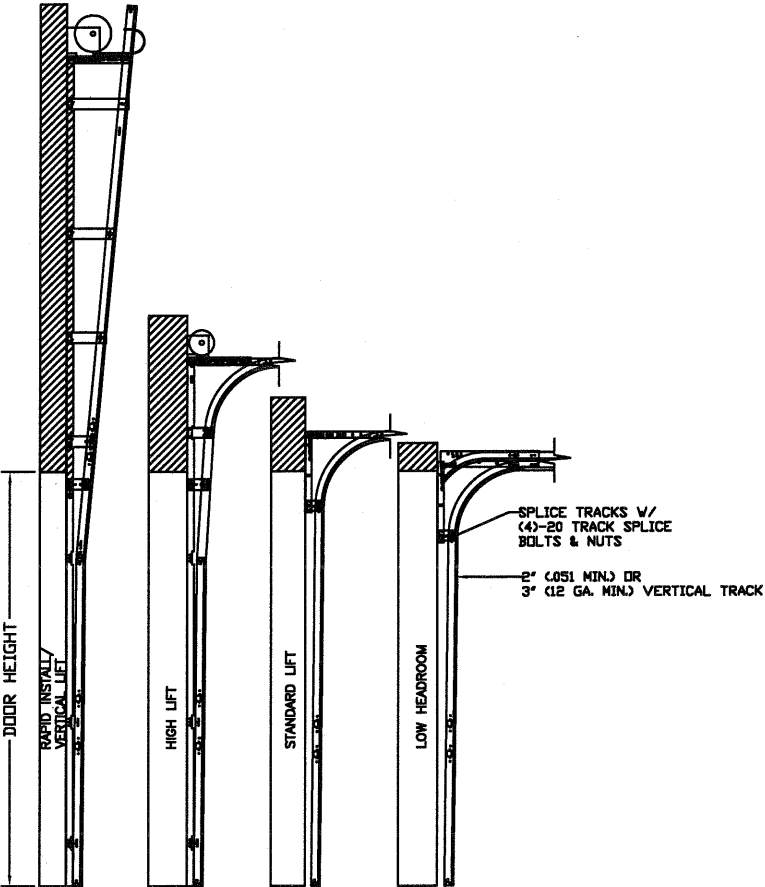
REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 9'2 x 24' DESIGN LOADS +25.5 PSF -30.0 PSF TEST LOADS +38.3 PSF -45.0 PSF	Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL	 dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410	
			
MODEL 1350 AMARR 2741 MODEL 2700 AMARR 2742 MODEL 2720 AMARR 2042			
SIZE	DRAWN BY	DRD	DATE 5/1/18
B	CHECKED BY	DLJ	DATE 7/23/18
			DRAWING NUMBER
			IBC-1309-133-11
ENTREMATRIC			
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			
			SHEET 2 OF 4



REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 9'2" x 24' DESIGN LOADS +25.5 PSF -30.0 PSF TEST LOADS +38.3 PSF -45.0 PSF Thomas L. Shelmerdine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410			
MODEL 1350 AMARR 2741 MODEL 2700 AMARR 2742 MODEL 2720 AMARR 2042			
SIZE	DRAWN BY	DRD	DATE 5/1/18
B	CHECKED BY	DLJ	DATE 7/23/18
ENTREMATICS			DRAWING NUMBER
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			IBC-1309-133-11
			SHEET 3 OF 4

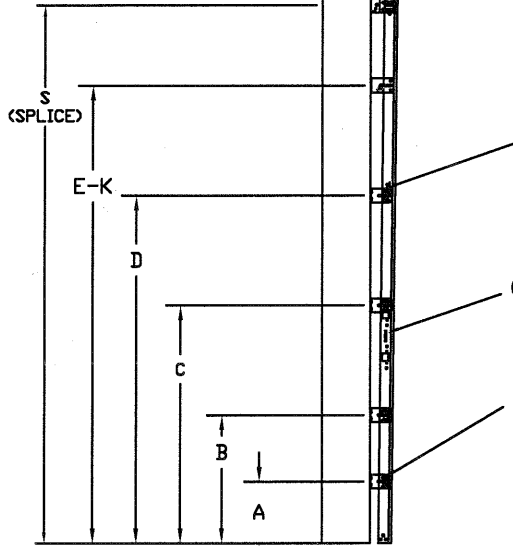
TABLE 1

Section Width (ft)	Center Stile Locations (From Left Edge)	Max Design Loads Allowed	
		Positive (PSF)	Negative (PSF)
6' 0"	36"	38.7	45.6
6' 2"	37"	37.7	44.3
6' 4"	38"	36.7	43.2
6' 6"	39"	35.7	42.0
6' 8"	40"	34.8	41.0
6' 10"	41"	34.0	40.0
7' 0"	42"	33.2	39.0
7' 2"	43"	32.4	38.1
7' 4"	44"	31.7	37.3
7' 6"	45"	31.0	36.4
7' 8"	46"	30.3	35.6
7' 10"	47"	29.6	34.9
8' 0"	48"	29.0	34.2
8' 2"	49"	28.4	33.5
8' 4"	50"	27.9	32.8
8' 6"	51"	27.3	32.1
8' 8"	52"	26.8	31.5
8' 10"	53"	26.3	30.9
9' 0"	54"	25.8	30.4
9' 2"	55"	25.5	30.0



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

14 GA. FLAG BRACKET ATTACHED TO WOOD JAMB W/ (3) 5/16 DIA. X 1-5/8" LAG BOLTS AND TO TRACK W/ (4) 1/4"-20 X 5/8" TRACK SPLICE BOLTS AND NUTS



TRACK CONFIGURATION FOR UP TO 24' TALL DOORS
N.T.S.

