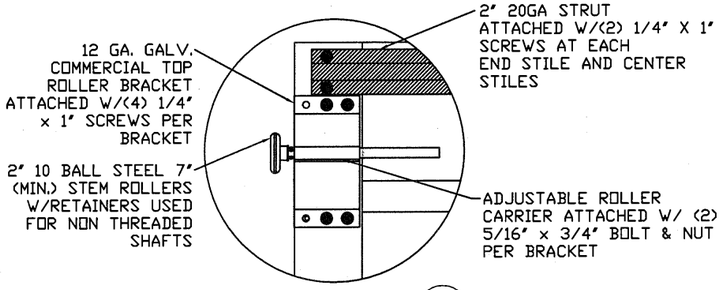
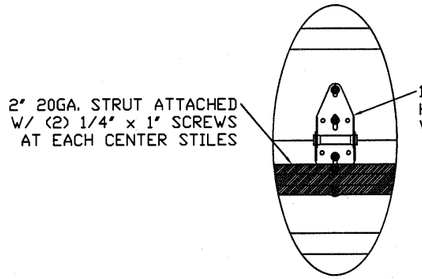
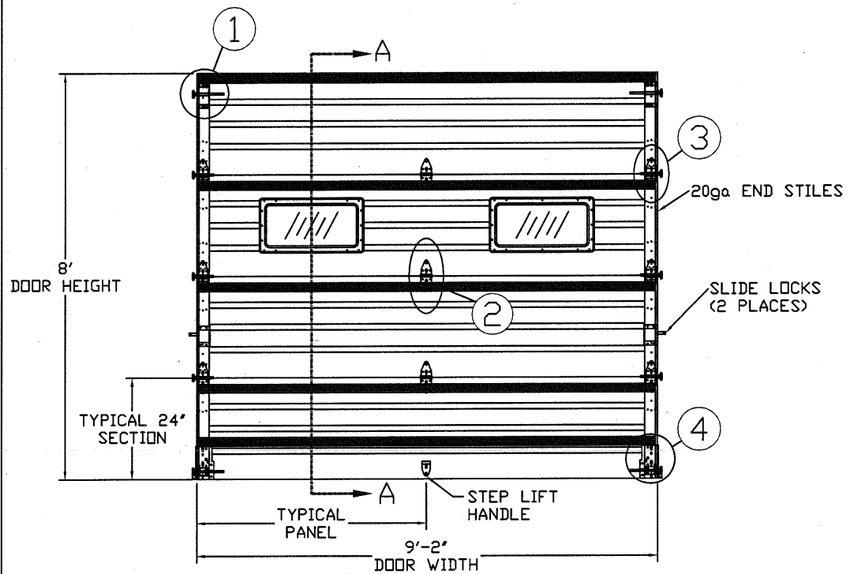


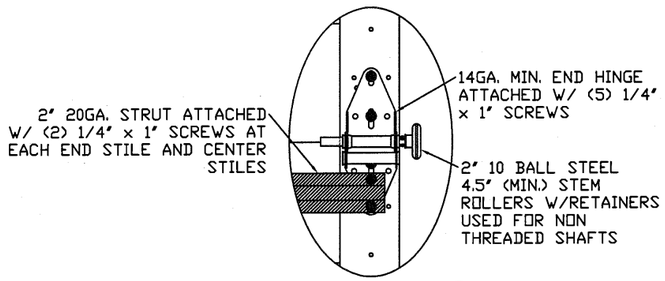
TYPICAL TOP FIXTURES (1)
N.T.S.



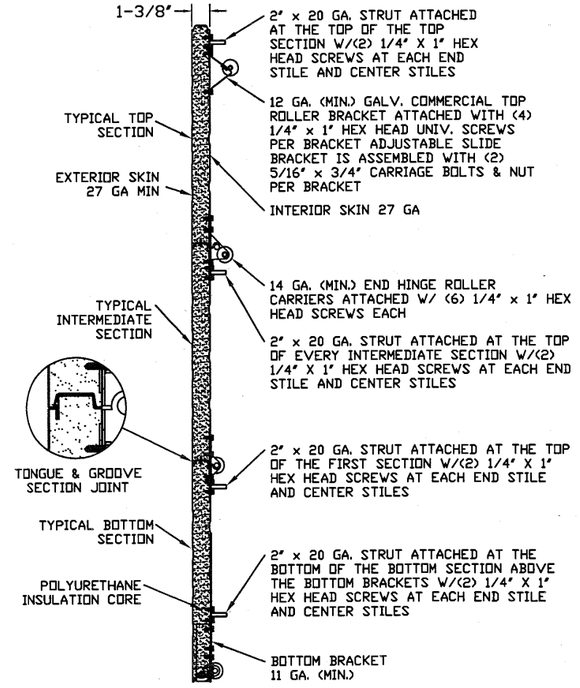
TYPICAL CENTER HINGE (2)
N.T.S.



