FL #	FL5684-R13
Application Type	Revision
Code Version	2023
Application Status	Approved
Comments	
Archived	☐
Product Manufacturer	Clopay Building Products Company
Address/Phone/Email	8585 Duke Blvd. Mason, OH 45040 (513) 770-4641 jwheeler@clopay.com
Authorized Signature	Jim Wheeler jwheeler@clopay.com
Technical Representative	
Address/Phone/Email	
Quality Assurance Representative	
Address/Phone/Email	
Category	Exterior Doors
Subcategory	Sectional Exterior Door Assemblies
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer ☐ Evaluation Report - Hardcopy Received
Florida Engineer or Architect Name who developed the Evaluation Report	Jim Wheeler
Florida License	PE-91932
Quality Assurance Entity	Intertek Testing Services NA, Inc. - QA Entity
Quality Assurance Contract Expiration Date	12/31/2030
Validated By	Gary Pfuehler ✓ Validation Checklist - Hardcopy Received
Certificate of Independence	FL5684_R13_COI_Certification_of_Independence_of_Evaluation_Entity-Gary_Pfuehler.pdf FL5684_R13_COI_Statement_of_Independence_of_Evaluation_Entity_JDW.pdf

Referenced Standard and Year (of Standard)

Standard	Year
ANSI/DASMA 108	2005
ANSI/DASMA 115	2005
ASTM E330	2002
TAS 201	1994
TAS 202	1994
TAS 203	1994

Equivalence of Product Standards Certified By	Florida Licensed Professional Engineer or Architect FL5684_R13_Equiv_20200812 - FBC - ASTM 1886-1996 equiv.pdf FL5684_R13_Equiv_20230712 - FBC - ASTM E330 equiv_s.pdf
Sections from the Code	
Product Approval Method	Method 1 Option D
Date Submitted	10/17/2025
Date Validated	10/20/2025
Date Pending FBC Approval	10/22/2025
Date Approved	12/09/2025

Summary of Products

Go to Page GO!

FL #	Model, Number or Name	Description
5684.1	01 W8-09 DSIE-1F471: GD2SP, GR2SP, GD2LP, GR2LP, AR2SP, AR2LP, ED2SP, ED2LP, 4302, 6202, SFC68, 4305, HDGR, MFR68, 6205, SFR68	Gallery/Artistry/Expressions: Double-skin Insulated (exterior skin 27 ga. min.; interior skin 27 ga. min.) Single-Car (up to 9’0” wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +54 PSF/-60 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		**Installation Instructions** FL5684_R13_II_104119-Rev06.pdf Verified By: James D. Wheeler FL PE 91932 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_CBPC_111215-A-05.pdf Created by Independent Third Party: No
5684.2	02 W7-09 PAN-2F153: 73, 75, 84A, 94, 98, 42, 42B, 48, 48B, 4F, 4RST, 6RST	Steel Pan (min. 25 ga.) Single-Car (up to 9’0” wide) WINDCODE® W7 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +42 PSF/-48 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Optional Impact Resistant Glazing available.		**Installation Instructions** FL5684_R13_II_101702-Rev13.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_CBPC_111215-A.pdf Created by Independent Third Party: No
5684.3	03 W7-16 PAN-2F153: 73, 75, 84A, 94, 98, 42, 42B, 48, 48B, 4F, 4RST, 6RST	Steel Pan (min. 25 ga.) Double Car (9’2” to 16’2” wide) WINDCODE® W7 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +42 PSF/-48 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Optional Impact Resistant Glazing available.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.4	04 W7-18 PAN-2F143: 84A, 94, 98, 48, 48B, 4F, 4RST	Steel Pan (min. 24 ga.) 16’4” to 18’2” wide WINDCODE® W7 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +42 PSF/-46 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.5	05 W8-09 DSIE-1F171: 4400, 4401, HDG, HDGL, HDGF, 4300, 4310,	Double-skin Insulated (exterior skin 27 ga. min.; interior skin 27 ga. min.) Single-Car (up to 9’0” wide) WINDCODE® W8

