

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION GDR-2

Effective June 1, 2005  
Revised July 22, 2005

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building code (IBC)**. This product shall be subject to reevaluation 3 years after the effective date.*

*This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.*

*This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.*

### **Clopay and Holmes Garage Doors**, manufactured by

**Clopay Building Products Company** and marketed under private label  
**8585 Duke Blvd.**  
**Mason, OH 45040**  
**(513) 770-4800**

**Holmes Garage Door**  
**8585 Duke Blvd.**  
**Mason, OH 45040**  
**(513) 770-4800**

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation. Installation instructions and the appropriate shop drawings for the particular model, as shown in Tables 1- 5 shall be provided and available on the job site during installation.

### **PRODUCT DESCRIPTION**

**Clopay Doors** are sectional overhead doors constructed from galvanized steel with a baked on polyester finish. Doors may be raised panel or flat and may have a smooth or an embossed wood grain texture. Insulated sectional doors will have an interior skin with 1 5/16" thick or 2" thick, 1# density polystyrene foam insulation between the skins.

**Product Identification:** A label will be affixed to the garage door. The label shall include the manufacturer's name, series and model number, and the allowable design pressure rating.

### **LIMITATIONS**

Each model door may have multiple design pressure ratings based upon the type of horizontal, vertical, and end reinforcing that is used. To attain the specified design pressure ratings, doors must be installed and reinforced according to the appropriate shop drawing shown in Tables 1 - 5.

**Impact protection:** The doors in Tables 1-3 have not been tested for windborne debris resistance. Doors that contain glazing may not be installed in the Inland I zone unless the door is protected with an impact protective system. The door assemblies shown in Table 4 and 5 satisfy the Texas Department of Insurance's criteria for protection from windborne debris and do not need to be protected with an impact protective system. Impact resistive doors were not tested with optional glass panes.

### **INSTALLATION INSTRUCTIONS**

Doors shall be installed according to the appropriate shop drawing specified for the particular model and design pressure shown in Tables 1 – 5. The approved shop drawings shall be signed and sealed by Mark Westerfield, P.E.

**Table 1 - Non-Impact Rated Assemblies<sup>1</sup>**

**Clopay and Holmes W4 Doors**

Model Numbers (Clopay)	Model Numbers (Holmes)	Door Width (Max.)	Door Height (Max.)	Drawing Number (Clopay)	Drawing Number (Holmes)	Design Pressure (psf)	Horizontal Reinforcing	Skin
73, 75, 84A, 94, 190, 1500	42, 48, 55	9'-0"	8'-0"	300159 Rev. 7, 8/3/04	102046 Rev. 5, 8/3/04	+25, -32	3" 20 ga. U-Bar (1-1-1-1)	Ext.- 24 or 25 ga
76	N/A	9'-0"	8'-0"	102429 Rev. 00, 7/2001	N/A	+25, -32	3" 20 ga. U-Bar (1-1-1-1)	Ext.- 25 ga
H73, H76, H94, H500	N/A	9'-0"	12'-0"	102485 Rev. 2, 8/04	N/A	+25, -32	3" 20 ga. U-Bar (1-1-1-1)	Ext.- 24 or 25 ga
73, 75, 84A, 94, 190, 1500	42, 48, 55	16'-0"	8'-0"	101711 Rev. 5, 8/3/04	102047 Rev. 4, 8/3/04	+24, -24.5	3" 20 ga. U-Bar (2-1-2-1)	Ext.- 24 or 25 ga
H73, H94, H500	N/A	16'-0"	12'-0"	102486 Rev. 2, 8/04	N/A	+24, -24.5	3" 20 ga. U-Bar (2-1-2-1)	Ext.- 24 or 25 ga
73, 75, 84A, 94, 190, 1500	42, 48, 55	18'-0"	8'-0"	101312 Rev. 5, 8/4/03	102048 Rev. 3, 8/4/03	±25	4" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 25 ga
H73, H94, H500	N/A	18'-0"	12'-0"	102487 Rev. 1, 8/3/04	N/A	±25	4" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 25 ga
4400, 4401, HDG, HDGL, 4300, 4310, 4301	66, 67, 68	9'-0"	8'-0"	101652 Rev. 5, 6/05	102049 Rev. 3, 6/05	+28, -29	2-¼" 20 ga. U-Bar (1-1-0-1)	Ext.- 24 or 27 ga
H400, H401, H310, H300, H301	N/A	9'-0"	12'-0"	102488 Rev. 2, 6/05	N/A	+28, -29	2-1/4" 20 ga. U-Bar (1-1-0-1)	Ext.- 24 or 27 ga
4400, 4401, HDG, HDGL, 4300, 4310, 4301	66, 67, 68	16'-0"	8'-0"	101481 Rev. 7, 6/05	102050 Rev. 3, 6/05	±25.5	3" 20 ga. U-Bar (2-1-1-1)	Ext.- 24 or 27 ga
H400, H401, H310, H300, H301	N/A	16'-0"	12'-0"	102489 Rev. 1, 6/05	N/A	±25.5	3" 20 ga. U-Bar (2-1-1-1)	Ext.- 24 or 27 ga
4400, 4401, HDG, HDGL, 4300, 4310, 4301	66, 67, 68	18'-0"	8'-0"	101247 Rev. 13, 6/05	102051 Rev. 3, 6/05	±25	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 24 or 27 ga
H400, H401, H310, H300, H301	N/A	18'-0"	10'-0"	102490 Rev. 2, 6/05	N/A	±25	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 24 or 27 ga