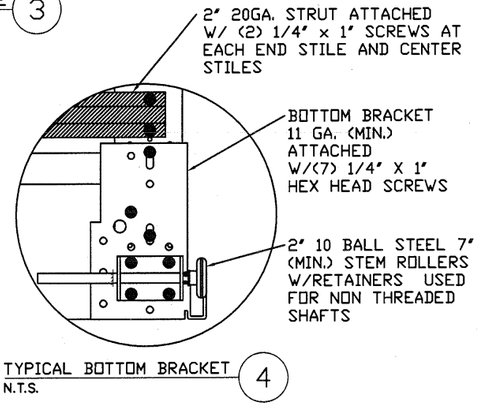
DOOR INTERIOR ELEVATION
N.T.S.



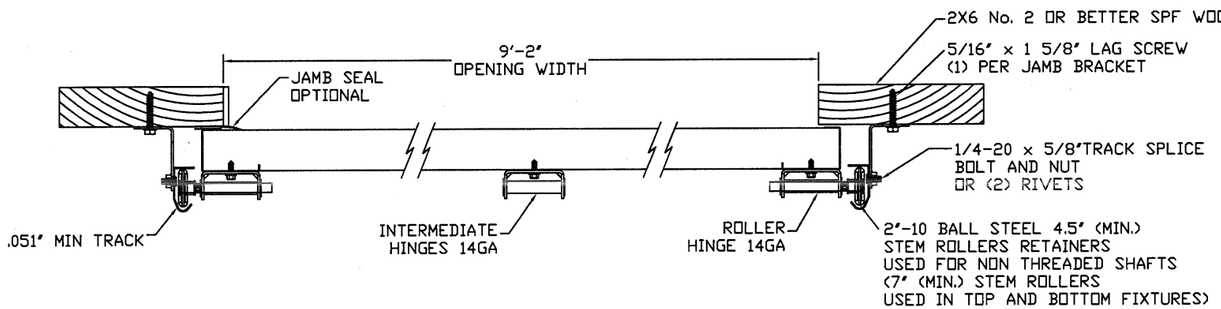
TYPICAL END HINGE (3)
N.T.S.



SECTION A-A (SIDE VIEW)



TYPICAL BOTTOM BRACKET (4)
N.T.S.



2" BRACKET MOUNT TO WOOD JAMB DETAIL
N.T.S.

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 7-98/02/05 WITH THE FOLLOWING PARAMETERS (5 FEET OF DOOR WIDTH IN END ZONE, ROOF SLOPE 10° OR LESS, AND I=1.0):

WIND SPEED (MPH)	133	121	115	110	105
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 (TX PE #85829)
Structural Solutions, PA (TX Firm #F-004063)

STATE OF TEXAS
THOMAS L. SHELMERDINE
85829
LICENSED
PROFESSIONAL ENGINEER
TX

5921-G W. Friendly Ave., Greensboro, NC 27410

Amarr ENTREMATIC

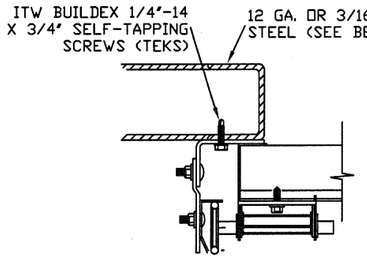
MODEL 1350 AMARR 2741
MODEL 2700 AMARR 2742
MODEL 2720 AMARR 2042

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

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

SHEET 1 OF 4

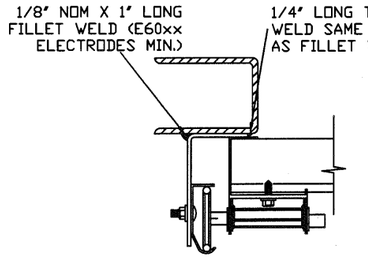
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



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

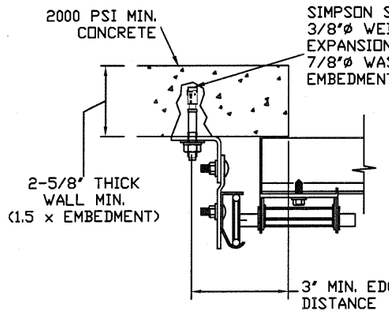
3/16" STEEL FRAMING
569 LBS./SCREW ALLOWABLE LOAD - 6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5



