

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)	118	107	102	97	93
EXPOSURE LEVEL	B	C	C	D	D
MEAN ROOF HEIGHT	30'	15'	25'	15'	25'

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 24'2" x 24'

DESIGN LOADS +18.5 PSF -20.7 PSF

TEST LOADS +27.8 PSF -31.1 PSF

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ENTRE//MATIC

MODEL 2400 (24 GA)
MODEL 2000 (20 GA)

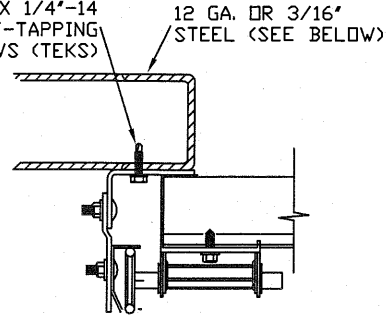
SIZE	DRAWN BY	RWS	DATE	08/27/14	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	08/27/14	IBC-2424-118-26

SHEET 1 OF 4

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

TRACK CONNECTION DIRECTLY TO STRUCTURE OPTIONS

ITW BUILDDEX 1/4"-14 X 3/4" SELF-TAPPING SCREWS (TEKS)

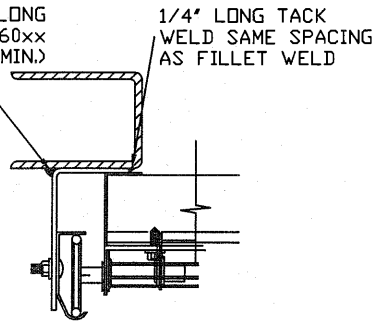


CLIP STYLE REVERSE ANGLE MOUNT SHOWN BRACKET, CONTINUOUS AND TAPERED ANGLE MOUNT AVAILABLE

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

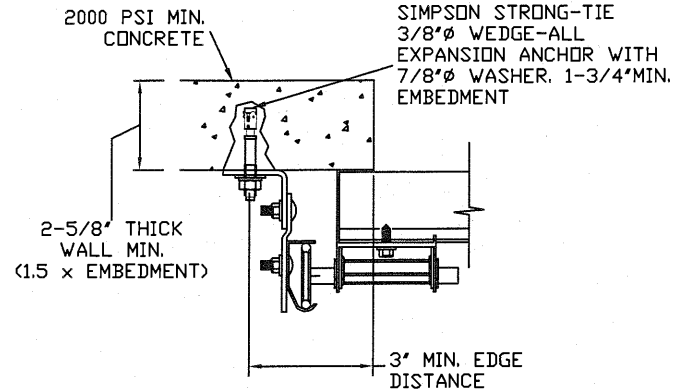
1/8" NDM X 1' LONG FILLET WELD (E60xx ELECTRODES MIN.)



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

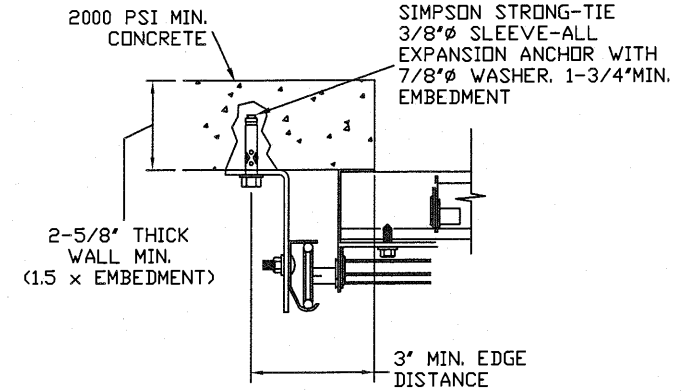
STEEL FRAMING 12GA DR BETTER
1590 LBS./IN. ALLOWABLE LOAD - 6' FROM ENDS AND 24' O.C.
REFER TO NOTES: 1, 2, 5, 6, 7, 8 AND 9

2000 PSI MIN. CONCRETE



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

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: +223.5 LBS/FT & -250.1 LBS/FT
3. DOOR AND HARDWARE WILL BE DESIGNED, MANUFACTURED AND INSTALLED WITH STANDARDS AS SET FORTH BY DASMA.
4. DOOR SECTIONS SHALL BE 24 GA. (.022) MIN. EXTERIOR SKIN ROLLED FORMED, W/ BAKED ON POLYESTER FINISH
5. DOORS UP TO 24'0" HIGH USE (1) 5 1/2" X 18 GA R-TRUSS AT CENTER OF EACH SECTION
6. SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS INDICATED ON THIS DRAWING IN ADDITION TO OTHER LOADINGS.