Note: <sup>1</sup> These door assemblies listed in Table 1 do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These garage door assemblies will need to be protected from windborne debris in the Inland I zone (if glazing occurs) and the Seaward zone (for the entire opening).

**Table 2 - Non-Impact Rated Assemblies<sup>1</sup>**

**Clopay and Holmes W5 Doors**

Model Numbers (Clopay)	Model Numbers (Holmes)	Door Width (Max.)	Door Height (Max.)	Drawing Number (Clopay)	Drawing Number (Holmes)	Design Pressure (psf)	Horizontal Reinforcing	Skin
73, 75, 84A, 94, 190, 1500	42, 48, 55	9'-0"	8'-0"	102110 Rev. 8, 8/2004	102111 Rev. 5, 8/3/04	+30, -32	3" 20 ga. U-Bar (2-1-1-1)	Ext.- 24 or 25 ga
76	N/A	9'-0"	8'-0"	102548 Rev. 00, 4/2002	N/A	+30, -32	3" 20 ga. U-Bar (2-1-1-1)	Ext.- 25 ga
73, 75, 84A, 94, 190, 1500	42, 48, 55	16'-0"	8'-0"	101593 Rev. 5, 8/2004	102052 Rev. 3, 8/3/04	±30	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 24 or 25 ga
76	N/A	16'-0"	8'-0"	102416 Rev. 00, 6/2001	N/A	±30	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 25 ga
H73, H76, H94, H500	N/A	16'-0"	12'-0"	102512 Rev. 00, 1/2002	N/A	±30	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 24 or 25 ga
73, 75, 84A, 94, 190, 1500	N/A	16'-0"	8'-0"	101922 Rev. 4, 8/2004	N/A	±32	3" 20 ga. 80 KSI U-Bar (2-2-2-2)	Ext.- 24 or 25 ga

Note: <sup>1</sup> These door assemblies listed in Table 2 do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These garage door assemblies will need to be protected from windborne debris in the Inland I zone (if glazing occurs) and the Seaward zone (for the entire opening).