	4301, 66, 66G, 67, 67G, 68, 68G, 6200, 6201, 6203, SP200, SF200, SE200	Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +48 PSF/-60 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Optional Impact Resistant Glazing available.		**Installation Instructions** FL5684_R13_II_101703-Rev13.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_CBPC_111215-A.pdf Created by Independent Third Party: No
5684.6	06 W8-09 PAN-2F153: 73, 75, 42, 42B, 6RST	Steel Pan (min. 25 ga.) Single-Car (up to 9’0” wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +46 PSF/-50 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Optional Impact Resistant Glazing available.		**Installation Instructions** FL5684_R13_II_101296-Rev15.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_CBPC_111215-A.pdf Created by Independent Third Party: No
5684.7	07 W8-09 PAN-2F143: 84A, 94, 98, 48, 48B, 4F, 4RST (solid doors)	Steel Pan (min. 24 ga.) Single-Car (up to 9’0” wide) WINDCODE® W8 Garage Door with no glazing
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +54 PSF/-62 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Solid doors.		**Installation Instructions** FL5684_R13_II_103287-Rev05.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_CBPC_111215-A.pdf Created by Independent Third Party: No
5684.8	08 W8-09 PAN-2F143: 84A, 94, 98, 48, 48B 4F, 4RST (impact-resistant glazing)	Steel Pan (min. 24 ga.) Single-Car (up to 9’0” wide) WINDCODE® W8 Garage Door with Impact Resistant Glazing
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +48 PSF/-54 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Doors with Impact Resistant Glazing.		**Installation Instructions** FL5684_R13_II_103547-Rev06.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_CBPC_111215-A.pdf Created by Independent Third Party: No
5684.9	09 W8-09 DSIEO-1M479: Coachman/Settlers/Affinity	Double-skin Insulated (exterior skin 27 ga. min.; interior skin 27 ga. min.) with Overlay Single-Car (up to 9’0” wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +54 PSF/-60 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		**Installation Instructions** FL5684_R13_II_103436-Rev03.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_CBPC_111215-A.pdf Created by Independent Third Party: No
5684.10	10 W8-12 C-DSIE-1F447: 3200, 3205, 3220, 240, 240G	Double-skin Insulated EPS (exterior skin 24 ga. min.; interior skin 27 ga. min.) WINDCODE® W8 Sectional Door, up to 12’2” wide, with optional Impact Resistant Glazing
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +52 PSF/-58 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Optional Impact Resistant Glazing available.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.11	11 W8-12 C-PAN-1E448: 524, 520, 224, C4ST, C0ST	Ribbed Steel (min. 24 ga.) WINDCODE® W8 Sectional Door, up to 12’2”
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +50 PSF/-56 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No

5684.12	12 W8-14 C-PAN-1E448: 524, 520, 224, C4ST, C0ST	Ribbed Steel (min. 24 ga.) WINDCODE® W8 Sectional Door, 12’3” to 14’2”
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +50 PSF/-56 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.13	13 W8-16 PAN-2F443: G4S, GS4, GD4S, GR4S, E4S, ED4S, SS4, AR4S	Gallery/Artistry/Expressions: Steel Pan (min. 24 ga.) Double-Car (up to 16’2” wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +46.6 PSF/-52 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.14	14 W8-16 DSIE-1F471: GD2SP, GR2SP, GD2LP, GR2LP, AR2SP, AR2LP, ED2SP, ED2LP	Gallery/Artistry/Expressions: Double-skin Insulated (exterior skin 27 ga. min.; interior skin 27 ga. min.) Double-Car (up to 16’2” wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +46.6 PSF/-52 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.15	15 W8-16 DSIEO-1M479: Coachman/Settlers/Affinity	Double-skin Insulated (exterior skin 27 ga. min.; interior skin 27 ga. min.) with Overlay Double-Car (9’2” up to 16'2" wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +46.6 PSF/-52 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.16	16 W8-16 DSIE-1F171: 4400, 4401, HDG, HDGL, 4300, 4310, 4301, 66, 66G, 67, 67G, 68, 68G, 6200, 6201, 6203, SP200, SF200, SE200	Double-skin Insulated (exterior skin 27 ga. min.; interior skin 27 ga. min.) Double Car (9’2” to 16’2” wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +46.6 PSF/-52 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Optional Impact Resistant Glazing available.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.17	17 W8-16: PAN-2F143: 84A, 94, 98, 48, 48B, 4F, 4RST	Steel Pan (min. 24 ga.) Double Car (9’2” to 16’2” wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +46.6 PSF/-52 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Optional Impact Resistant Glazing available.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.18	18 W8-18 DSIE-1F171: 4400, 4401, HDG, HDGL, HDGF, 4300, 4310, 4301, 66, 66G, 67, 67G, 68, 68G, 6200, 6201, 6203, SP200, SF200, SE200	Double-skin Insulated (exterior skin 27 ga. min.; interior skin 27 ga. min.) Double Car (16’4” to 18’2” wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286