WOOD JAMB ATTACHMENT TO STRUCTURE (OPTIONAL)

2 X 6 VERTICAL JAMB ATTACHMENT TO WOOD FRAME STRUCTURE

HILTI KWIK BOLT 3/8" X 4" STARTING 6" FROM ENDS THEN 22" 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 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)

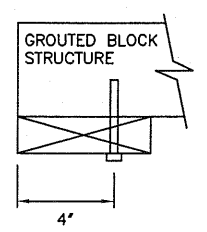
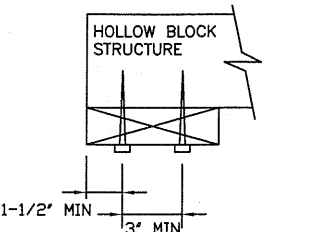
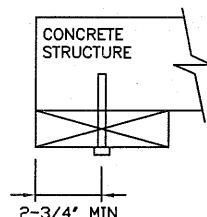
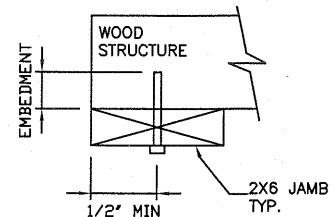
2 X 6 VERTICAL JAMB ATTACHMENT TO GROUTED C-90 BLOCK (2000 PSI GROUT)

HILTI SLEEVE ANCHOR 3/8" X 2-3/4" STARTING 6" FROM ENDS THEN 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.

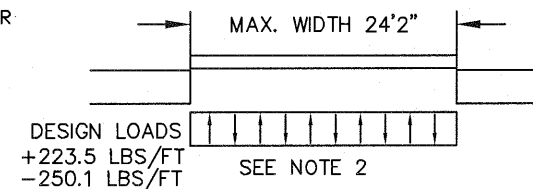
*PREPARATION OF WOOD JAMBS BY OTHERS



NOTES:

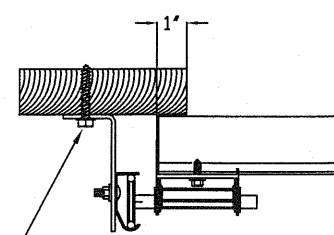
1. ANCHORS TO BE EVENLY SPACED BETWEEN THE HEADER AND FLOOR.
2. FIRST (BOTTOM) ANCHOR STARTING AT NO MORE THAN HALF OF THE MAXIMUM ON-CENTER DISTANCE. HIGHEST ANCHOR INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING.
3. MIN. EDGE DISTANCE OF 3' REQUIRED.
4. USE WASHERS PROVIDED BY THE ANCHOR MANUFACTURER.
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.

INTERIOR OF GARAGE

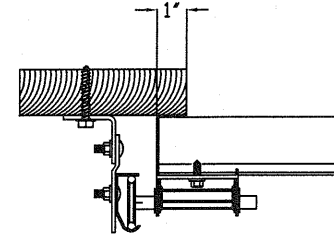


TRACK CONNECTION TO WOOD JAMB OPTIONS

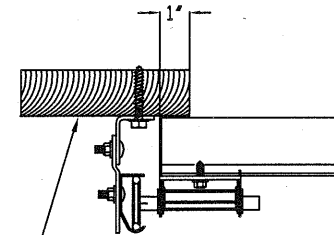
FOR LAG SCREWS & BRACKET SPACING SEE PAGE 4 FOR TRACK CONFIGURATION DETAIL



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



CONTINUOUS ANGLE MOUNT



REVERSE ANGLE MOUNT

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

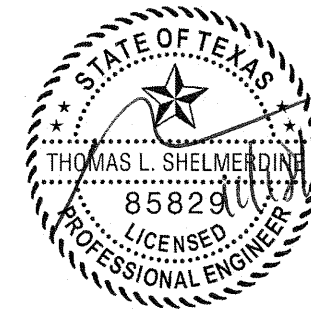
REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE 24'2" x 24'

