

CLOPAY MODELS 84A, 94, 98
 IDEAL MODELS 4RST, 4F
 HOLMES MODEL 48, 48B

REV	DATE	DESCRIPTION
2	11/2003	ADD 34.3 KSI MIN. YIELD
3	02/2005	ADD MODELS 98, 4F
4	07/2005	UPDATED CODE REF.
5	08/2008	ADDED M/N 48B
6	12/2008	INCREASED MAX HT TO 16'

(7) 20 GA. INTERMEDIATE STILES PER SECTION, ATTACHED W/ TOG-L-LOC (TOP & BOT) AND URETHANE ADHESIVE (ALONG CENTER)

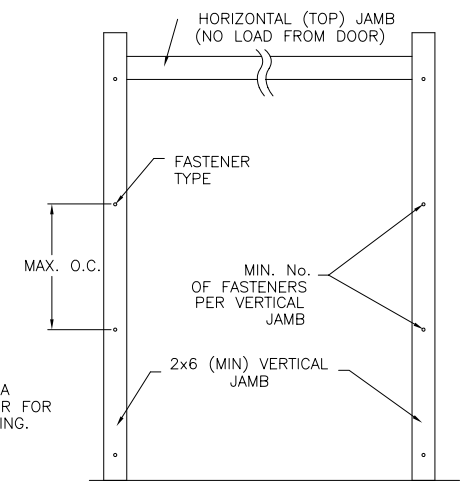
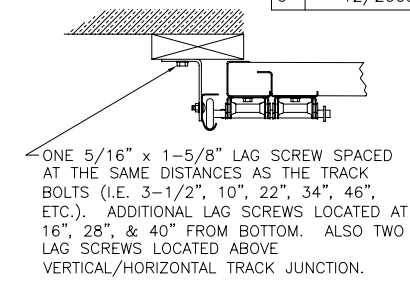
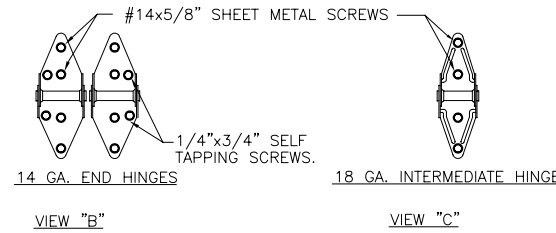
ATTACH PLATES AT THESE LOCATIONS ON EACH SECTION OF THE DOOR SEE VIEW E

16 GA. PAINTED END STILES ATTACHED TO DOOR SKIN WITH PATENTED TOG-L-LOC SYSTEM (TOP, BOTTOM & CENTER).
 18 GA. GALV. DOUBLE END STILES ATTACHED TO TOP AND BOTTOM RAIL WITH PATENTED TOG-L-LOC SYSTEM.

TABLE 1

DOOR HEIGHT	NUMBER OF SECTIONS*
6'0" TO 7'0"	4
7'6" TO 8'9"	5
9'0" TO 10'6"	6
10'9" TO 12'3"	7
12'6" TO 14'0"	8
14'3" TO 15'9"	9
16'0"	10

