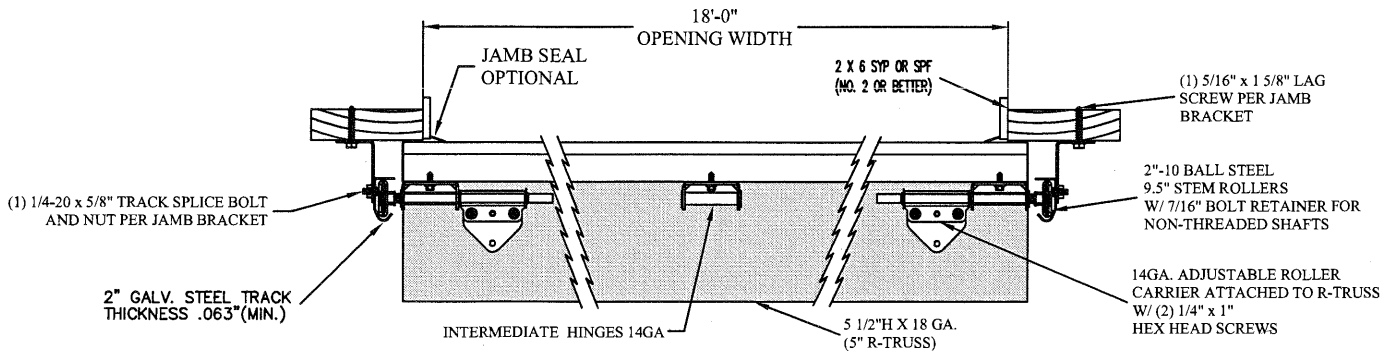


DOOR INTERIOR ELEVATION
N.T.S.

SECTION A-A (SIDE VIEW)
N.T.S.



2\"/>

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN ASTM E1886, E1996, F588, AND DASMA 108, 115. 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 AT ANY SLOPE, AND I=1.0):

WIND SPEED (MPH)	136	123	117	112	107
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 18'2 x 14'

DESIGN LOADS
+25.1 PSF
-28.4 PSF

TEST LOADS
+37.7 PSF
-42.6 PSF

LARGE MISSILE IMPACT RESISTANCE

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

STATE OF TEXAS
THOMAS L. SHELMERDINE
85829
LICENSED PROFESSIONAL ENGINEER

TX

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

ENTRE/MATIC

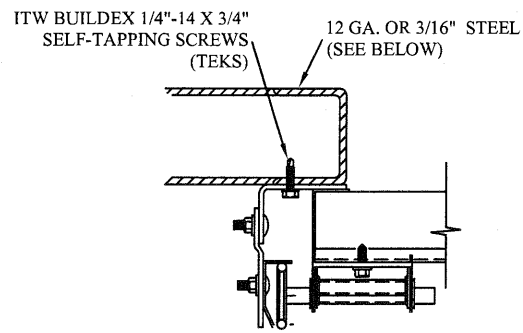
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

AMARR MODEL #1380

SIZE	DRAWN BY	RLR	DATE	12/08/14	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	12/08/14	IBC-1818-136-26-1

SHEET 1 OF 3

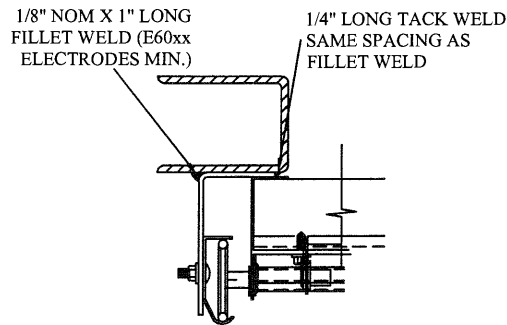
TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



