

THE METHOD OF TESTING WAS IN SUBSTANTIAL CONFORMANCE WITH THE PROCEDURES DESCRIBED IN ASTM E330, ANSI/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, 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
A			

MAX SIZE 10'2" x 24'

DESIGN LOADS +26.2 PSF -30.6 PSF

TEST LOADS +39.3 PSF -45.9 PSF

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

STATE OF TEXAS  
THOMAS L. SHELMERDINE  
85829  
LICENSED PROFESSIONAL ENGINEER

TX

Amarr  
ENTREMATiC

MODEL 3550HD AMARR 3552  
MODEL VISTA AMARR 3552

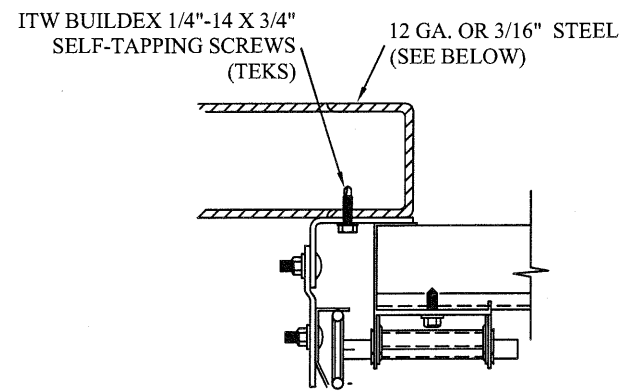
SIZE	DRAWN BY RLR	DATE 12/06/17	DRAWING NUMBER
B	CHECKED BY RLR	DATE 12/07/17	IBC-3610-136-00

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

SHEET 1 OF 3

## TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS



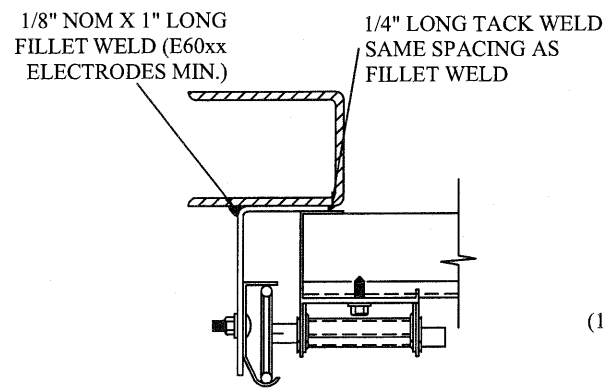
CLIP STYLE REVERSE ANGLE MOUNT SHOWN  
BRACKET, CONTINUOUS AND TAPERED ANGLE  
MOUNT AVAILABLE

**12 GA. STEEL FRAMING**

232 LBS./SCREW ALLOWABLE LOAD - 6" FROM ENDS  
AND 20" O.C.  
REFER TO NOTES: 1, 2 AND 5

**3/16" STEEL FRAMING**

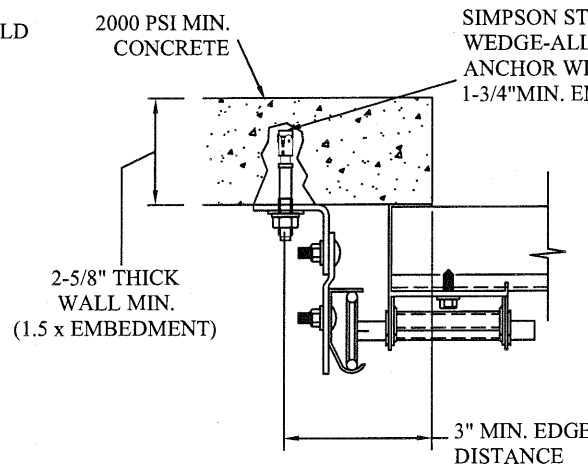
569 LBS./SCREW ALLOWABLE LOAD - 6" FROM ENDS  
AND 24" O.C.  
REFER TO NOTES: 1, 2 AND 5