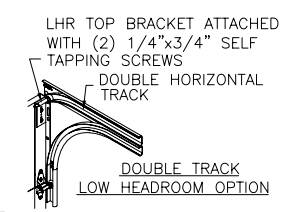
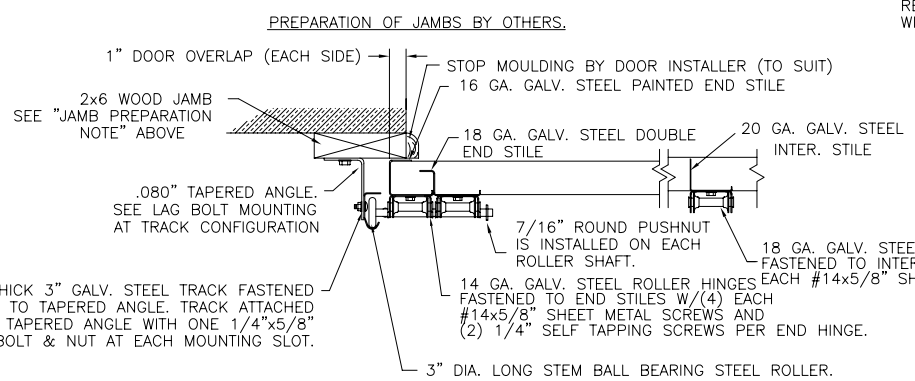
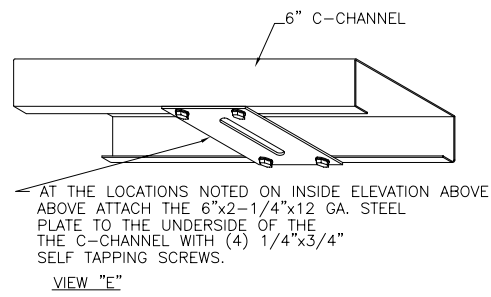
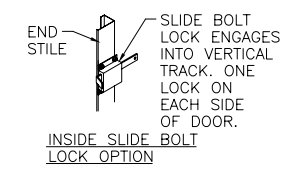
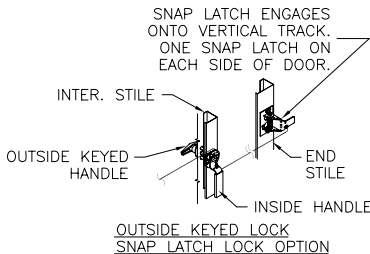
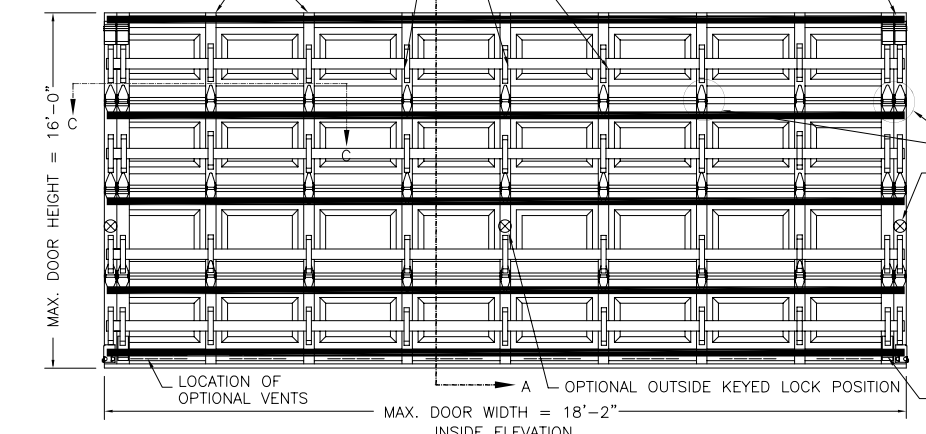
* SECTION ARE EITHER 18" OR 21" HIGH



IDEAL MODEL	DESCRIPTION
4RST	WOODGRAIN TEXTURE, RAISED PANEL (24GA.)
4F	WOODGRAIN TEXTURE, FLUSH (24GA.)

INSTALLER MODEL	RETAIL MODEL	DESCRIPTION
94	84A, 48, 48B	WOODGRAIN TEXTURE, RAISED PANEL, PAINTED STILES (24 GA.)
98	-	WOODGRAIN TEXTURE, FLUSH, PAINTED STILES (24 GA.)

NOTE: SUPPORTING STRUCTURAL ELEMENTS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR WIND LOADS SHOWN ON THIS DRAWING.



TRACK CONFIGURATION ABOVE THE DOOR OPENING DOES NOT AFFECT THE WIND LOAD RATING.

JAMB TO SUPPORTING STRUCTURE ATTACHMENT

- NOTES:
 1) ALL THE LOAD FROM THE DOOR IS TRANSFERRED TO THE TRACK AND THEN FROM THE TRACK TO THE 2x6 VERTICAL YELLOW PINE (GRADE #2 OR BETTER) JAMBS. NO LOAD FROM THE DOOR IS TRANSFERRED TO THE HORIZONTAL (TOP) JAMB.
 2) ALL JAMB FASTENERS MAY BE (BUT NOT REQUIRED) COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.

