

MODELS	
GRAND HARBOR / STONE MANOR	
CLOPAY	GH11, GH12, GH13, GH21, GH22, GHR11, GHR12, GHR13, GHR21, GHR22, GHRV11, GHRV12, GHRV13, GHRV21, GHRV22
IDEAL	SM11, SM12, SM13, SM21, SM22 -MG11, MG12, MG13, MG21, MG22, MGV11, MGV12, MGV13, MGV21, MGV22
HOLMES	SP11, SP12, SP13, SP21, SP22, SPV11, SPV12, SPV13, SPV21, SPV22

MIN. (1) INTERMEDIATE STILE ATTACHED W/ TOG-L-LOC (TOP & BOT) AND URETHANE ADHESIVE

OPTIONAL ACRYLIC OR DSB GLASS LITES AVAILABLE. OPTIONAL ACRYLIC GLAZING IS PLASKOLITE OPTIX OR LUCITE CP APPROVED CC2 PLASTIC IN ACCORDANCE WITH IBC/FBC 2606 (SEE SECTION B-B). SHORT, LONG AND ARCH LITES (NOT SHOWN) ARE APPROVED. MAX GLAZING SIZE NOT TO EXCEED 41" x 15".

1# DENSITY POLYSTYRENE FOAM INSULATION 1-5/16" THICK WITH VINYL HAIRCELL BACKER (OPTION AVAILABLE)

1/2" DECORATIVE OVERLAYS ADHERED TO OUTSIDE SKIN WITH PERMANENT ADHESIVE.

24 GA. MIN. STEEL SKIN COATED WITH GALV., BAKED-ON PRIMER, AND A BAKED-ON POLYESTER TOP COAT APPLIED TO BOTH SIDES OF STEEL SKIN.

SECTION A-A (SIDE VIEW)

2-1/2" THICK
2" THICK
3" TALL U-BAR
20 GA. GALV. STEEL
3"
1-7/8"

12 GA. GALV. STEEL TOP ROLLER BRACKET. EACH BRACKET ATTACHED W/(3) #14x5/8" SHEET METAL SCREWS.

SHIP LAP JOINTS.

14 GA. GALV. STEEL END HINGE. EACH FASTENED TO END STILES W/(4) #14x5/8" SHEET METAL SCREWS & (4) 1/4"x3/4" SELF TAPPING SCREWS.

3" TALL x 20 GA. GALV. EACH U-BAR ATTACHED WITH TWO 1/4"x3/4" SELF TAPPING SCREWS PER STILE LOCATION.

13 GA. GALV. STEEL BOTTOM BRACKET. ATTACHED WITH TWO #14x5/8" SHEET METAL SCREWS.

ALUMINUM EXTRUSION & VINYL WEATHERSTRIP.

GRAND HARBOR 24GA W4-09

NO. OF U-BARS PER SECTION		SECTION NUMBER							
DOOR HEIGHT		1	2	3	4	5	6	7	8
6	6	1	1	1	1	-	-	-	-
7	0	1	1	1	1	-	-	-	-
7	6	2	1	1	1	-	-	-	-
8	0	2	1	1	1	-	-	-	-
8	6	2	1	1	1	1	-	-	-
9	0	2	1	1	1	1	-	-	-
9	6	2	1	1	1	1	-	-	-
10	0	2	1	1	1	1	-	-	-
10	6	2	1	1	1	1	1	-	-
11	0	2	1	1	1	1	1	-	-
11	6	2	1	1	1	1	1	1	-
12	0	2	1	1	1	1	1	-	-
12	6	2	1	1	1	1	1	1	-
13	0	2	1	1	1	1	1	1	-
13	6	2	1	1	1	1	1	1	-
14	0	2	1	1	1	1	1	1	-
14	6	2	1	1	1	1	1	1	1
15	0	2	1	1	1	1	1	1	1
15	6	2	1	1	1	1	1	1	1
16	0	2	1	1	1	1	1	1	1

BOTTOM SECTION

SECTION B-B OPTIONAL 10 SCREW WINDOW LITE

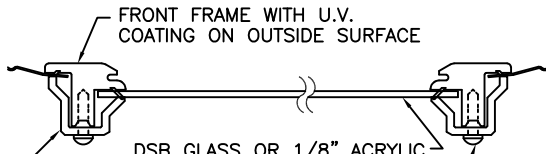
FRONT FRAME WITH U.V. COATING ON OUTSIDE SURFACE

DSB GLASS OR 1/8" ACRYLIC

#8x1-1/4" PAN HEAD SCREW.
10 SCREWS PER SHORT LITE,
16 SCREWS PER LONG RECT. LITE,
15 SCREWS PER ARCH LITE.