Impact Resistant: Yes **Design Pressure:** +46 PSF/-50 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.19	19 W9-09 PAN-2F143: 93, 84A, 94, 98, 4F, 4RST, 48, 48B	Steel Pan (min. 24 ga.) Single-Car (up to 9'0" wide) WINDCODE® W9 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +62 PSF/-72 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH. Optional Impact Resistant Glazing available.		**Installation Instructions** FL5684_R13_II_DISCONTINUED.pdf Verified By: Scott Hamilton FL PE 63286 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_DISCONTINUED.pdf Created by Independent Third Party: No
5684.20	20 W8-09 PAN-2F443: G4S, GS4, GD4S, GR4S, E4S, ED4S, SS4, AR4S	Gallery/Artistry/Expressions: Steel Pan (min. 24 ga.) Double-Car (up to 9'0" wide) WINDCODE® W8 Garage Door
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** Yes **Design Pressure:** +50 PSF/-58 PSF **Other:** Max. Wind Speed (V_ult): 170 MPH.		**Installation Instructions** FL5684_R13_II_104121-Rev08.pdf Verified By: James D. Wheeler FL PE 91932 Created by Independent Third Party: No **Evaluation Reports** FL5684_R13_AE_CBPC_111215-A-05.pdf Created by Independent Third Party: No

Contact Us :: 2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1824

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

INSTALLER MODEL	RETAIL MODEL	DESCRIPTION
94, 4RST	84A, 48, 48B	WOODGRAIN TEXTURE, RAISED PANEL, GALV. INTER. STILES
98, 4F	–	WOODGRAIN TEXTURE, FLUSH PANEL, GALV. INTER. STILES

REV	DATE	DESCRIPTION
01	02/12/07	'MULTIPURPOSE HIGH BOND' WAS VHB; FACADE IS OPTIONAL
02	11/14/07	REMOVED RIVETS/SCREWS FROM END STILE.
03	08/08/08	ADDED 48B.
04	12/10/08	MAX HT WAS 12-0.
05	12/15/11	UPDATED WIND SPEEDS FOR ASCE7-10.
06	08/04/20	UPDATED TITLE BLOCK AND REMOVED WIND CHART

END STILES ATTACHED TO DOOR SKIN WITH PATENTED TOG-L-LOC SYSTEM. END STILES HAVE TOG-L-LOC CLINCHES AT TOP, BOTTOM AND FRONT FACE.

(1) INTERMEDIATE STILE BETWEEN EACH EMBOSS, ATTACHED WITH TOG-L-LOC [(2) AT TOP & BOTTOM] AND URETHANE ADHESIVE (ALONG CENTER).

ONE ROW OF IMPACT-RESISTANT GLAZING IN EITHER TOP SECTION (SHOWN) OR NEXT-TO-THE-TOP SECTION (NOT SHOWN). MAX. GLAZING SIZE IS 18-1/2" x 11". GLAZING IS INJECTION MOLDED GE LEXAN SLX2432T, AN APPROVED CC2 PLASTIC IN ACCORDANCE WITH IBC/FBC 2606. SEE SECTION B-B FOR ASSEMBLY DETAILS.

SEE INTERMED. HINGE DETAIL.

SEE END HINGE DETAIL.

LOCK POSITION (BOTH SIDES). SEE LAYOUT OF EACH LOCK FOR DETAILS.

MAX. DOOR HEIGHT = 16'-0"

LOCATION OF OPTIONAL VENTS

MAX. DOOR WIDTH = 9'-0"

INSIDE ELEVATION

SECTION B-B

DETAIL 'D'

DETAIL 'D'

MULTIPURPOSE HIGH BOND TAPE.

OPTIONAL DECORATIVE FRONT FRAME FACADE.

OPTIONAL DECORATIVE SNAP-IN INSERT.

GE SSG4000AC STRUCTURAL SILICONE SEALANT.

0.188

IMPACT RESISTANT ONE-PIECE INJECTION MOLDED GE LEXAN SLX2432T FRONT FRAME & GLAZING.

POLYSTYRENE RETAINER FASTENED TO FRAME WITH (10) #8 x 3/4" PAN HEAD MACHINE SCREWS.

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

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

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

TRACK CONFIGURATION

HORIZONTAL TRACK SUPPORT BY DOOR INSTALLER (TO SUIT).

CENTER HANG REQUIRED FOR DOORS OVER 8' HIGH.

VERTICAL TRACK ATTACHED TO FLAG BRACKET WITH (1) 3/8"x3/4" CARRIAGE BOLT.

13 GA. GALV. STEEL FLAG BRACKET. EACH FASTENED TO WOOD JAMB WITH (3) 5/16"x1-1/2" WOOD LAG SCREWS.

VERTICAL TRACK ATTACHED TO HORIZONTAL TRACK WITH (2) 1/4"x3/4" TRACK BOLTS.

2" GALV. STEEL TRACK, TRACK THICKNESS: 0.060".

TYP. 2-1/2"x12 GA. GALV. STEEL TRACK BRACKET.