**Table 3 - Non-Impact Rated Assemblies<sup>1</sup>**

**Clopay and Holmes W6 Doors**

Model Numbers (Clopay)	Model Numbers (Holmes)	Door Width (Max.)	Door Height (Max.)	Drawing Number (Clopay)	Drawing Number (Holmes)	Design Pressure (psf)	Horizontal Reinforcing	Skin
73, 75, 84A, 94	42, 48	9'-0"	8'-0"	101348 Rev. 7, 5/05	102056 Rev. 5, 5/05	+38, -42	3" 20 ga. U-Bar (2-1-2-1)	Ext.- 24 or 25 ga
H73, H94	N/A	9'-0"	12'-0"	102494 Rev. 2, 5/05	N/A	+38, -42	3" 20 ga. U-Bar (2-1-2-1)	Ext.- 24 or 25 ga
73, 75, 84A, 94	42, 48	16'-2"	8'-0"	101539 Rev. 5, 5/05	102057 Rev. 4, 5/05	+37, -41	4" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 25 ga
H73, H94	N/A	16'-2"	12'-0"	102495 Rev. 2, 5/05	N/A	+37, -41	4" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 25 ga
73, 75, 84A, 94	42, 48	18'-2"	8'-0"	101485 Rev. 6, 11/02	102058 Rev. 3, 11/05/02	+37, -37	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 25 ga
H73, H94	N/A	18'-2"	12'-0"	102496 Rev. 2, 9/03	N/A	+37, -37	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 25 ga

**Table 3 - Non-Impact Rated Assemblies<sup>1</sup> (Continued)**

**Clopay and Holmes W6 Doors**

Model Numbers (Clopay)	Model Numbers (Holmes)	Door Width (Max.)	Door Height (Max.)	Drawing Number (Clopay)	Drawing Number (Holmes)	Design Pressure (psf)	Horizontal Reinforcing	Skin
84A, 94	42, 48	18'-2"	8'-0"	101485 Rev. 6, 11/02	102058 Rev. 3, 11/05/02	+37, -39	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 ga
H94	N/A	18'-2"	12'-0"	102496 Rev. 2, 9/03	N/A	+37, -39	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 ga
4400, 4401, HDG, HDGL, 4300, 4310, 4301	66, 67, 68	9'-0"	8'-0"	101526 Rev. 8, 6/05	102060 Rev. 3, 6/05	+37, -40	3" 20 ga. U-Bar (2-1-1-1)	Ext.- 24 or 27 ga
H400, H401, H310, H300, H301	N/A	9'-0"	12'-0"	102497 Rev. 1, 6/05	N/A	+37, -40	3" 20 ga. U-Bar (2-1-1-1)	Ext.- 24 or 27 ga
4400, 4401, HDG, HDGL, 4300, 4310, 4301	66, 67, 68	16'-2"	8'-0"	101486 Rev. 9, 6/05	102061 Rev. 4, 6/05	+37, -40	4" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 27 ga
H400, H401, H310, H300, H301	N/A	16'-2"	12'-0"	102498 Rev. 1, 6/05	N/A	+37, -40	4" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 27 ga
4400, 4401, HDG, HDGL, 4300, 4310, 4301	66, 67, 68	18'-2"	8'-0"	101487 Rev. 9, 6/05	102062 Rev. 4, 6/05	±37	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 27 ga
H400, H401, H310, H300, H301	N/A	18'-2"	12'-0"	102499 Rev. 1, 6/05	N/A	±37	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 27 ga

Note: <sup>1</sup> These door assemblies listed in Table 3 do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These garage door assemblies will need to be protected from windborne debris in the Inland I zone (if glazing occurs) and the Seaward zone (for the entire opening).