DESIGN LOADS
+18.5 PSF
-20.7 PSF

TEST LOADS
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-31.1 PSF

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TX

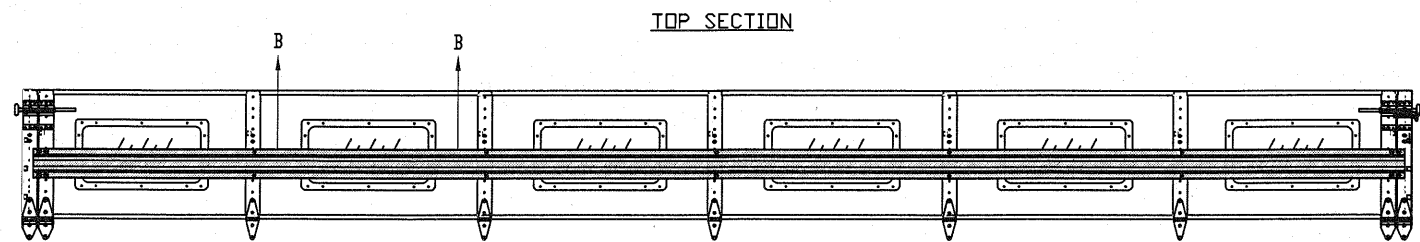
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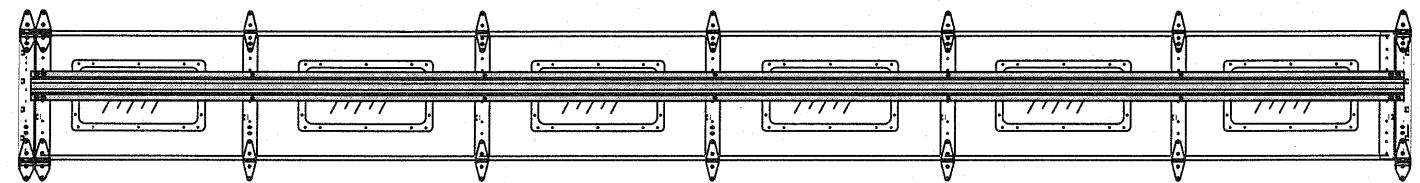
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MODEL 2400 (24 GA)
MODEL 2000 (20 GA)