OPENING HEIGHT = DOOR HEIGHT

"L"

"X4"

"X3"

"X2"

"X1"

LHR TOP BRACKET

DOUBLE HORIZONTAL TRACK

DOUBLE TRACK LOW HEADROOM OPTION

DOOR HEIGHT	"L"	BRACKET PLACEMENTS "X1"	"X2"	"X3"	"X4"	"X5"	"X6"	"X7"	"X8"
6'-6"	70"	3-1/2"	10"	35"	60"	–	–	–	–
7'-0"	76"	3-1/2"	10"	38"	66"	–	–	–	–
7'-6"	82"	3-1/2"	10"	34"	58"	–	–	–	–
8'-0"	88"	3-1/2"	10"	34"	58"	–	–	–	–
8'-6"	94"	3-1/2"	10"	34"	58"	82"	–	–	–
9'-0"	100"	3-1/2"	10"	34"	58"	82"	–	–	–
9'-6"	106"	3-1/2"	10"	34"	58"	82"	–	–	–
10'-0"	112"	3-1/2"	10"	34"	58"	82"	–	–	–
10'-6"	118"	3-1/2"	10"	34"	58"	82"	106"	–	–
11'-0"	124"	3-1/2"	10"	34"	58"	82"	106"	–	–
11'-6"	130"	3-1/2"	10"	34"	58"	82"	106"	–	–
12'-0"	136"	3-1/2"	10"	34"	58"	82"	106"	–	–
12'-6"	142"	3-1/2"	10"	34"	58"	82"	106"	130"	–
13'-0"	148"	3-1/2"	10"	34"	58"	82"	106"	130"	–
13'-6"	154"	3-1/2"	10"	34"	58"	82"	106"	130"	–
14'-0"	160"	3-1/2"	10"	34"	58"	82"	106"	130"	–
14'-6"	166"	3-1/2"	10"	34"	58"	82"	106"	130"	154"
15'-0"	172"	3-1/2"	10"	34"	58"	82"	106"	130"	154"
15'-6"	178"	3-1/2"	10"	34"	58"	82"	106"	130"	154"
16'-0"	184"	3-1/2"	10"	34"	58"	82"	106"	130"	154"

SNAP LATCH ENGAGES ONTO VERTICAL TRACK. ONE SNAP LATCH ON EACH SIDE OF DOOR.

INTER. STILE

OUTSIDE KEYED HANDLE

END STILE

INSIDE HANDLE

OUTSIDE KEYED LOCK SNAP LATCH LOCK OPTION

INTER. STILE

END STILE

LOCK BAR GUIDE

OUTSIDE HANDLE

LOCK BAR ENGAGES IN TRACK ON EACH SIDE OF DOOR.

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

2-3/4"

(4) #14x5/8" SHEET METAL SCREWS

7-1/2"

(4) 1/4"x3/4" SELF TAPPING SCREWS

14 GA. END HINGES VIEW "B"

2-1/4"

7-1/2"

18 GA. INTERMEDIATE HINGE VIEW "C"

SECTION A-A

24 GA. DDS STEEL EXTERIOR SKIN WITH G-40 GALVANIZING, BAKED-ON PRIMER AND A BAKED-ON POLYESTER PAINTED TOP COAT APPLIED TO BOTH SIDES OF STEEL SKIN. (ASTM No. A653).

2" THICK

12 GA. GALV. STEEL TOP ROLLER BRACKET (2-1/2" x 5-3/8"). EACH BRACKET ATTACHED W/(4) #14x5/8" SHEET METAL SCREWS.

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

SHIP LAP JOINTS.

3" TALL x 20 GA. GALV. STEEL U-BAR. TWO U-BARS PER SECTION. EACH U-BAR ATTACHED WITH 1/4" SELF TAPPING SCREWS. (2) SCREWS AT EACH END AND INTERMED. STILE LOCATION.

13 GA. GALV. STEEL BOTTOM BRACKET (3-1/2" x 5-1/2") ATTACHED WITH (2) #14x5/8" SHEET METAL SCREWS.

ALUMINUM EXTRUSION & VINYL WEATHERSTRIP. EXTRUSION ATTACHED WITH #8x1/2" SELF TAPPING SCREWS AT 18" ON CENTER SPACING [(6) SCREWS ON 9'W DOOR].

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 SYP (GRADE #2 OR BETTER) JAMBS. NO LOAD FROM THE DOOR IS TRANSFERRED TO THE HORIZONTAL (TOP) JAMB.
2. ALL JAMB FASTENERS MAY BE (BUT ARE NOT REQUIRED TO BE) COUNTERSUNK TO PROVIDE A FLUSH MOUNTING SURFACE.
3. A 1/3 STRESS INCREASE FOR WIND LOAD WAS NOT USED IN THE CALCULATION OF ALLOWABLE LOADS FOR ANCHORS AND FASTENERS FOR STEEL, CONCRETE AND MASONRY.

