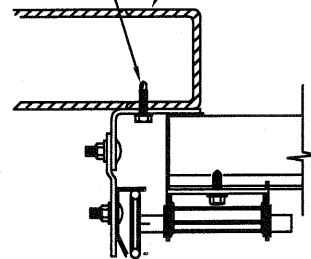


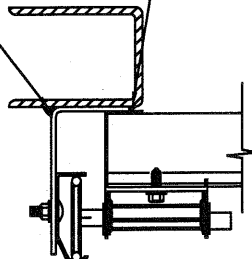
ITW BUILDEX 1/4"-14 X 3/4" SELF-TAPPING SCREWS (TEKS) 12 GA. OR 3/16" STEEL (SEE BELOW)



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

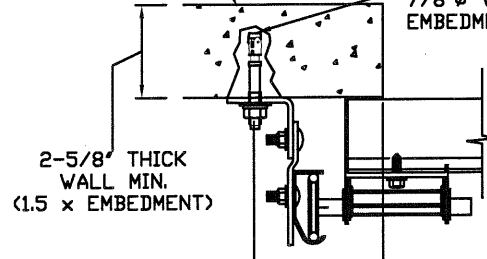
3/16" STEEL FRAMING
569 LBS./SCREW ALLOWABLE LOAD - 6"
FROM ENDS AND 24" O.C.
REFER TO NOTES: 1, 2 AND 5

1/8" NOM X 1" LONG
FILLET WELD (E60xx
ELECTRODES MIN.)



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

1/4" LONG TACK
WELD SAME SPACING
AS FILLET WELD



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

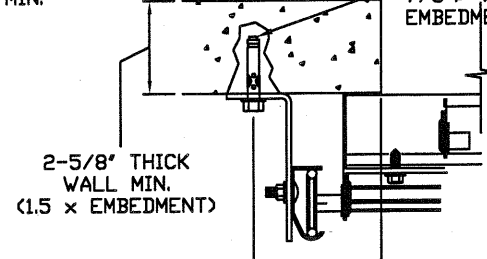
2000 PSI MIN.
CONCRETE

2-5/8" THICK
WALL MIN.
(1.5 x EMBEDMENT)

SIMPSON STRONG-TIE
3/8"Ø WEDGE-ALL
EXPANSION ANCHOR WITH
7/8"Ø WASHER. 1-3/4"MIN.
EMBEDMENT

3' MIN. EDGE
DISTANCE

2000 PSI MIN.
CONCRETE



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

SIMPSON STRONG-TIE
3/8" SLEEVE-ALL
EXPANSION ANCHOR WITH
7/8" WASHER. 1-3/4" MIN.
EMBEDMENT

3' MIN. EDGE
DISTANCE

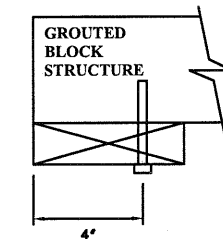
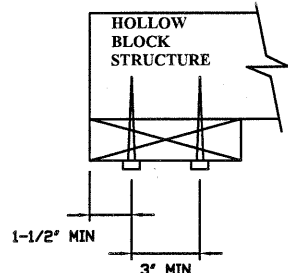
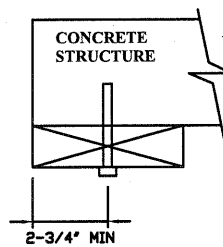
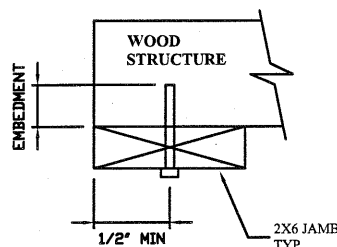
2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE
5/16" X 3" LAG SCREWS STARTING 6" FROM ENDS THEN 24" O.C. (1 1/2" EMBEDMENT)

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

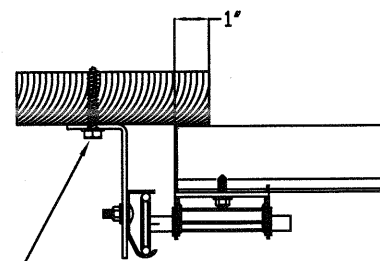
2 X 6 VERTICAL JAMB ATTACHMENT TO HOLLOW C-90 BLOCK
SIMPSON 1/4" X 3" TITEN SCREWS STARTING 6" FROM ENDS, USE PAIRS OF FASTENERS
(3" APART) AT 16" O.C. (1 1/2" EMBEDMENT)
HILTI 1/4" X 2-3/4" KWIK-CON II+ SCREWS STARTING 6" FROM ENDS, USE PAIRS OF FASTENERS
(3" APART) AT 16" O.C. (1 1/4" EMBEDMENT)

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)

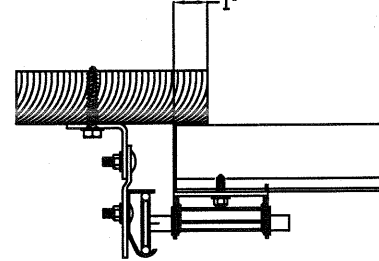
*LAGS AND BOLTS CAN BE COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
*PREPARATION OF WOOD JAMBS BY OTHERS