SIZE	DRAWN BY	RWS	DATE	08/27/14	DRAWING NUMBER
B	CHECKED BY	RLR	DATE	08/27/14	IBC-2424-118-26
					SHEET 2 OF 4

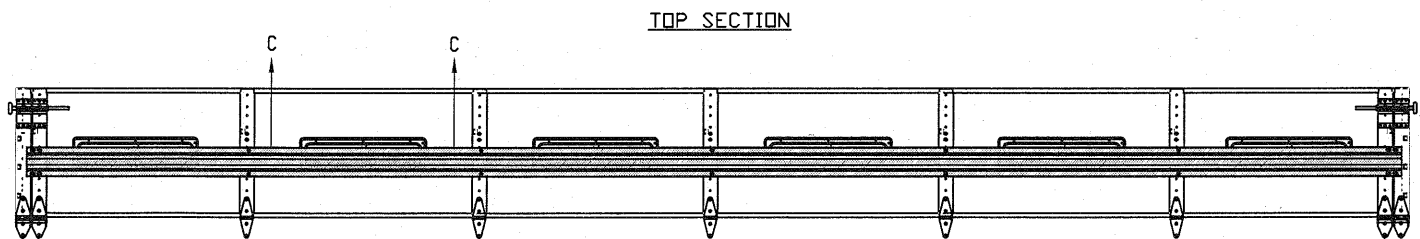


TOP SECTION

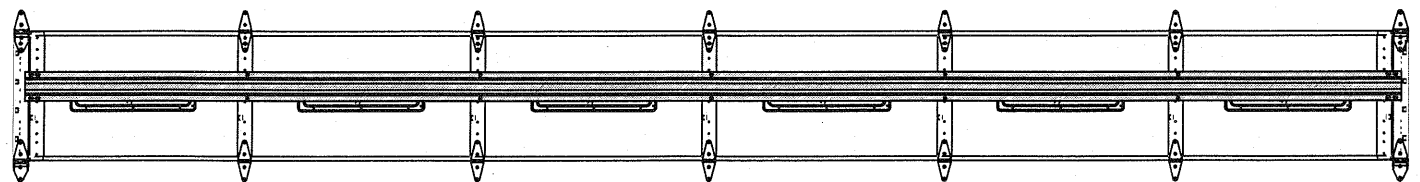


INTERMEDIATE SECTION

OPTIONAL GLAZED SECTION W/ 24' X 12' WINDOWS AND STRUT LAYOUT
N.T.S.

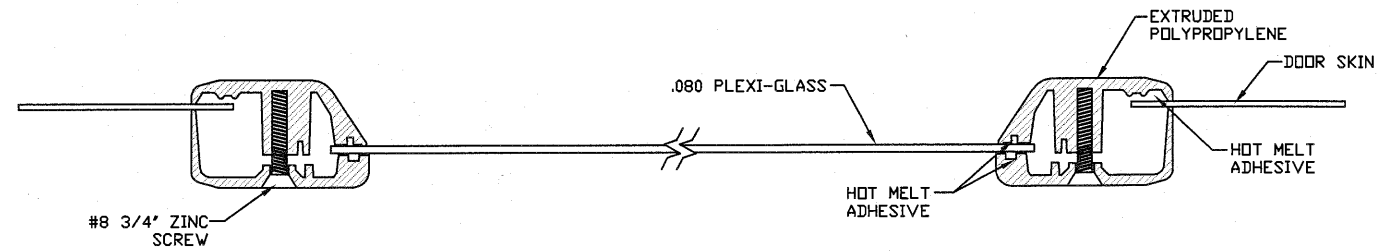


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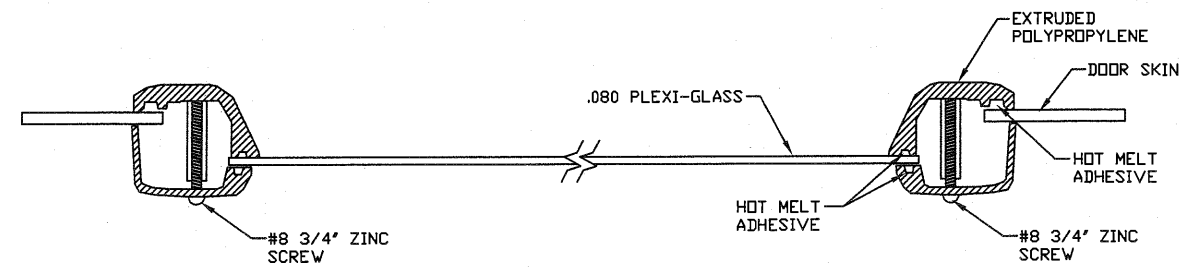


INTERMEDIATE SECTION

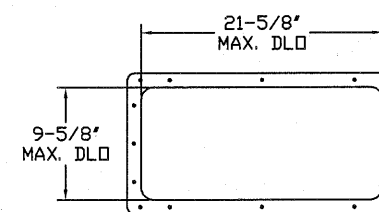
OPTIONAL GLAZED SECTION W/ 24' X 6' WINDOWS AND STRUT LAYOUT
N.T.S.



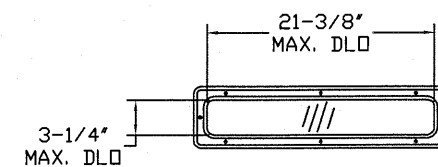
SECTION B-B 24' X 12' WINDOW DETAIL W/ .080 PLEXI-GLASS
N.T.S.



SECTION C-C 24' X 6' WINDOW DETAIL
N.T.S.



24' X 12' DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.