HORIZONTAL (TOP) JAMB (NO LOAD FROM DOOR)

FASTENER TYPE

MAX. O.C.

2x6 VERTICAL JAMB

PREPARATION OF JAMBS BY OTHERS

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.

JAMB CONFIGURATION

STOP MOULDING BY DOOR INSTALLER (TO SUIT)

20 GA. MIN. GALV. STEEL END STILE, 2-5/8"x2".

20 GA. MIN. GALV. STEEL INTERM. STILE, 2"x2".

12 GA. GALV. STEEL TRACK BRACKET FASTENED TO WOOD JAMB WITH ONE 5/16"x1-1/2" WOOD LAG SCREW PER BRACKET.

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

18 GA. GALV. STEEL INTER. HINGE FASTENED TO CENTER STILE W/(4) EACH #14x5/8" SHEET METAL SCREWS.

7/16" ROUND PUSHNUT IS INSTALLED ON EACH ROLLER SHAFT.

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

2" 10 BALL STEEL ROLLER (1-3/16"x7/16"x4") WITH STEEL OR NYLTON TIRE.

2x6 JAMB TO SUPPORTING STRUCTURE ATTACHMENT

(NOT TO BE USED FOR ATTACHMENT OF TRACK BRACKETS)

BUILDING TYPE	FASTENER TYPE	MAXIMUM * ON CENTER DISTANCE BETWEEN FASTENERS	STEEL WASHERS REQUIRED?
C-90 BLOCK (HOLLOW OR GROUTED)	1/4" x 3" (1-1/4" EMBED) ITW TAPCON CONCRETE ANCHOR (2-1/2" MIN. EDGE DISTANCE)	10-1/2"	1" O.D.
3,000 PSI MIN. CONCRETE	1/4" x 4" (1-3/4" EMBED) ITW TAPCON CONCRETE ANCHOR (2-1/2" MIN. EDGE DISTANCE)	24"	1" O.D.
3,000 PSI MIN. CONCRETE	1/2" x 4" (2-1/4" EMBED) SIMPSON STRONG-TIE WEDGE-ALL WEDGE ANCHOR (2" MIN. EDGE DISTANCE)	21-1/2"	INCLUDED
WOOD FRAME	1/2" x 4" (1-5/8" EMBED) LAG SCREW (ASTM A307, GRADE A) (2-1/2" MIN. EDGE DISTANCE)	24"	1" O.D.
2,000 PSI MIN. CONCRETE	1/2" x 4" (2-1/2" EMBED) WEJ-IT SLEEVE ANCHOR (2-1/2" MIN. EDGE DISTANCE)	24"	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.

SCOTT HAMILTON LICENSE

DESIGN ENGINEER: SCOTT HAMILTON FLORIDA PE#: 63286

8/4/20

DESIGN LOADS: +48.0 PSF & -54.0 PSF.
TEST LOADS: +72.0 PSF & -81.0 PSF.

FLORIDA PRODUCT APPROVAL 5684

Clopay CORPORATION

CLOPAY CORPORATION
8585 DUKE BLVD.
MASON, OHIO 45040
(513) 770-4800

TOLERANCES Unless Stated Otherwise
.00 = ±.03
.000 = ±.015
.0000 = ±.007
Degrees = ±1/2°

MANUFACTURING PRODUCT CODE: MPC: PAN-2F143
DATE: 10/23/06
DRAWN BY: SH
CHECKED BY: SH

PAGE: 1 OF 1
MAX. SIZE: 9'0"W x 16'0"H
DESCRIPTION: SINGLE CAR W8 PAN DOOR WITH IMPACT RESISTANT LITES
B
DRAWING NUMBER: 103547
VER: IBC

December 15, 2011 (revised 10/19/23)

Evaluation Report for Clopay Corporation Sectional Garage Doors, W7 through W9

I have evaluated the wind load door designs as shown on the drawings listed below. I have reviewed the test reports, which were generated by accredited independent laboratories as required by the relevant Florida Administrative Rule, the engineering rational analysis, and the product drawings. The test reports are listed below. Testing was conducted by American Test Lab North Carolina and Hurricane Engineering and Testing Inc.

For the doors listed in the Tables below, Static Pressure Tests were conducted in accordance with TAS 202-1994, ASTM-E330-2002 and ANSI/DASMA 108-2005. Missile Impact and Cyclic Pressure Tests were conducted in accordance with TAS 201-1994 and TAS 203-1994 and ASTM E1886-2005 and ASTM E1996-2009 and ANSI/DASMA 115-2005. The pressures listed on the drawings are either direct results of these tests or results obtained through engineering rational analysis based on actual tests. I have concluded that the sectional garage door designs listed below in the Tables below are in compliance with these High Velocity Hurricane Zone test requirements of the Florida Building Code and therefore are qualified as impact-resistant assemblies (large missile impact).