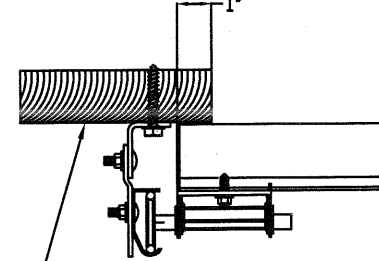
FOR LAG SCREWS & BRACKET SPACING SEE SHEET 1 TRACK CONFIGURATION DETAIL



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



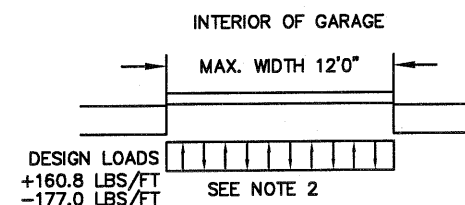
CONTINUOUS ANGLE MOUNT



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

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.

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:
+160.8 LBS/FT & -177.0 LBS/FT
3. DOORS AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.
5. REFER TO (TABLE 2) ON SHEET 3 FOR ADDITIONAL DOOR WIDTHS AND THEIR DESIGN PRESSURES



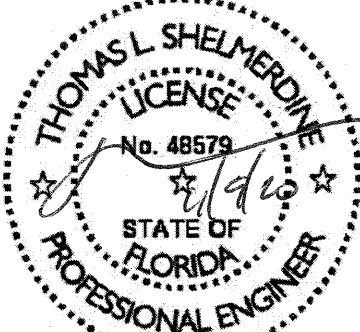
REV	DESCRIPTION OF REVISIONS	DATE	BY
MAX SIZE 12'2" x 24' DESIGN LOADS +26.8 PSF -29.5 PSF TEST LOADS (1.5 x DESIGN LOADS) +40.2 PSF -44.3 PSF		Thomas L. Sheldermine, PE (FL PE #0048579) Structural Solutions, PA (FL Firm #29412) FL  dba Structural Solutions of North Carolina, Inc. 5921-G W. Friendly Ave., Greensboro, NC 27410	
			
MODEL 2400/3550 AMARR 2402/3552, 2412/3552, 2422/3552 MODEL 2000/3550 AMARR 2002/3552, 2012/3552, 2022/3552			
SIZE	DRAWN BY	RLR	DATE 05/23/12
B	CHECKED BY	BHG	DATE
ENTREMATIC 165 CARRIAGE COURT WINSTON-SALEM, NC 27105			DRAWING NUMBER IBC-2452-130-15 SHEET 2 OF 3

TABLE 1

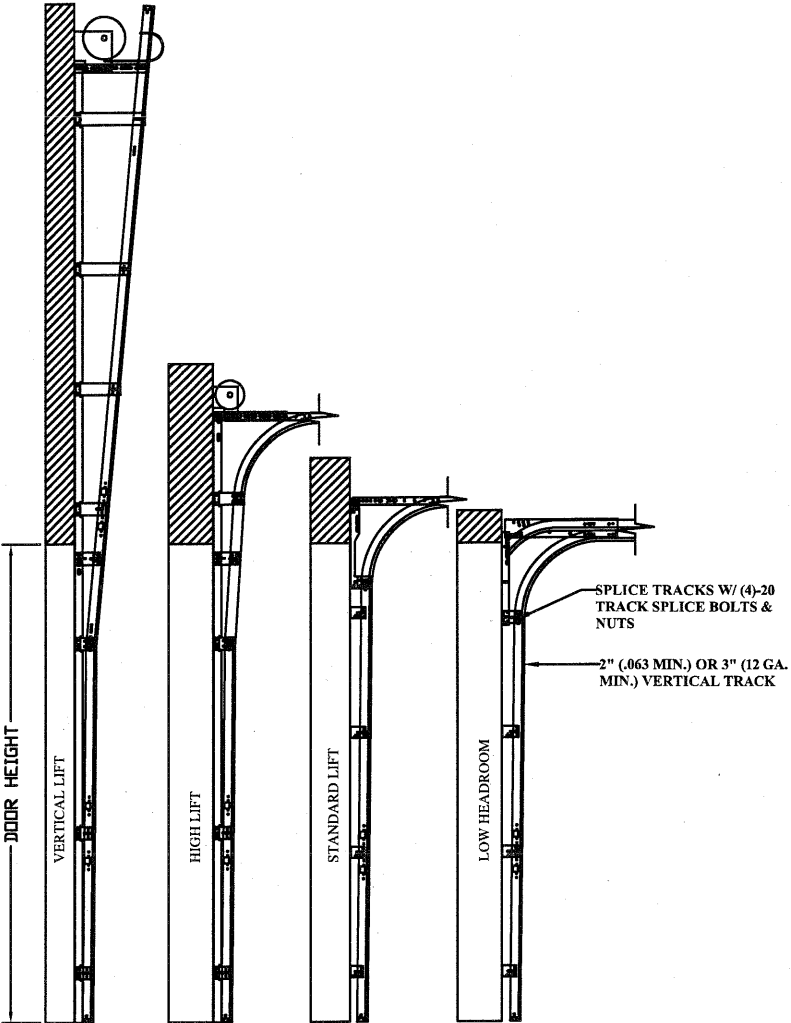
Door Height	21" Bottom	21" Intermediate	24" Bottom	24" Intermediate
7'0"	1	3		
7'3"		3	1	
7'6"		2	1	
7'9"		1	1	2
8'0"				4
8'3"	Not Available			
8'6"	Not Available			
8'9"	1	4		
9'0"		4	1	
9'3"		3	1	1
9'6"		2	1	2
9'9"		1	1	3
10'0"			1	4
10'3"	Not Available			
10'6"	1	5		
10'9"		5	1	
11'0"		4	1	1
11'3"		3	1	2
11'6"		2	1	3
11'9"		1	1	4
12'0"			1	5
12'3"	1	6		
12'6"		6	1	
12'9"		5	1	1
13'0"		4	1	2
13'3"		3	1	3
13'6"		2	1	4
13'9"		1	1	5
14'0"			1	6
14'0"	1	7		
14'3"		7	1	
14'6"		6	1	1
14'9"		5	1	2
15'0"		4	1	3
15'3"		3	1	4
15'6"		2	1	5
15'9"		1	1	6
15'9"	1	8		
16'0"			1	7
16'0"		8	1	
16'3"		7	1	1
16'6"		6	1	2
16'9"		5	1	3
17'0"		4	1	4
17'3"		2	1	5
17'6"		2	1	6
17'9"		1	1	7
18'0"			1	8
18'3"		7	1	2
18'6"		6	1	3
18'9"		5	1	4
19'0"		4	1	5
19'3"		3	1	6
19'6"		2	1	7
19'9"		1	1	8
20'0"			1	9