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

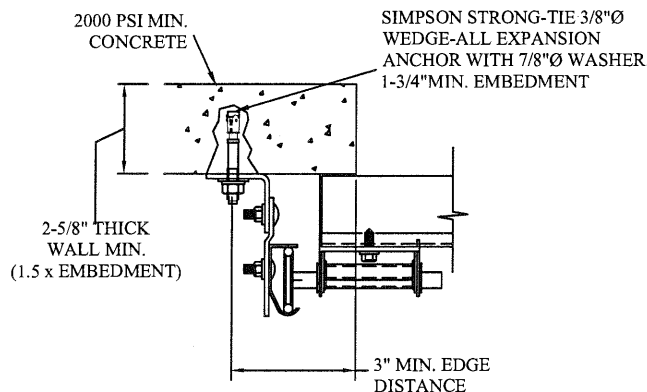
12 GA. STEEL FRAMING
232 LBS./SCREW ALLOWABLE LOAD - 6" FROM ENDS
AND 12" O.C.
REFER TO NOTES: 1, 2 AND 5

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



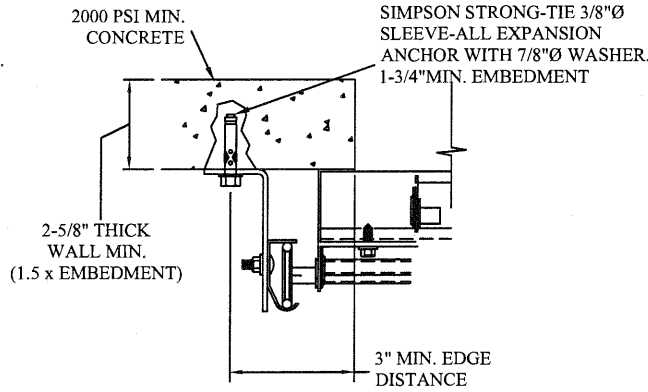
REVERSE ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED
ANGLE MOUNT AVAILABLE

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 18" O.C.
REFER TO NOTES: 1, 2, 3, 4 AND 5

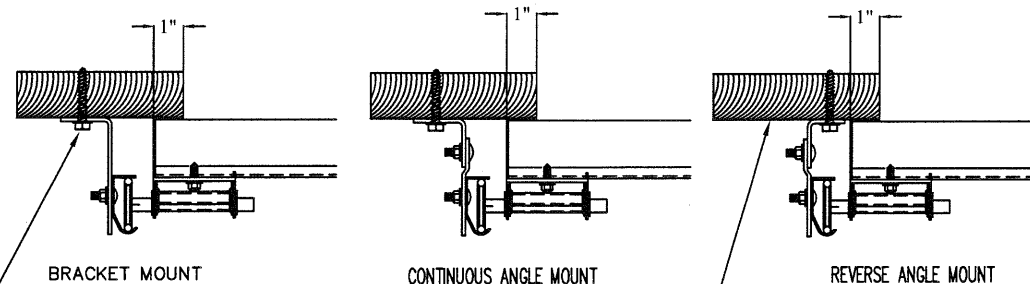


CONTINUOUS ANGLE MOUNT SHOWN
BRACKET, CONTINUOUS AND TAPERED ANGLE
MOUNT AVAILABLE

2000 PSI CONCRETE OR GREATER
336 LBS./EXPANSION ANCHOR ALLOWABLE LOAD - 6"
FROM ENDS AND 16" 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.)

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

NOTES:

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

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 20" 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 18" 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 8" 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 8" O.C. (1 1/4" EMBEDMENT)

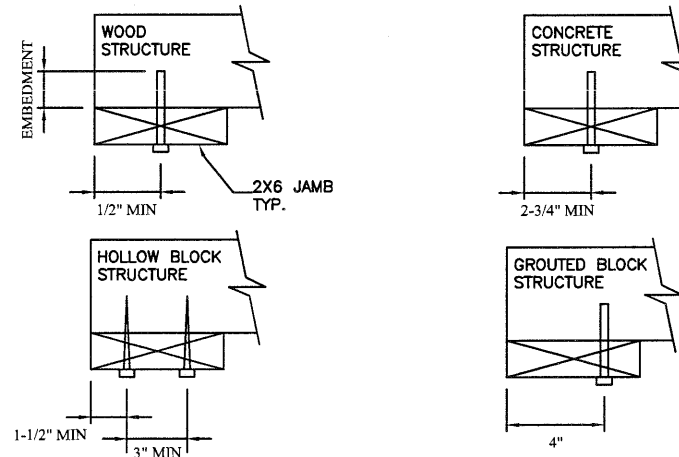
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)

HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS
THEN 22" O.C. (1 1/4" EMBEDMENT)

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

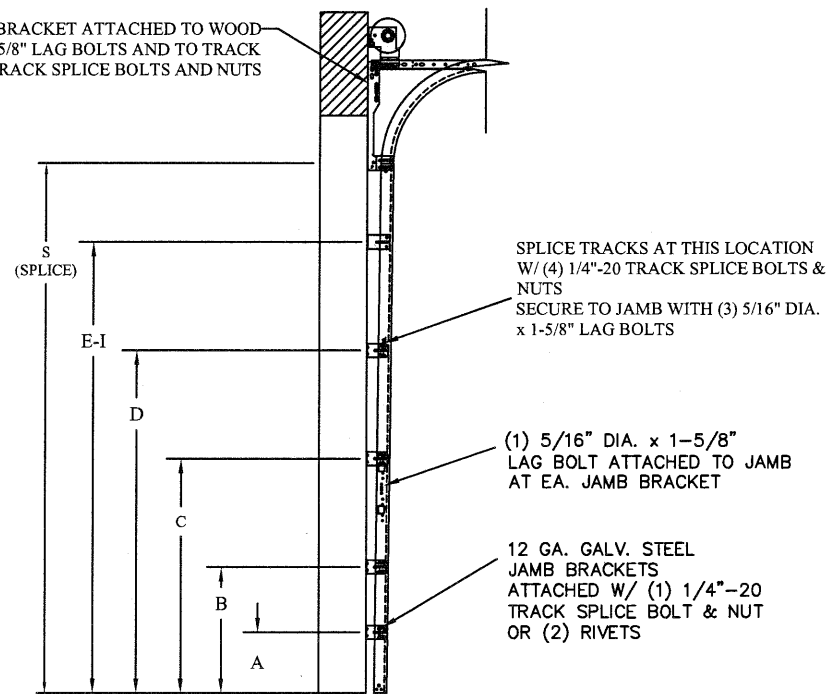
*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.

*PREPARATION OF WOOD JAMBS BY OTHERS



REV	DESCRIPTION OF REVISIONS	DATE	BY
<p>MAX SIZE 18'2" x 14'</p> <p>DESIGN LOADS +25.1 PSF -28.4 PSF</p> <p>TEST LOADS +37.7 PSF -42.6 PSF</p> <p>LARGE MISSILE IMPACT RESISTANCE</p>		<p>Thomas L. Shelmerdine, PE (TX PE #85829) Structural Solutions, PA (TX Firm #F-004063)</p> <p>STATE OF TEXAS THOMAS L. SHELMERDINE 85829 LICENSED PROFESSIONAL ENGINEER TX</p> <p>5921-G.W. Friendly Ave., Greensboro, NC 27410</p>	
ENTRE//MATIC			
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105			
AMARR MODEL #1380			
SIZE	DRAWN BY RLR	DATE 12/08/14	DRAWING NUMBER
B	CHECKED BY RLR	DATE 12/08/14	IBC-1818-136-26-1
SHEET 2 OF 3			