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

**STEEL FRAMING 12GA OR BETTER**

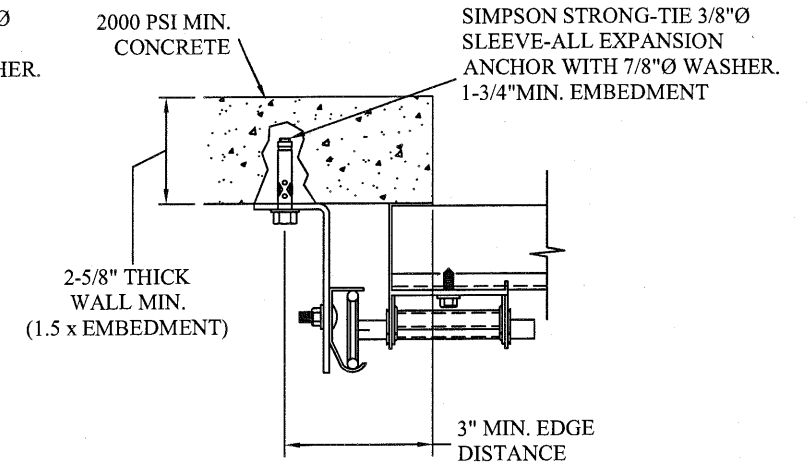
1590 LBS./IN. ALLOWABLE LOAD - 6"  
FROM ENDS AND 24" O.C.  
REFER TO NOTES: 1, 2, 5, 6, 7, 8 AND 9



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

**2000 PSI CONCRETE OR GREATER**

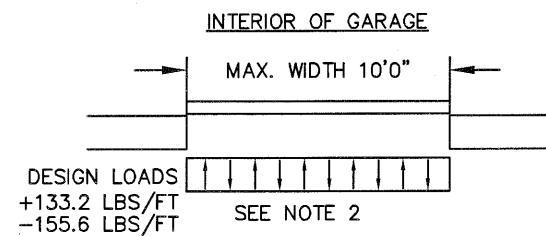
351 LBS./EXPANSION ANCHOR ALLOWABLE LOAD - 6"  
FROM ENDS AND 24" O.C.  
REFER TO NOTES: 1, 2, 3, 4 AND 5



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



**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 J RECEIVES NO PORTION OF THE LOAD TRANSFERRED FROM THE DOOR
- EACH VERTICAL JAMBS RECEIVES MAXIMUM DESIGN LOADS OF: +133.2 LBS/FT & -155.6 LBS/FT.
- DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
- SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

**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 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)

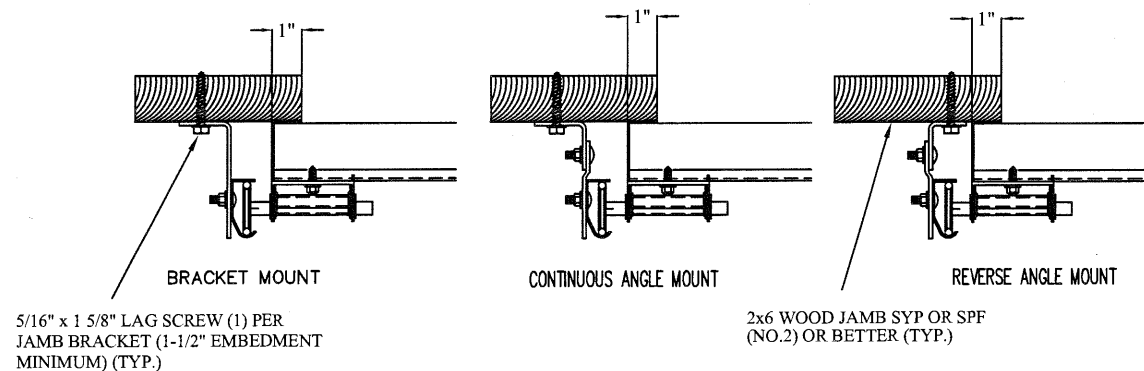
**2 X 6 VERTICAL JAMB ATTACHMENT TO HOLLOW C-90 BLOCK**  
SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS, USE PAIRS OF FASTENERS (3" APART)  
AT 24" O.C. (1 1/2" EMBEDMENT)  
HILTI 1/4" X 2-3/4" KWIK-CON II+ SCREWS STARTING 6" FROM ENDS, USE PAIRS OF FASTENERS (3" APART)  
AT 24" O.C. (1 1/4" EMBEDMENT)