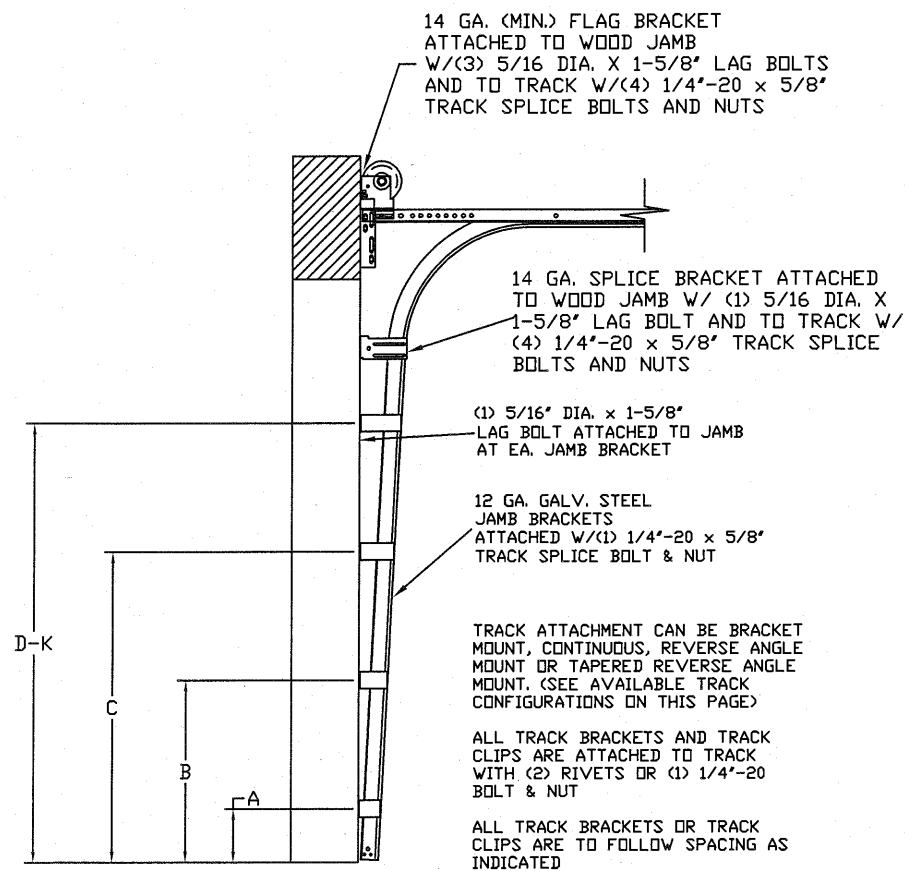
24' X 6' DAY LIGHT OPENING AND FASTENER DETAIL
N.T.S.

REV	DESCRIPTION OF REVISIONS	DATE	BY
	MAX SIZE 24'2" x 24'		
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MODEL 2400 (24 GA) MODEL 2000 (20 GA)			
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			SHEET 3 OF 4

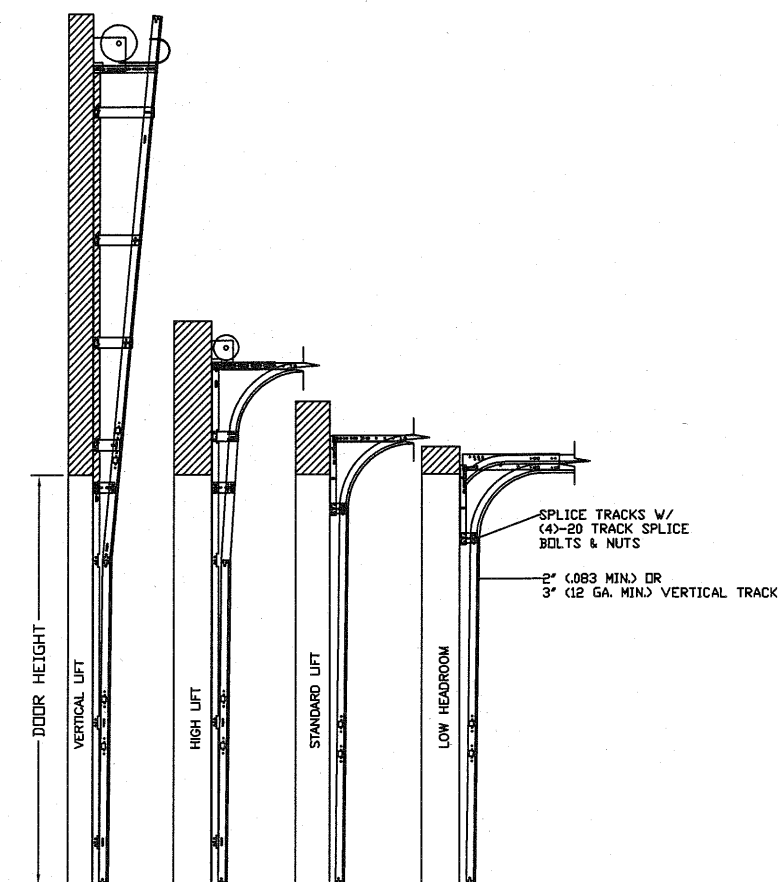
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TABLE 1