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

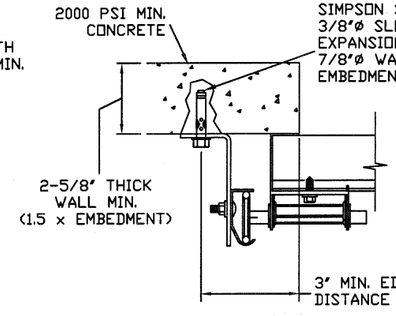
STEEL FRAMING 12GA OR BETTER
1590 LBS./IN. ALLOWABLE LOAD - 6" FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2, 5, 6, 7, 8 AND 9

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. EGDE 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.



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

WOOD JAMB ATTACHMENT TO STRUCTURE (OPTIONAL)

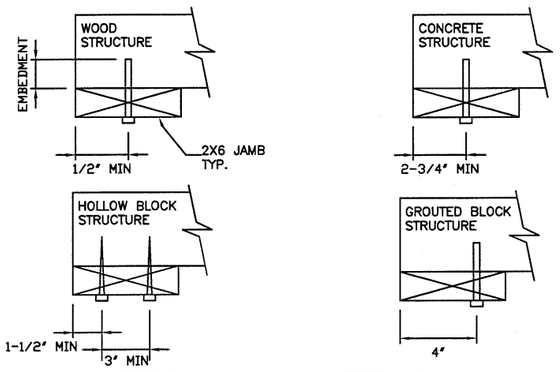
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/2" EMBEDMENT)

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)

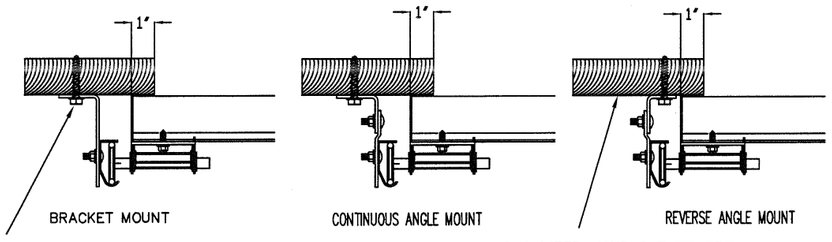
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)
HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 24" O.C. (1 1/4" EMBEDMENT)
(OR, USE FASTENERS FOR HOLLOW C-90 BLOCK)

*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
*PREPARATION OF WOOD JAMBS BY OTHERS



TRACK CONNECTION TO WOOD JAMB OPTIONS

FOR LAG SCREWS & BRACKET SPACING SEE TRACK CONFIGURATION DETAIL



REV	DESCRIPTION OF REVISIONS	DATE	BY

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DESIGN LOADS
+25.5 PSF
-30.0 PSF

TEST LOADS
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-45.0 PSF

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SIZE	DRAWN BY	DATE	DRAWING NUMBER
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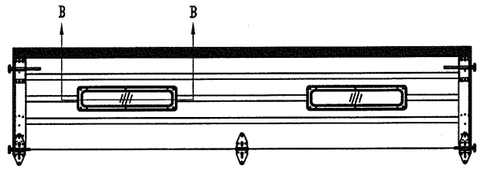
ENTREMATIC
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

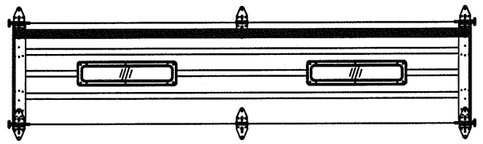
SHEET 2 OF 4

TOP SECTION



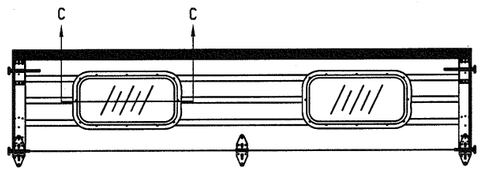
OPTIONAL GLAZED SECTION W/ 24" X 6" WINDOWS
N.T.S.

INTERMEDIATE SECTION



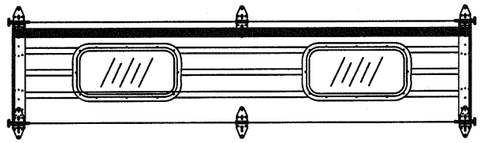
OPTIONAL GLAZED SECTION W/ 24" X 6" WINDOWS
N.T.S.