WOOD FRAME BUILDINGS

STUD WALLS OF DOOR OPENING SHALL BE FRAMED SOLID BY NOT LESS THAN (3) 2x6 PRESSURE TREATED GRADE #2 OR BETTER WOOD STUDS OF A STRESS GRADE NOT LESS THAN 1200 PSI NOMINAL EXTREME FIBER STRESS IN BENDING (F_b). STUD WALLS TO BE CONTINUOUS FROM FOOTING TO TIE BEAMS.

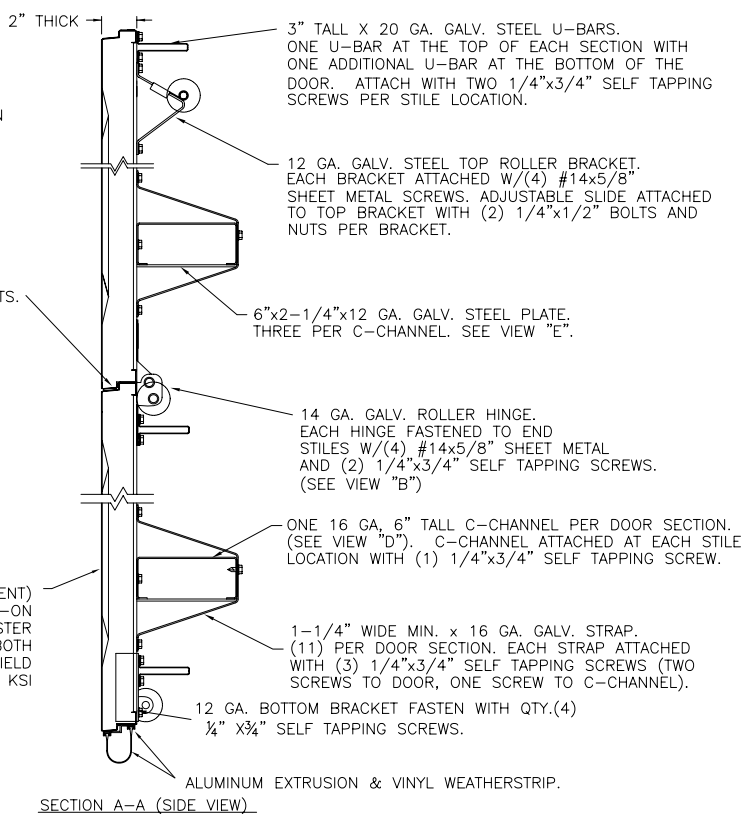
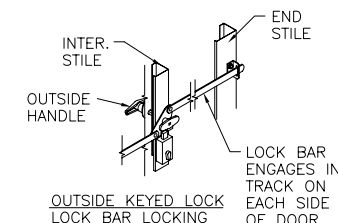
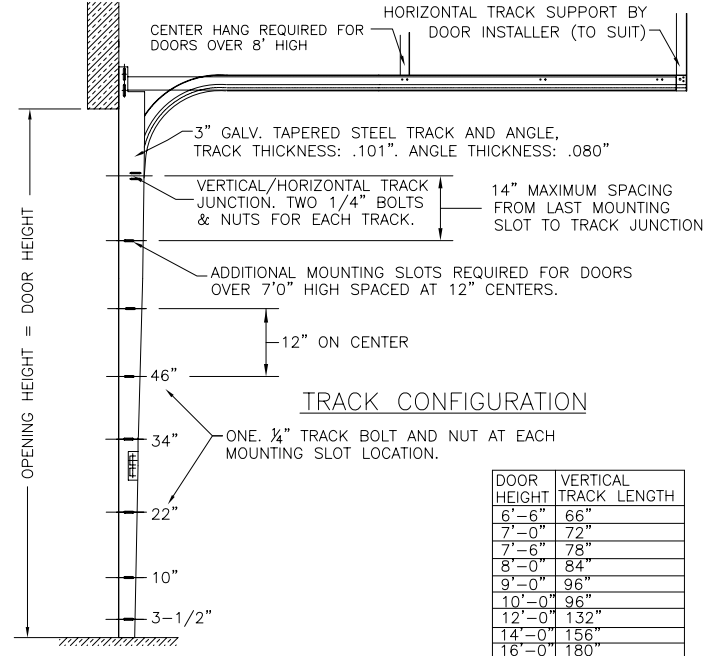
BLOCK WALL OR 2000 PSI MIN. CONCRETE