THE OPTIONAL GLAZING SHOWN ON THIS DRAWING MEETS THE WIND LOAD REQUIREMENTS OF THE FLORIDA BUILDING CODE OR INTERNATIONAL BUILDING CODE BUT DOES NOT MEET THE IMPACT RESISTANT REQUIREMENT FOR WINDBORNE DEBRIS REGIONS (REF. CHAPTER 16 FBC/IBC)

MOLDED INSIDE LITE RETAINER



DSB GLASS OR 1/8" ACRYLIC

#8x1-1/4" PAN HEAD SCREW.
10 SCREWS PER SHORT LITE,
16 SCREWS PER LONG RECT. LITE,
15 SCREWS PER ARCH LITE.

THE OPTIONAL GLAZING SHOWN ON THIS DRAWING MEETS THE WIND LOAD REQUIREMENTS OF THE FLORIDA BUILDING CODE OR INTERNATIONAL BUILDING CODE BUT DOES NOT MEET THE IMPACT RESISTANT REQUIREMENT FOR WINDBORNE DEBRIS REGIONS (REF. CHAPTER 16 FBC/IBC)

REV	DATE	ECO	DESCRIPTION
03	04/13/07		ADDED OPTIONAL LITES; ADDED STONE MANOR
04	07/10/08	ER1184	ADDED RETAIL MODEL NUMBERS
05	08/08/08	-	ADDED LONG LITE OPTION.
06	01/31/12	-	REVISED WIND SPEED TABLE FOR ASCE7-10.
07	09/17/14	EN2125	CROSSED THRU OBSOLETE M/N'S MG & MGV
08	11/9/20	-	UPDATED TITLE BLOCK AND REMOVED WIND CHART

HORIZONTAL TRACK SUPPORT BY DOOR INSTALLER (TO SUIT)

TRACKS ABOVE 8' IN HEIGHT

13 GA. GALV. STEEL FLAG BRACKET. EACH FASTENED TO WOOD JAMB WITH (3) 5/16"x1-5/8" LAG SCREWS.

NOTE: 3" TRACK AVAILABLE AS NEEDED.

2" GALV. STEEL TRACK, TRACK THICKNESS: .060" MIN.

TYP. 2-1/2"x12 GA. GALV. STEEL TRACK BRACKET.
• (5) TRACK BRACKETS PER SIDE (UP TO 10' HIGH).
• (6) TRACK BRACKETS PER SIDE (UP TO 12' HIGH).
• (7) TRACK BRACKETS PER SIDE (UP TO 14' HIGH).
• (8) TRACK BRACKETS PER SIDE (UP TO 16' HIGH).
DISTANCE BETWEEN FLAG AND TOP TRACK BRACKET NOT TO EXCEED 30" O.C.

DOOR HEIGHT	"L"
8'-6"	94"
9'-0"	100"
9'-6"	106"
10'-0"	112"
10'-6"	118"
11'-0"	124"
11'-6"	130"
12'-0"	136"
12'-6"	142"
13'-0"	148"
13'-6"	154"
14'-0"	160"
14'-6"	166"
15'-0"	172"
15'-6"	178"
16'-0"	184"

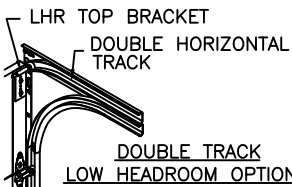
HORIZONTAL TRACK SUPPORT BY DOOR INSTALLER (TO SUIT)

TRACKS UP TO 8' IN HEIGHT

13 GA. GALV. STEEL FLAG BRACKET. EACH FASTENED TO WOOD JAMB WITH (3) 5/16"x1-5/8" WOOD LAG SCREW.

2" GALV. STEEL TRACK, TRACK THICKNESS: .060"

TYP. 2-1/2"x12 GA. GALV. STEEL TRACK BRACKET.
(4) TRACK BRACKETS PER SIDE.