TOP SECTION



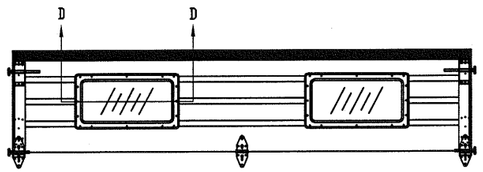
OPTIONAL GLAZED SECTION W/ 26" X 13" WINDOWS
N.T.S.

INTERMEDIATE SECTION



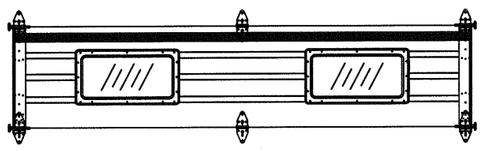
OPTIONAL GLAZED SECTION W/ 26" X 13" WINDOWS
N.T.S.

TOP SECTION



OPTIONAL GLAZED SECTION W/ 24" X 12" WINDOWS
N.T.S.

INTERMEDIATE SECTION



OPTIONAL GLAZED SECTION W/ 24" X 12" WINDOWS
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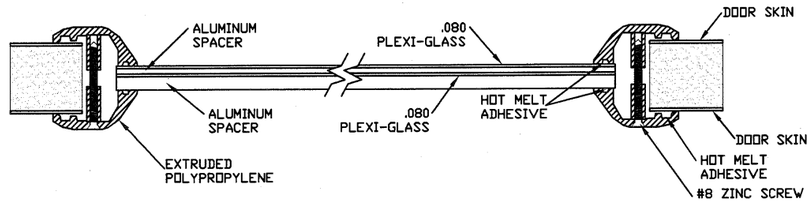

SECTION B-B 24" X 6" WINDOW DETAIL W/ .080 PLEXI-GLASS
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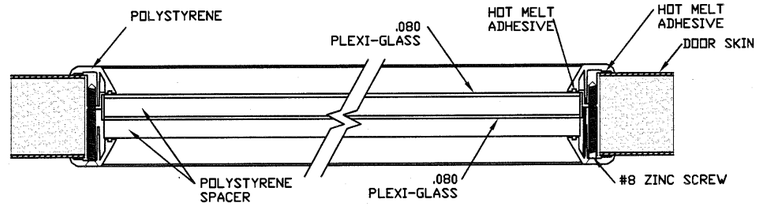

SECTION C-C 26" X 13" WINDOW DETAIL W/ INSULATED PLEXI-GLASS
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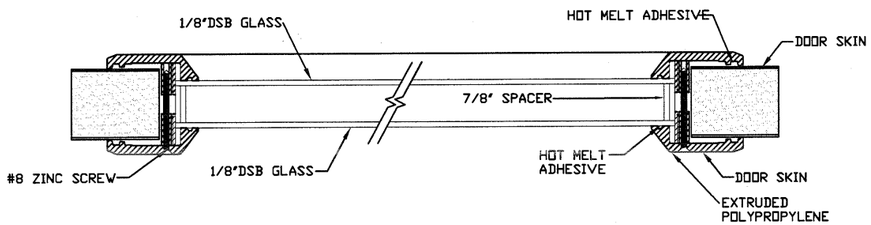
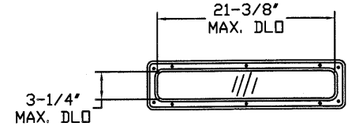
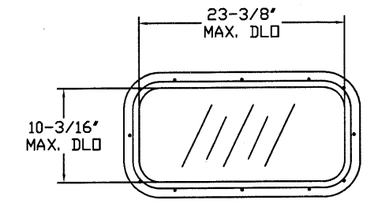


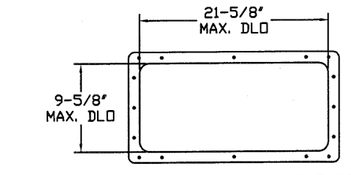
SECTION D-D 24" X 12" WINDOW DETAIL W/ 1-1/8" INSULATED GLASS
N.T.S.



24" X 6" DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.



26" X 13" DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.



