

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION GDR-24

August 1, 2005
(Revised September 1, 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- 4 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 or with extruded aluminum stiles and rails with large glazed panels. Steel doors may be raised panel, flat or formed with minor ribs and may have a smooth or an embossed wood grain texture. Insulated steel sectional doors will have an interior skin with either 1 $\frac{5}{16}$ " or 2" thick, 1# density polystyrene foam insulation or polyurethane foam insulation (1-3/4" or 2" thick) 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 - 4.

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 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 – 4. The approved shop drawings shall be signed and sealed by Mark Westerfield, P.E.

Table 1 - Non-Impact Rated Assemblies¹

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
525, 525V, 525S, 524, 524V, 524S, 520, 520S	225, 225S, 224, 224S	12'-2"	18'-0"	101856 Rev. 08, 5/2005	101856 Rev. 08, 5/2005	±25	3" 20 ga. U-Bar (2-1-1-1)	Ext.- 20, 24 or 25 ga
524, 524V, 524S, 520, 520S	224, 224S	16'-2"	18'-0"	101886 Rev. 09, 5/2005	101886 Rev. 09, 5/2005	±25	4" 16 ga. C-channels (1-1-1-1)	Ext.- 20 or 24 ga
524, 524V, 524S, 520, 520S	224, 224S	20'-2"	18'-0"	102126 Rev. 06, 5/2005	102126 Rev. 06, 5/2005	±25	6" 16 ga. C-channels (1-1-1-1)	Ext.- 20 or 24 ga
524, 520	224	24'-2"	18'-0"	103333 Rev. 01 5/2005	103333 Rev. 01 5/2005	±25	6" 16 ga. C-channels (1-1-1-1) and 3" 20 ga. U-Bar (1-1-1-1)	Ext.- 20 or 24 ga
3200, 3220	240	12'-2"	18'-0"	101687 Rev. 06 8/2005	101687 Rev. 06 8/2005	+25, -28	2-1/4" 24 ga. U-Bar (1-1-1-1)	Ext.- 20 or 24 ga
3200, 3220	240	20'-2"	18'-0"	101682 Rev. 05 8/2005	101682 Rev. 05 8/2005	+25, -28	6" 16 ga. C-channels (1-1-1-1)	Ext.- 20 or 24 ga
3200, 3220	240	24'-2"	18'-0"	103334 Rev. 01 7/7/2005	103334 Rev. 01 7/7/2005	±25	6" 16 ga. C-channels (1-1-1-1) and 3" 20 ga. U-Bar (1-1-1-1)	Ext.- 20 or 24 ga
3602, 3603, 3622	N/A	10'-2"	18'-0"	102812 Rev. 02 5/2005	N/A	±25	3" 20 ga. U-Bar (1 - ONLY GLAZED SECTIONS)	Ext.- 20 or 26 ga
902	N/A	24'-2"	18'-0"	103332 Rev. 01 7/7/2005	N/A	±25	6" 16 ga. C-channels (1-1-1-1) and 3" 20 ga. U-Bar (1-1-1-1)	0.070" aluminum extrusion / glazing