TABLE 1: Drawings for doors with Manufacturing Product Code (MPC) PAN-2F153:
101702-Rev13, max. door size 9'0" x 16'0", +42/-48 PSF (design load)
101296-Rev15, max. door size 9'0" x 16'0", +46/-50 PSF (design load)
104857-Rev00, max. door size 16'2" x 16'0", +42/-48 PSF (design load)

TABLE 2: Drawings for doors with Manufacturing Product Code (MPC) PAN-2F143:
102621-Rev08, max. door size 18'2" x 16'0", +42/-46 PSF (design load)
103287-Rev05, max. door size 9'0" x 16'0", +54/-62 PSF (design load)
103547-Rev06, max. door size 9'0" x 16'0", +48/-54 PSF (design load)
101300-Rev17, max. door size 16'2" x 16'0", +46.6/-52 PSF (design load)
101706-Rev14, max. door size 9'0" x 16'0", +62/-72 PSF (design load)

TABLE 3: Drawings for doors with Manufacturing Product Code (MPC) DSIE-1F171:
101703-Rev13, max. door size 9'0" x 16'0", +48/-60 PSF (design load)
101488-Rev14, max. door size 16'2" x 16'0", +46.6/-52 PSF (design load)
103028-Rev09, max. door size 18'2" x 16'0", +46/-50 PSF (design load)

TABLE 4: Drawings for doors with Manufacturing Product Code (MPC) DSIEO-1M479:
103436-Rev03, max. door size 9'0" x 16'0", +54/-60 PSF (design load)
103560-Rev05, max. door size 16'2" x 16'0", +46.6/-52 PSF (design load)

TABLE 5: Drawings for doors with Manufacturing Product Code (MPC) C-DSIE-1F447:
101705-Rev09, max. door size 12'2" x 18'0", +52/-58 PSF (design load)

TABLE 6: Drawings for doors with Manufacturing Product Code (MPC) C-PAN-1E448:
102645-Rev08, max. door size 12'2" x 18'0", +50/-56 PSF (design load)
103288-Rev04, max. door size 14'2" x 18'0", +50/-56 PSF (design load)

TABLE 7: Drawings for doors with Manufacturing Product Code (MPC) PAN-2F443:
104067-Rev03, max. door size 16'2" x 16'0", +46.6/-52 PSF (design load)
104121-Rev06, max. door size 9'0" x 16'0", +50/-58 PSF (design load)

TABLE 8: Drawings for doors with Manufacturing Product Code (MPC) DSIE-1F471:
104119-Rev05, max. door size 9'0" x 16'0", +54/-60 PSF (design load)
104038-Rev03, max. door size 16'2" x 16'0", +46.6/-52 PSF (design load).

TABLE 9: Drawings for doors with Manufacturing Product Code (MPC) DSIU-1F171:
104185-Rev03, max. door size 9'0" x 16'0", +48/-50 PSF (design load)
104280-Rev02, max. door size 16'2" x 16'0", +46.6/-52 PSF (design load)
104281-Rev02, max. door size 18'2" x 16'0", +46/-50 PSF (design load)

TABLE 10: Drawings for doors with Manufacturing Product Code (MPC) DSIUO-1K479:
104277-Rev03, max. door size 9'0" x 16'0", +54/-60PSF (design load)
104278-Rev03, max. door size 16'2" x 16'0", +46.6/-52 PSF (design load)

TABLE 11: Drawings for doors with Manufacturing Product Code (MPC) C-DSIU-1F447:
104112-Rev03, max. door size 16'2" x 18'0", +50/-56 PSF (design load)

TABLE 12: Drawings for doors with Manufacturing Product Code (MPC) C-DSIU-1D447:
104245-Rev03, max. door size 12'2" x 18'0", +52/-58 PSF (design load)

Test Reports:
ATL 0428.01-09 (6/30/09), 1112.01-96 (11/13/96), 0907.01-23 (10/12/23), 0305.01-08 (5/28/08), 0924.02-02 (10/29/02), 0823.01-06 (12/18/06), 0827.01-04 (10/22/04), 1008.01-07 (11/5/07), 0606.01-05 (7/29/05), 0107.01-09 (2/2/09), 1018.01-04 (7/13/10), 0415.01-08 (5/15/08), 0331.01-08 (5/13/08), 1106.01-07 (11/29/07), 0128.01-08 (3/13/08), 0327.01-08 (5/13/08), 0610.01-08 (7/16/08), 1202.01-08 (12/17/08), 1210.01-08 (12/17/08), 0609.01-09 (7/28/09), 0512.01-09 (6/22/09), 0127.01-09 (2/4/09); HETI 95-494 & 95-496 (10/23/95), 94-252 & 94-254 (7/29/97), 02-1267 & 02-1268 (11/21/02), 03-1358 & 03-1359 (11/19/03). These reports documents compliance with the TAS testing standards and are signed by David Johnson (FL PE 61915), ATL or William Mehner (FL PE 7496), ATL or Hector Medina (FL PE 13008), HETI or Rafael Droz-Seda (FL PE 39228), HETI.