**Table 4 - Impact Rated Assemblies<sup>1</sup>**

**Clopay and Holmes W7 Doors**

Model Numbers (Clopay)	Model Numbers (Holmes)	Door Width (Max.)	Door Height (Max.)	Drawing Number (Clopay)	Drawing Number (Holmes)	Design Pressure (psf)	Horizontal Reinforcing	Skin
73, 75, 84A, 94, 98, H73, H94	42, 48	9'-0"	12'-0"	101702 Rev. 5, 2/05	102064 Rev. 2, 11/03	+42, -48	2-¼" 20 ga. 80 KSI U-Bar (2-2-1-2)	Ext.- 24 or 25 ga
73, 75, 84A, 94, 98, H73, H94	42, 48	16'-2"	12'-0"	101309 Rev. 7, 2/05	102063 Rev. 3, 9/03	+42, -48	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 25 ga
84A, 94, 98, H94	48	18'-2"	12'-0"	102621 Rev. 3, 2/05	102621 Rev. 3, 2/05	+42, -48	6" 16 ga. C-channels and 3" 20 ga. U-Bar (1-1-1-1)	Ext.- 24 ga

Note: <sup>1</sup> The door assemblies shown in Table 4 satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the Inland I zone and the Seaward zone and do not need to be protected with an impact protective system. The door assemblies in Table 4 pass an impact standard equivalent to Missile Level D specified in ASTM E 1996-01. The door assemblies in Table 4 may be installed on the structure as long as the design pressure rating for the assemblies is not exceeded. Impact resistive doors were not tested with optional glass panes. Glazing is not permitted in the Inland I and Seaward zone.

**Table 5 - Impact Rated Assemblies<sup>1</sup>**

**Clopay and Holmes W8 Doors**

Model Numbers (Clopay)	Model Numbers (Holmes)	Door Width (Max.)	Door Height (Max.)	Drawing Number (Clopay)	Drawing Number (Holmes)	Design Pressure (psf)	Horizontal Reinforcing	Skin
73, 75, 84A, 94, H73, H94	42, 48	9'-0"	12'-0"	101296 Rev. 7, 2/05	102087 Rev. 3, 9/04	+46, -50	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 24 or 25 ga
84A, 94, H94	48	16'-2"	12'-0"	101300 Rev. 9, 2/05	102066 Rev. 3, 11/03	+46.6, -52	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 ga
4400, 4401, HDG, HDGL, 4300, 4310, 4301	66, 67, 68	9'-0"	8'-0"	101703 Rev. 6, 7/05	101703 Rev. 6, 7/05	+48, -60	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 24 or 27 ga
H400, H401, H310, H300, H301	N/A	9'-0"	8'-0"	101703 Rev. 6, 7/05	N/A	+48, -60	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 24 or 27 ga
4400, 4401, HDG, HDGL, 4300, 4310, 4301	66, 67, 68	16'-2"	8'-0"	101488 Rev. 8, 7/05	101488 Rev. 8, 7/05	+46.6, -52	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 27 ga
H400, H401, H310, H300, H301	N/A	16'-2"	12'-0"	101488 Rev. 8, 7/05	N/A	+46.6, -52	6" 16 ga. C-channels (1-1-1-1)	Ext.- 24 or 27 ga
4400, 4401, HDG, HDGL, 4300, 4310, 4301	66, 67, 68	18'-2"	8'-0"	103028 Rev. 4, 7/05	103028 Rev. 4, 7/05	+46, -50	6" 16 ga. C-channels (1-1-1-1) and 3" 20 ga. U-Bar (2-1-1-1)	Ext.- 24 or 27 ga
H400, H401, H310, H300, H301	N/A	18'-2"	12'-0"	103028 Rev. 4, 7/05	N/A	+46, -50	6" 16 ga. C-channels (1-1-1-1) and 3" 20 ga. U-Bar (2-1-1-1)	Ext.- 24 or 27 ga

Note: <sup>1</sup> The door assemblies shown in Table 5 satisfy the Texas Department of Insurance's criteria for protection from windborne debris in both the Inland I zone and the Seaward zone and do not need to be protected with an impact protective system. The door assemblies in Table 5 pass an impact standard equivalent to Missile Level D specified in ASTM E 1996-01. The door assemblies in Table 5 may be installed on the structure as long as the design pressure rating for the assemblies is not exceeded. Impact resistive doors were not tested with optional glass panes. Glazing is not permitted in the Inland I and Seaward zone.

**Note:** The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC) along with the Texas Revisions.