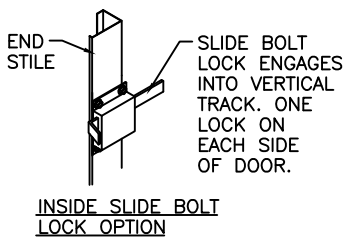


ORIGINAL DRAWINGS ARE SIGNED IN BLUE INK WITH A RAISED SEAL (EMBOSS).

DESIGN ENGINEER: MARK WESTERFIELD, P.E.
FLORIDA P.E. #48495, NC P.E. #23832, TEXAS P.E. #91513

DESIGN LOADS: +25.0 P.S.F. & -32.0 P.S.F.
TEST LOADS: +37.5 P.S.F. & -48.0 P.S.F.

VERTICAL JAMB ATTACHMENT (C-90 BLOCK OR 2,000 PSI MIN. CONCRETE COLUMN): 3/8"x4" SLEEVE ANCHOR BOLTS ON 24" CENTERS (BOTH C-90 BLOCK OR 2,000 PSI MIN. CONCRETE) OR 1/4"x4" TAPCON SCREWS ON 21" CENTERS (2,000 PSI MIN. CONCRETE). WASHERS INCLUDED WITH SLEEVE ANCHORS, 1" O.D. WASHERS REQUIRED WITH TAPCONS. ANCHORS MAY BE COUNTERSUNK (BUT NOT REQUIRED) TO PROVIDE A FLUSH MOUNTING SURFACE. HORIZONTAL JAMBS DO NOT TRANSFER LOAD.



OUTSIDE KEYED LOCK LOCK BAR LOCKING

END STILE

SLIDE BOLT LOCK ENGAGES INTO VERTICAL TRACK. ONE LOCK ON EACH SIDE OF DOOR.

INSIDE SLIDE BOLT LOCK OPTION

STOP MOULDING BY DOOR INSTALLER (TO SUIT)
20 GA. MIN. GALV. STEEL END STILE
20 GA. GALV. STEEL INTER. STILE

2x6 YELLOW PINE JAMB

JAMB CONFIGURATION SECTION B-B

12 GA. GALV. STEEL TRACK BRACKETS FASTENED TO WOOD JAMB WITH ONE 5/16"x1-5/8" LAG SCREW PER TRACK BRACKET.

2" GALV. STEEL TRACK FASTENED TO 12 GA. GALV. STEEL TRACK BRACKETS. TRACK ATTACHED TO EACH BRACKET WITH ONE 1/4"x5/8" BOLT & NUT OR TWO 1/4" DIA. RIVETS.

VERTICAL JAMB ATTACHMENT (WOOD FRAME BUILDINGS): 1/2"x3" LAG SCREWS ON 24" CENTERS. 1" O.D. WASHER REQUIRED. LAG SCREWS MAY BE COUNTERSUNK (BUT NOT REQUIRED) TO PROVIDE A FLUSH MOUNTING SURFACE. HORIZONTAL JAMBS DO NOT TRANSFER LOAD.

PREPARATION OF JAMBS BY OTHERS

14 GA. GALV. STEEL ROLLER HINGES FASTENED TO END STILES EACH W/(4) #14x5/8" SHEET METAL SCREWS AND (4) 1/4"x3/4" SELF TAPPING SCREWS PER END HINGE.

2" 10 BALL SHORT STEM STEEL ROLLER WITH STEEL OR NYLON TIRE

NOTE: THE DESIGN OF THE SUPPORTING STRUCTURAL ELEMENTS SHALL BE THE RESPONSIBILITY OF THE PROFESSIONAL OF RECORD FOR THE BUILDING OR STRUCTURE AND IN ACCORDANCE WITH CURRENT BUILDING CODES FOR THE LOADS LISTED ON THIS DRAWING.



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MANUFACTURING PRODUCT CODE MPC: SPO-2F449	WINDLOAD RATING W4	MAX. DOOR SIZE: 9'W x 16'H
DATE: 11/01/06	DESCRIPTION: GRAND HARBOR 9'W +25/-32	
DRAWN BY: BFA	DRAWING NUMBER: B 103549	
CHECKED BY:		