**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 PAGE 3 FOR TRACK CONFIGURATION DETAIL



REV	DESCRIPTION OF REVISIONS	DATE	BY
A			

MAX SIZE  
10'2" x 24'

DESIGN LOADS  
+26.2 PSF  
-30.6 PSF

TEST LOADS  
+39.3 PSF  
-45.9 PSF

TX

**Amarr**  
ENTREMATICS

MODEL 3550HD AMARR 3552  
MODEL VISTA AMARR 3552

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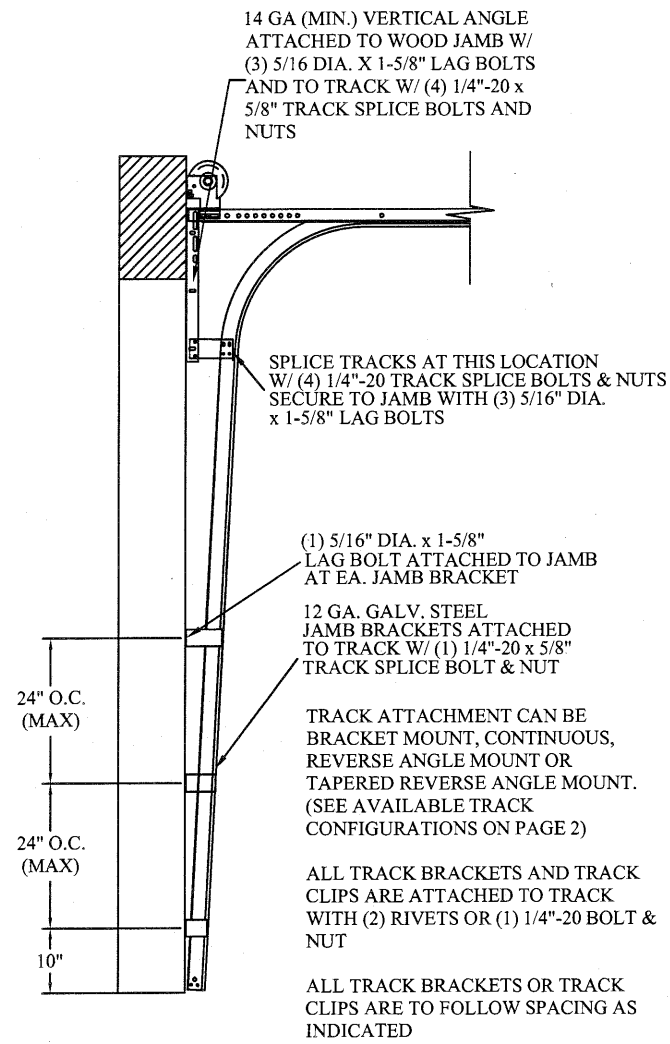
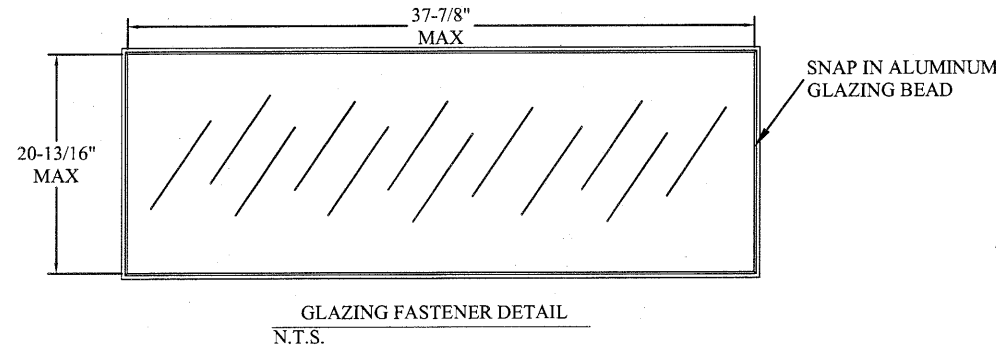
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SHEET 2 OF 3