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



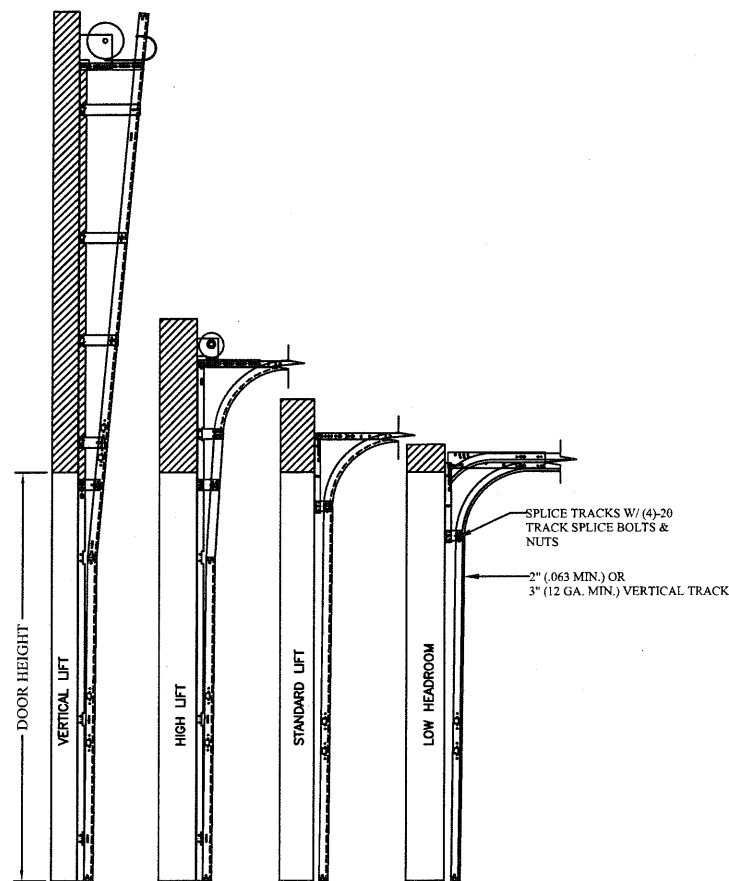
SPLICE TRACKS AT THIS LOCATION W/ (4) 1/4"-20 TRACK SPLICE BOLTS & NUTS SECURE TO JAMB WITH (3) 5/16" DIA. X 1-5/8" LAG BOLTS

(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

TRACK CONFIGURATION FOR 8' TALL DOORS
N.T.S.

SEE TABLE 2 FOR TRACK ATTACHMENT SPACING



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

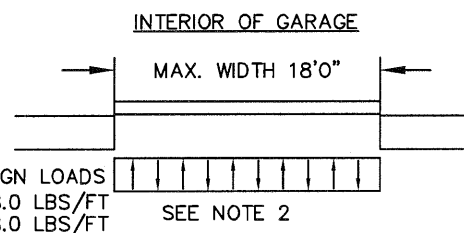
TABLE 1

Section Width (ft)	Center Stile Locations (Measured from Left Edge)		
	1st (in)	2nd (in)	3rd (in)
16' 4"	52.168	98.000	143.834
16' 6"	51.340	99.000	146.660
16' 8"	52.200	100.000	147.800
16' 10"	53.200	101.000	148.800
17' 0"	54.200	102.000	149.800
17' 2"	55.2	103.0	150.8
17' 4"	56.200	104.000	151.800
17' 6"	57.200	105.000	152.800
17' 8"	55.800	106.000	156.200
17' 10"	56.250	107.000	157.750
18' 0"	57.800	108.000	158.200
18' 2"	57.3	109.0	160.7

TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT										TYPICAL SPLICE
	A	B	C	D	E	F	G	H	I	J	
7' 0"	3.5"	22"	34"	58"							76"
7' 6"	3.5"	22"	34"	58"							82"
8' 0"	3.5"	22"	34"	58"	70"						88"
9' 0"	3.5"	22"	34"	58"	70"						100"
9' 6"	3.5"	22"	34"	58"	70"	82"					106"
10' 0"	3.5"	22"	34"	58"	70"	82"					112"
11' 0"	3.5"	22"	34"	58"	70"	82"	106"				124"
12' 0"	3.5"	22"	34"	58"	70"	82"	106"	118"			136"
13' 0"	3.5"	22"	34"	58"	70"	82"	106"	118"	130"		148"
14' 0"	3.5"	22"	34"	58"	70"	82"	106"	118"	130"	142"	160"

ALL TRACK ATTACHMENT SPACING +/-1.5" ALLOWED WITH SPF OR SYP NO. 2 OR BETTER ONLY



DESIGN LOADS
+228.0 LBS/FT
-258.0 LBS/FT

SEE NOTE 2

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: +228.0 LBS/FT & -258.0 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
- DOORS UP TO 14'0" HIGH HAVE (1) 5.5" 18GA R-TRUSS PER SECTION AND (1) 3" 20GA STRUT ON THE BOTTOM SECTION
- SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
18'2 x 14'

DESIGN LOADS
+25.1 PSF
-28.4 PSF

TEST LOADS
+37.7 PSF
-42.6 PSF

LARGE MISSILE IMPACT
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SHEET 3 OF 3