TABLE 2

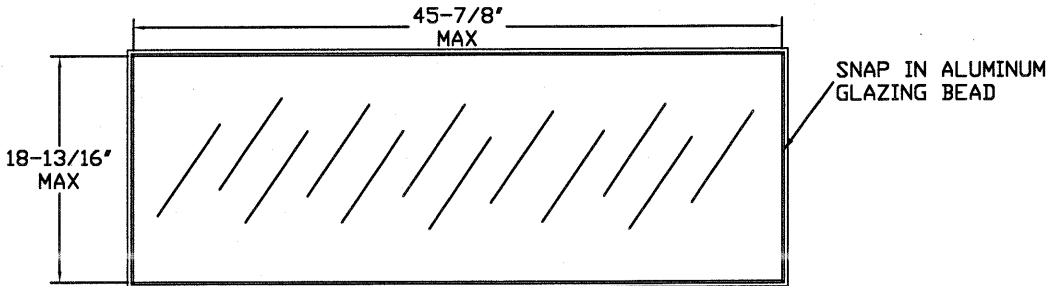
Section Width (ft)	Max Design Loads Allowed	
	Positive (PSF)	Negative (PSF)
9' 4	34.0	37.5
9' 6	33.6	37.0
9' 8	33.2	36.5
9' 10	32.7	36.0
10' 0	32.3	35.6
10' 2	31.9	35.1
10' 4	31.4	34.6
10' 6	30.9	34.0
10' 8	30.4	33.5
10' 10	29.9	33.0
11' 0	29.5	32.5
11' 2	29.1	32.0
11' 4	28.6	31.5
11' 6	28.2	31.1
11' 8	27.8	30.6
11' 10	27.4	30.2
12' 0	26.9	29.7
12' 2	26.8	29.5

TABLE 3

Section Width (ft)	Center Stile Locations (Measured from Left Edge)	
	1st (in)	2nd (in)
9' 4	36	76
9' 6	37	77
9' 8	38	78
9' 10	39	79
10' 0	40	80
10' 2	41	81
10' 4	42	82
10' 6	43	83
10' 8	44	84
10' 10	45	85
11' 0	46	86
11' 2	47	87
11' 4	48	88
11' 6	49	89
11' 8	50	90
11' 10	51	91
12' 0	48	96
12' 2	49	97



AVAILABLE TRACK CONFIGURATIONS
N.T.S.



GLAZING FASTENER DETAIL
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX. SIZE:
12'2" x 24'

DESIGN LOADS
+26.8 PSF
-29.5 PSF

TEST LOADS
(1.5 x DESIGN LOADS)
+40.2 PSF
-44.3 PSF

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

FL

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

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

Amarr

MODEL 2400/3550 AMARR 2402/3552, 2412/3552, 2422/3552
MODEL 2000/3550 AMARR 2002/3552, 2012/3552, 2022/3552

SIZE	DRAWN BY	RLR	DATE	05/23/12	DRAWING NUMBER
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ENTREMATIC
165 CARRIAGE COURT WINSTON-SALEM, N.C. 27105

SHEET 3 OF 3