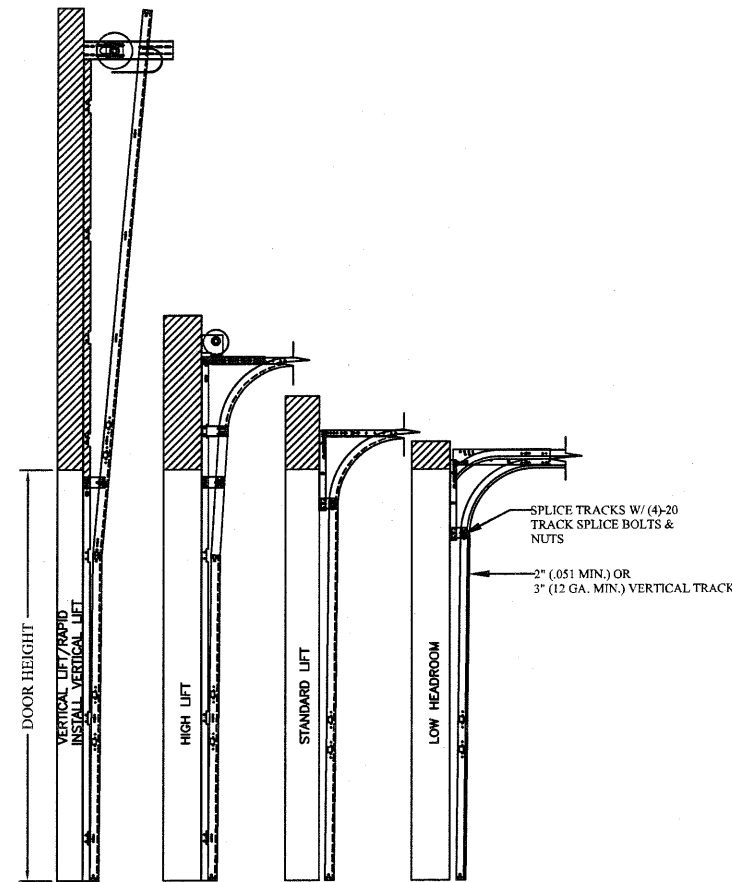
TABLE 1

DOOR HEIGHT	TRACK ATTACHMENT												SPLICE
	A	B	C	D	E	F	G	H	I	J	K	S	
7'	10"	38"	58"										76"
8'	10"	38"	58"										88"
9'	10"	38"	58"	82"									100"
10'	10"	38"	58"	82"									112"
11'	10"	38"	58"	82"	106"								124"
12'	10"	38"	58"	82"	106"								136"
13'	10"	38"	58"	82"	106"	130"							148"
14'	10"	38"	58"	82"	106"	130"							160"
15'	10"	38"	58"	82"	106"	130"	154"						172"
16'	10"	38"	58"	82"	106"	130"	154"						184"
17'	10"	38"	58"	82"	106"	130"	154"	178"					196"
18'	10"	38"	58"	82"	106"	130"	154"	178"					208"
19'	10"	38"	58"	82"	106"	130"	154"	178"	202"				220"
20'	10"	38"	58"	82"	106"	130"	154"	178"	202"				232"
21'	10"	38"	58"	82"	106"	130"	154"	178"	202"	226"			244"
22'	10"	38"	58"	82"	106"	130"	154"	178"	202"	226"			256"
23'	10"	38"	58"	82"	106"	130"	154"	178"	202"	226"	250"		268"
24'	10"	38"	58"	82"	106"	130"	154"	178"	202"	226"	250"		280"

ALL TRACK ATTACHMENTS +/- 2" WITH SYP OR SPF NO.2 OR BETTER



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



AVAILABLE TRACK CONFIGURATIONS  
N.T.S.

TABLE 2

Section Width (ft)	Center Stile Locations		Max Design Loads Allowed	
	1st (in)	2nd (in)	Positive (PSF)	Negative (PSF)
9' 4"	36"	76"	27.7	32.4
9' 6"	37"	77"	27.4	32.0
9' 8"	38"	78"	27.0	31.6
9' 10"	39"	79"	26.7	31.2
10' 0"	40"	80"	26.3	30.8
10' 2"	41"	81"	26.2	30.6

REV	DESCRIPTION OF REVISIONS	DATE	BY
A			

MAX SIZE  
10'2" x 24'

DESIGN LOADS  
+26.2 PSF  
-30.6 PSF

TEST LOADS  
+39.3 PSF  
-45.9 PSF

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