SEE TABLE 2 FOR TRACK ATTACHMENT SPACING

SPLICE TRACKS AT THIS LOCATION W/ (4) 1/4"-20 TRACK SPLICE BOLTS & NUTS SECURE TO JAMB WITH (3) 5/16" DIA. X 1-5/8" LAG BOLTS

(1) 5/16" DIA. X 1-5/8" LAG BOLT ATTACHED TO JAMB AT EA. JAMB BRACKET

12 GA. GALV. STEEL JAMB BRACKETS ATTACHED W/ (1) 1/4"-20 TRACK SPLICE BOLT & NUT OR (2) RIVETS

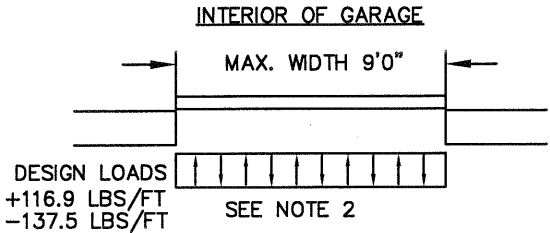
TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT											SPLICE
	A	B	C	D	E	F	G	H	I	J	K	
6' 6"	10"	34"	58"									70"
7' 0"	10"	34"	58"									76"
7' 6"	10"	34"	58"									82"
8' 0"	10"	34"	58"									88"
8' 6"	10"	34"	58"	82"								94"
9' 0"	10"	34"	58"	82"								100"
9' 6"	10"	34"	58"	82"								106"
10' 0"	10"	34"	58"	82"								112"
10' 6"	10"	34"	58"	82"	100"							118"
11' 0"	10"	34"	58"	82"	106"							124"
11' 6"	10"	34"	58"	82"	100"							130"
12' 0"	10"	34"	58"	82"	106"							136"
12' 6"	10"	34"	58"	82"	98"	124"						142"
13' 0"	10"	34"	58"	82"	106"	130"						148"
13' 6"	10"	34"	58"	82"	98"	124"						154"
14' 0"	10"	34"	58"	82"	106"	130"						160"
15' 0"	10"	34"	58"	82"	106"	130"	154"					172"
16' 0"	10"	34"	58"	82"	106"	130"	154"					184"
17' 0"	10"	34"	58"	82"	106"	130"	154"	178"				196"
18' 0"	10"	34"	58"	82"	106"	130"	154"	178"				208"
19' 0"	10"	34"	58"	82"	106"	130"	154"	178"	202"			220"
20' 0"	10"	34"	58"	82"	106"	130"	154"	178"	202"			232"
21' 0"	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"		244"
22' 0"	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"		256"
23' 0"	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"	250"	268"
24' 0"	10"	34"	58"	82"	106"	130"	154"	178"	202"	226"	250"	280"

ALL TRACK ATTACHMENT SPACING +/-2" ALLOWED WITH SPF OR SYP NO. 2 OR BETTER ONLY
AMARR MODEL 1350 ONLY AVAILABLE UP TO 14'

SPECIFICATIONS AND NOTES

- ALL THE LOAD FROM THE DOOR IS TRANSFERRED TO THE VERTICAL TRACK, FROM THE TRACK THE LOAD IS TRANSFERRED TO THE VERTICAL JAMBS. THE HORIZONTAL JAMB OR HEADER RECEIVES NO PORTION OF THE LOAD TRANSFERRED FROM THE DOOR.
- EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +116.9 LBS/FT & -137.5 LBS/FT
- DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
- DOOR SECTIONS SHALL BE 27 GA. (.015) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
- SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.



REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
9'2 x 24'

DESIGN LOADS
+25.5 PSF
-30.0 PSF

TEST LOADS
+38.3 PSF
-45.0 PSF

Thomas L. Shelmerdine, PE (FL PE #0048579)
Structural Solutions, PA (FL Firm #29412)

FL

dba Structural Solutions of North Carolina, Inc.
5921-G.W. Friendly Ave., Greensboro, NC 27410

MODEL 1350 AMARR 2741
MODEL 2700 AMARR 2742
MODEL 2720 AMARR 2042

SIZE	DRAWN BY	DRD	DATE	5/1/18	DRAWING NUMBER
B	CHECKED BY	DLJ	DATE	7/23/18	IBC-1309-133-11
ENTREMATICA 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105					SHEET 4 OF 4