24" X 12" DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
9'2 x 24'

DESIGN LOADS
+25.5 PSF
-30.0 PSF

TEST LOADS
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-45.0 PSF

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SIZE	DRAWN BY DRD	DATE 5/1/18	DRAWING NUMBER
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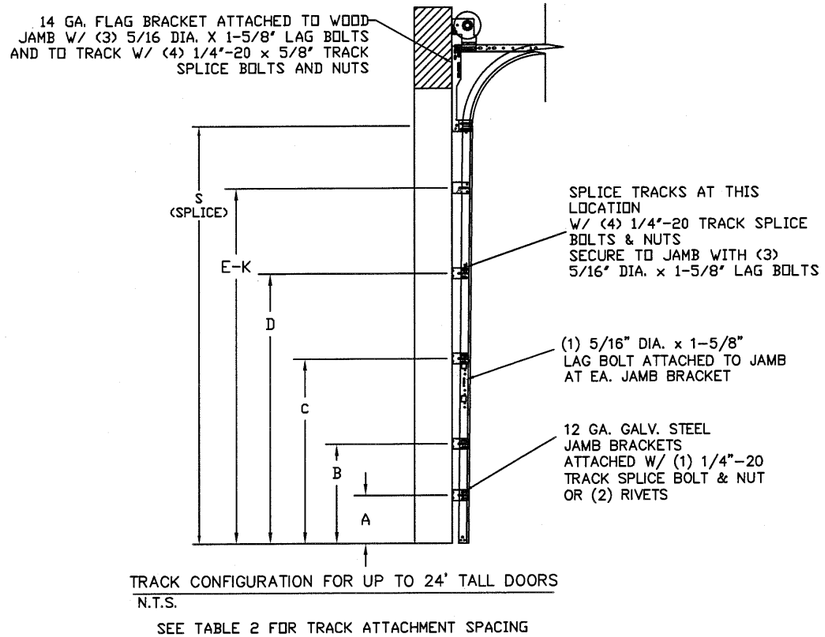
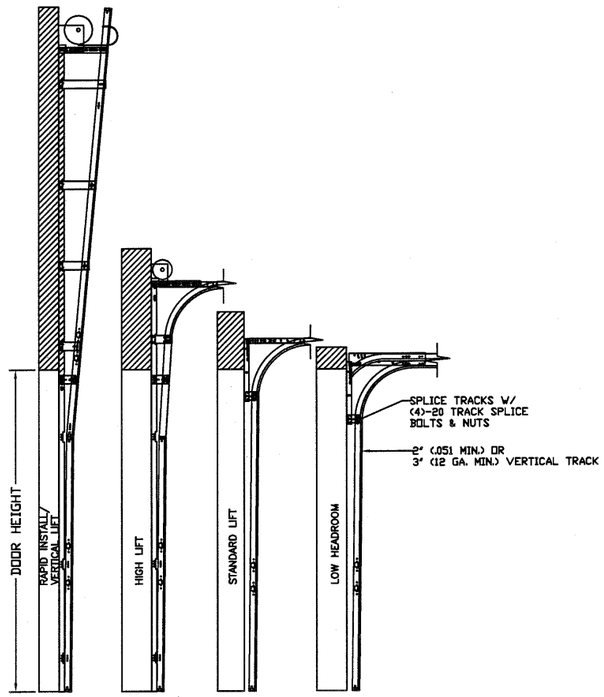
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			SHEET 3 OF 4



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

SEE TABLE 2 FOR TRACK ATTACHMENT SPACING



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

TABLE 1

Section Width (ft)		Center Stile Locations (From Left Edge)	Max Design Loads Allowed	
			Positive (PSF)	Negitive (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

TABLE 2

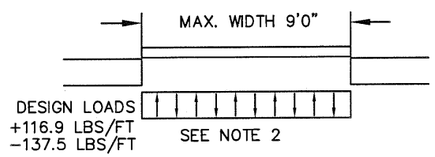
DOOR HEIGHT	TRACK ATTACHMENT											SPLICE
	A	B	C	D	E	F	G	H	I	J	K	S
6' 6	10"	34"	58"									70"
7' 0	10"	34"	58"									76"
7' 6	10"	34"	58"									82"
8' 0	10"	34"	58"									88"
8' 6	10"	34"	58"	82"								94"
9' 0	10"	34"	58"	82"								100"
9' 6	10"	34"	58"	82"								106"
10' 0	10"	34"	58"	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

1. 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.
2. EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +116.9 LBS/FT & -137.5 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 27 GA. (.015) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
5. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTRED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

INTERIOR OF GARAGE



REV	DESCRIPTION OF REVISIONS	DATE	BY

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-30.0 PSF

TEST LOADS
+38.3 PSF
-45.0 PSF

Thomas L. Shelmerdine, PE (TX PE #85829)
Structural Solutions, PA (TX Firm #F-004063)

STATE OF TEXAS
THOMAS L. SHELMERDINE
85829
LICENSED
PROFESSIONAL ENGINEER
7/23/18

TX

5921-G W. Friendly Ave., Greensboro, NC 27410

Amarr ENTREMATIC

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

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