Product Description for doors with MPC PAN-2F153:

These doors consist of 2" thick steel pan sections with min. 25 ga. (0.019") skins. The steel skin is at least G40 DDS per ASTM A653. The maximum section height is 21". These doors may have optional Impact-Resistant Glazing (molded). Optional Impact-Resistant Glazing is a one-piece injection-molded front frame and glazing. The following models are at least structurally equivalent to the tested door: 73, 75, 6RST, 42, 42B, 84A, 94, 98, 4RST, 4F, 48, 48B, 1500, 190, 55, 55S. Not all models may be shown on a given drawing.

Product Description for doors with MPC PAN-2F143:

These doors consist of 2" thick steel pan sections with min. 24 ga. (0.0239") skins. The steel skin is at least G40 DDS per ASTM A653. The maximum section height is 21". These doors may have optional Impact-Resistant Glazing (molded). Optional Impact-Resistant Glazing is a one-piece injection-molded front frame and glazing. The following models are at least structurally equivalent to the tested door: 84A, 93, 94, 98, 4RST, 4F, 48, 48B. Not all models may be shown on a given drawing.

Product Description for doors with MPC DSIE-1F171:

These doors consist of 2" double-skin insulated sections with an EPS core laminated to both skins. Both inner and outer skins are min. 27 ga. (0.016") G40 DDS per ASTM A653. The maximum section height is 21". These doors may have optional Impact-Resistant Glazing (molded). Optional Impact-Resistant Glazing is a one-piece injection-molded front frame and glazing. The following models are at least structurally equivalent to the tested door: 4300, 4301, 4310, 4400, 4401, HDG, HDGL, HDGF, 66, 66G, 67, 67G, 68, 68G, 6200, 6201, 6203, SP200, SF200, SE200. Not all models may be shown on a given drawing.

Product Description for doors with MPC DSIEO-1M479:

These doors consist of a base 2" double-skin insulated section with an EPS core laminated to both skins. Decorative overlays are attached to the exterior skin, adding not more than 5/8" to the total thickness. Both inner and outer skins are min. 27 ga. (0.016") G40 CS Type B per ASTM A653. The maximum section height is 24". The following models are at least structurally equivalent to the tested door: CGnn, CPnn, HPnn, CXnn, SXnn, AGnn. Note that 'nn' represents the arrangement of the decorative overlays. Not all models may be shown on a given drawing.

Product Description for doors with MPC C-PAN-1E448:

These doors consist of 2" thick steel pan doors with min. 24 ga. (0.022") outer skins. The steel skin is at least G40 CS-B per ASTM A653. The maximum section height is 24". The following models are at least structurally equivalent to the tested door: 524, 520, 224, C4ST, C0ST. Not all models may be shown on a given drawing.

Product Description for doors with MPC PAN-2F443:

These doors consist of 2" thick steel pan doors with min. 24 ga. (0.022") outer skins. The steel skin is at least G40 DDS per ASTM A653. The maximum section height is 24". These doors may have optional Impact-Resistant Glazing (Aluminum). Optional Impact-Resistant Glazing is an aluminum front frame and a separate polycarbonate glazing. The following models are at least structurally equivalent to the tested door: G4S, GS4, GD4S, GR4S, G4SV, GS4V, GD4SV, GR4SV, E4S, ED4S, E4SV, ED4SV, MR4S, SS4, AR4S, MR4SV, SS4V, AR4SV. Not all models may be shown on a given drawing.

Product Description for doors with MPC DSIE-1F471:

These doors consist of 2" double-skin insulated sections with an EPS core laminated to both skins. Both inner and outer skins are min. 27 ga. (0.016") G40 DDS per ASTM A653. The maximum section height is 24". These doors may have optional Impact-Resistant Glazing (Aluminum). Optional Impact-Resistant Glazing is an aluminum front frame and a separate polycarbonate glazing. The following models are

at least structurally equivalent to the tested door: GD2SP, GR2SP, GD2LP, GR2LP, AR2SP, AR2LP, ED2SP, ED2LP, 4302, HDGC, 6202, MFC68, 4305, HDGR, MFR68, 6205, SFR68, SFC68. Not all models may be shown on a given drawing.

Product Description for doors with MPC PAN-2F151:

These doors consist of 2" thick steel pan doors with min. 25 ga. (0.019") outer skins. The steel skin is at least G40 DDS per ASTM A653. The maximum section height is 21". The following models are at least structurally equivalent to the tested door: 76, 76V.