Section Width		Center Stile Locations (Measured from Left Edge)					Max Design Loads Allowed	
(ft)	(in)	1st (in)	2nd (in)	3rd (in)	4th (in)	5th (in)	Positive (PSF)	Negative (PSF)
19'	4	36	76	116	156	196	22.4	25
19'	6	37	77	117	157	197	22.4	25
19'	8	38	78	118	158	198	22.4	25
19'	10	39	79	119	159	199	22.4	25
20'	0	40.0	80	120	160	200	22.3	25
20'	2	41.0	81	121	161	201	22.1	24.7
20'	4	42	82	122	162	202	21.8	24.4
20'	6	43	83	123	163	203	21.6	24.1
20'	8	44	84	124	164	204	21.3	23.9
20'	10	45	85	125	165	205	21.1	23.6
21'	0	46	86	126	166	206	20.8	23.3
21'	2	47	87	127	167	207	20.6	23
21'	4	48	88	128	168	208	20.3	22.8
21'	6	49	89	129	169	209	20.1	22.5
21'	8	50	90	130	170	210	19.9	22.3
21'	10	51	91	131	171	211	19.7	22
22'	0	44	88	132	176	220	20.3	22.7
22'	2	45	89	133	177	221	20.1	22.5
22'	4	46	90	134	178	222	19.9	22.3
22'	6	47	91	135	179	223	19.7	22
22'	8	48	92	136	180	224	19.5	21.8
22'	10	49	93	137	181	225	19.2	21.5
23'	0	50	94	138	182	226	19	21.3
23'	2	51	95	139	183	227	18.8	21.1
23'	4	44	92	140	188	236	18.6	20.9
23'	6	45	93	141	189	237	18.6	20.9
23'	8	46	94	142	190	238	18.6	20.9
23'	10	47	95	143	191	239	18.6	20.9
24'	0	48	96	144	192	240	18.6	20.8
24'	2	49	97	145	193	241	18.5	20.7



TRACK CONFIGURATION FOR UP TO 24' TALL DOORS
SEE TABLE 2



AVAILABLE TRACK CONFIGURATIONS
N.T.S.

TABLE 2

DOOR HEIGHT	TRACK ATTACHMENT																			SPLICE S					
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S		T	U	V	W	
7'	3.5"	10"	22"	34"	46"	58"	70"																	76"	
8'	3.5"	10"	22"	34"	46"	58"	70"	82"																	88"
9'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"																100"
10'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"															112"
11'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"														124"
12'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"													136"
13'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"												148"
14'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"											160"
15'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"										172"
16'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"									184"
17'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"								196"
18'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"							208"
19'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"						220"
20'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"					232"
21'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"				244"
22'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"	250"			256"
23'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"	250"	262"		268"
24'	3.5"	10"	22"	34"	46"	58"	70"	82"	94"	106"	118"	130"	142"	154"	166"	178"	190"	202"	214"	226"	238"	250"	262"		280"

ALL TRACK ATTACHMENTS +/- 2" ALLOWED USING SYP OR SPF NO.2 OR BETTER ONLY

REV	DESCRIPTION OF REVISIONS	DATE	BY

MAX SIZE
24'2 x 24'

DESIGN LOADS
+18.5 PSF
-20.7 PSF

TEST LOADS
+27.8 PSF
-31.1 PSF

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SHEET 4 OF 4