2x6 WOOD JAMB SHALL BE ANCHORED TO GROUT REINFORCED BLOCK WALL OR CONCRETE COLUMN. BLOCK WALL CELLS SHALL BE FILLED WITH CONCRETE AND REINFORCED WITH REINFORCING BARS EXTENDING INTO THE FOOTING AND INTO THE BEAMS. ALL BARS SHALL BE CONTINUOUS FROM THE TIE BEAMS TO FOOTING PER BLOCK WALL OR CONCRETE COLUMN. BLOCK WALLS AND CONCRETE COLUMNS TO BE DESIGNED BY THE BUILDING ENGINEER OR ARCHITECT OF RECORD.

2x6 (MIN) JAMB TO SUPPORTING STRUCTURE ATTACHMENT

BUILDING TYPE	FASTENER TYPE	MAXIMUM * ON CENTER DISTANCE BETWEEN FASTENERS	STEEL WASHERS REQUIRED?
WOOD FRAME	1/2" x 1-5/8" EMBED LAG SCREW (ASTM A307, GRADE A)	14"	1" O.D.
2,000 PSI CONCRETE	1/4" x 1-3/4" MIN. EMBED TAPCON CONCRETE ANCHOR	8-3/4"	1" O.D.
C-90 BLOCK WALL	3/8" x 1-1/2" MIN. EMBED SLEEVE ANCHOR BOLT	10-3/4"	INCLUDED
2,000 PSI MIN. CONCRETE	3/8" x 1-5/8" MIN. EMBED SLEEVE ANCHOR BOLT	13-3/4"	INCLUDED

* - FIRST ANCHOR/SCREW STARTING FROM BOTTOM AT NO MORE THAN HALF OF MAXIMUM ON CENTER DISTANCE. HIGHEST ANCHOR/SCREW INSTALLED AT LEAST AS HIGH AS THE DOOR OPENING HEIGHT
 #- TAPCONS/SLEEVE ANCHORS CAN BE INSTALLED DIRECTLY THROUGH TAPERED TRACK ANGLE IN LIEU OF 5/6 x 1-5/8 LAG SCREWS



THIS DOOR MEETS OR EXCEEDS THE DESIGN LOADS FOR THE WIND SPEEDS LISTED BELOW ACCORDING TO THE FLORIDA BLDG. CODE OR IBC (ASCE7) FOR THE FOLLOWING CONDITIONS: 1) ENCLOSED BUILDING, 2) DOOR HAS 2' OF WIDTH IN BUILDING'S END ZONE, 3) IMPORTANCE FACTOR OF 1.0, 4) ANY ROOF SLOPE, AND 5) 50% SAFETY FACTOR.

WIND SPEED (MPH)	≤ 130	140	140	150
EXPOSURE LEVEL	B or C	B	C	B
MEAN ROOF HEIGHT	30'	30'	29'	30'

THIS DOOR MEETS THE REQUIREMENTS OF THE LARGE MISSILE IMPACT AND CYCLIC TESTING.



DESIGN ENGINEER:
 MARK W. WESTERFIELD, P.E.

FLORIDA P.E. #48495,
 NC P.E. #23832
 TEXAS P.E. #91513

DESIGN LOADS: +42.0 P.S.F. & -46.0 P.S.F.
 TEST LOADS: +63.0 P.S.F. & -69.0 P.S.F.

CLOPAY BUILDING PRODUCTS COMPANY 8585 DUKE BLVD. MASON, OH 45040 (513) 770-4800	MANUFACTURING PRODUCT CODE: MPC: PAN-2F 143 DATE: 6/17/02 DRAWN BY: RJK CHECKED BY: MWW	CLOPAY WINDLOAD RATING: W7 DESCRIPTION: 2-IN PAN +42/-46 18-2 X 16-0 DRAWING NUMBER: B 102621	MAX DOOR SIZE: 18'2"W x 16'0"H VER: IBC
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