Note: ¹ 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 Assemblies¹

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
524, 524V, 524S, 520, 520S	224, 224S	8'-2"	18'-0"	101874 Rev. 09, 8/2005	101874 Rev. 09, 8/2005	±30	2-1/4" 20 ga. U-Bar (1-1-1-1)	Ext.- 20 or 24 ga
524, 524V, 524S, 520, 520S	224, 224S	10'-2"	18'-0"	101875 Rev. 08, 5/2005	101875 Rev. 08, 5/2005	±30	3" 20 ga. U-Bar (1-1-1-1)	Ext.- 20 or 24 ga
524, 524V, 524S, 520, 520S	224, 224S	12'-2"	18'-0"	101869 Rev. 08, 5/2005	101869 Rev. 08, 5/2005	±30	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 20 or 24 ga
524, 524V, 524S, 520, 520S	224, 224S	16'-2"	18'-0"	101885 Rev. 11, 5/2005	101885 Rev. 11, 5/2005	±32	4" 14 ga. C-channels (1-1-1-1)	Ext.- 20 or 24 ga
524, 520	224	22'-2"	18'-0"	103319 Rev. 01 5/2005	103319 Rev. 01 5/2005	±30	6" 16 ga. and 3" 20 ga. U-Bar C-channels (1-1-1-1)	Ext.- 20 or 24 ga
3200, 3220	240	16'-2"	18'-0"	200040 Rev. 10 8/2005	200040 Rev. 10 8/2005	+30, -32	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 20 or 24 ga
3200, 3220	240	22'-2"	18'-0"	103320 Rev. 01 7/7/2005	103320 Rev. 01 7/7/2005	±30	6" 16 ga. C-channels (1-1-1-1) and 3" 20 ga. U-Bar (1-1-1-1)	Ext.- 20 or 24 ga
3602, 3603, 3622	N/A	14'-2"	18'-0"	102891 Rev. 02 5/2005	N/A	+30, -34	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 20 or 26 ga
902	N/A	12'-2"	18'-0"	103275 Rev. 02 7/2005	N/A	±32	2x2x1/8 aluminum angle (1-1-1-1)	0.070" aluminum extrusion / glazing
902	N/A	16'-2"	18'-0"	103294 Rev. 01 7/2005	N/A	±32	4" 16 ga. C-channels (1-1-1-1)	0.070" aluminum extrusion / glazing
902	N/A	20'-2"	18'-0"	103296 Rev. 01 7/2005	N/A	±30	6" 16 ga. C-channels (1-1-1-1)	0.070" aluminum extrusion / glazing
902	N/A	22'-2"	18'-0"	103324 Rev. 01 5/2005	N/A	±30	6" 16 ga. C-channels (1-1-1-1) and 3" 20 ga. U-Bar (1-1-1-1)	0.070" aluminum extrusion / glazing

Note: ¹ 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 Assemblies¹

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
524, 524V, 524S, 520, 520S	224, 224S	10'-2"	18'-0"	102445 Rev. 03, 5/2005	102445 Rev. 03, 5/2005	+37, -42	3" 20 ga. U-Bar (2-1-2-1)	Ext.- 20 or 24 ga
524, 524V, 524S, 520, 520S	224, 224S	12'-2"	18'-0"	102446 Rev. 04, 5/2005	102446 Rev. 04, 5/2005	+37, -42	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 20 or 24 ga
524, 524V, 524S, 520, 520S	224, 224S	14'-2"	18'-0"	102585 Rev. 06, 5/2005	102585 Rev. 06, 5/2005	+37, -38	4" 14 ga. C-channels (1-1-1-1)	Ext.- 20 or 24 ga
3200, 3220	240	10'-2"	18'-0"	101617 Rev. 05 8/2005	101617 Rev. 05 8/2005	+37, -40	3" 20 ga. U-Bar (2-1-1-1)	Ext.- 20 or 24 ga
3200, 3220	240	12'-2"	18'-0"	101678 Rev. 05 8/2005	101678 Rev. 05 8/2005	±40	3" 20 ga. U-Bar (2-1-2-1)	Ext.- 20 or 24 ga
3602, 3603, 3622	N/A	10'-2"	18'-0"	102813 Rev. 02 5/2005	N/A	±37	3" 20 ga. U-Bar (2-1-1-1)	Ext.- 20 or 26 ga
3602, 3603, 3622	N/A	14'-2"	18'-0"	102890 Rev. 02 5/2005	N/A	+37, -42	3" 20 ga. U-Bar (2-2-2-2)	Ext.- 20 or 26 ga

Note: ¹ 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 Assemblies¹

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
524, 520	224	12'-2"	18'-0"	102645 Rev. 04, 5/2005	102645 Rev. 04, 5/2005	+50, -56	4" 14 ga. C-channels (1-1-1-1)	Ext.- 20 or 24 ga
524, 520	224	14'-2"	18'-0"	103288 Rev. 01, 03/04/05	103288 Rev. 01, 03/04/05	+50, -56	6" 16 ga. C-channels (1-1-1-1)	Ext.- 20 or 24 ga
3200, 3220	240	12'-2"	18'-0"	101705 Rev. 05 8/2005	101705 Rev. 05 8/2005	+52, -58	4" 14 ga. C-channels (1-1-1-1)	Ext.- 20 or 24 ga

Note: ¹ 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.

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.