Product Description for doors with MPC DSIU-1F171:

These doors consist of 2" double-skin insulated sections with polyurethane insulation foamed in place between both skins. Both inner and outer skins are min. 27 ga. (0.016") G40 DDS per ASTM A653. The maximum section height is 21". These doors may have optional Impact-Resistant Glazing in either the top section or the next-to-the-top section. Optional Impact-Resistant Glazing is a one-piece injection-molded front frame and glazing. The following models are at least structurally equivalent to the tested door: HDP20, HDPF20, HDPL20, 7200, 7201, 7203, 8200, 8201, 8203, 9200, 9201, 9203. Not all models may be shown on a given drawing.

Product Description for doors with MPC DSIUO-1K479:

These doors consist of a base 2" double-skin insulated section with polyurethane insulation foamed in place between both skins. Decorative overlays and optional cladding are attached to the exterior skin, adding not more than 1" to the total thickness. Both inner and outer skins are min. 27 ga. (0.016") G40 CS Type B per ASTM A653. The maximum section height is 24". The following models are at least structurally equivalent to the tested door: CAN2nn-XX, GLN2nn-XX, MWL2nn-XX. Note that 'nn' represents the arrangement of the decorative overlays and 'XX' represents the type of cladding. Not all models may be shown on a given drawing.

Product Description for doors with MPC C-DSIE-1F447:

These doors consist of 2" double-skin insulated sections with an EPS core laminated to both min. 24 ga. (0.019") exterior and 27 ga. (0.016") interior skins. The steel skins are at least G40 CS-B per ASTM A653. The maximum section height is 24". The following models are at least structurally equivalent to the tested door: 3200, 3205, 3220, 240, 240G. Not all models may be shown on a given drawing.

Product Description for doors with MPC C-DSIU-1F447:

These doors consist of a base 2" double-skin insulated section with polyurethane insulation foamed in place between both skins. Both inner and outer skins are min. 27 ga. (0.016") G40 CS Type B per ASTM A653. The maximum section height is 24". The following models are at least structurally equivalent to the tested door: 3720, C7X20, 240U, 3722, C0X22, 3724, C7X24. Not all models may be shown on a given drawing.

Product Description for doors with MPC C-DSIU-1D447:

These doors consist of a base 1-3/4" (min.) double-skin insulated section with polyurethane insulation foamed in place between both skins. Both inner and outer skins are min. 27 ga. (0.016") G40 CS Type B per ASTM A653. The maximum section height is 24". The following models are at least structurally equivalent to the tested door:

3717, C7X17, 3718, C7X18, 3720, C7X20, 240U, 3722, C0X22, 3724, C7X24. Not all models may be shown on a given drawing.

Impact Resistant Glazing (Aluminum):

The optional impact resistant glazing is an aluminum front frame and a separate polycarbonate glazing that is an approved C1 plastic in accordance with testing required by FBC-B 2606 and complies with FBC-B 2615 testing requirements. Approved polycarbonate materials are Sabic IP Lexan 9034 (versions also approved: MR10, 9030, 90318, 90316, 90317, 90311, 90314, 90355) and Bayer Makrolon GP (versions also approved: SL, AR, 15). Approval based on review of NOA 13-0717.01 (Sabic) and NOA 12-0605.05 (Bayer) and manufacturer's product datasheets.

Impact Resistant Glazing (Molded):

The optional impact resistant glazing is an injection-molded polycarbonate front frame and glazing (LEXAN SLX2432T) that is an approved C1 plastic in accordance with testing required by FBC-B 2606. FBC-B 2615 compliance based on review of the following tests:
HETI-06-A002 ASTM G155; HETI-06-T566 ASTM D638 (before); HETI-06-T634 ASTM D638 (after); ETC-06-1024-17496.0 ASTM D2843, ASTM D635, ASTM D1929.

Limitations:

The drawing(s) cited above are an explicit part of this evaluation report. The text of this report does not attempt to address all design details and relies on the illustrations and text of these drawings as well.

Jambs, lintels, sills or other structural elements required to prepare openings are not covered. 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 the drawing(s) referenced above.

Installation requirements per the relevant Florida Administrative Rule, including attachments, are detailed on the drawing(s) listed above. Installation must be in accordance with manufacturer's installation instructions and must be as shown on the drawing(s) listed above. The manufacturer's licensed design professional listed on the drawing(s) has reviewed the attachment details and installation requirements.

Signature:

James D. Wheeler, P. E.
Florida P. E. No. 91932

Date: 10/19/23

JAMES D. WHEELER LICENSE No. 91932 STATE OF FLORIDA PROFESSIONAL ENGINEER