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Product Evaluation

GDR129 | 0622

Engineering Services Program

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 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.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: GDR-129

Effective Date:June 1, 2022Re-evaluation Date:June 2026

Product Name: Haas Door Series PAN R24xx, R25xx, C24xx, C25xx, and C20xx Steel, Sectional Doors, Non-Impact Resistant

Manufacturer: Haas Door

320 Sycamore Street Wauseon, OH 43567 (419) 337-9900

General Description:

The garage doors specified in this product evaluation report are sectional overhead doors constructed from sections consisting of painted 25-gauge, 24-gauge, and 20-gauge steel skins (outside). The overall thickness of the doors is offered at 2" thick. The doors are available in a variety of external residential appearances but are not limited to residential use. Windows are available in many of the products, as detailed in each of the drawings.

All editions of the PAN R24xx, R25xx, C24xx, and C20xx family vary only in external emboss pattern. For products that offer windows, the availability of any given model/emboss is determined by the maximum window size tested. Each drawing contains a list of theses available models/windows.

Product Identification: The doors will have a wind load label, applied by the installer, that includes the manufacturers name (Haas Door); the Series/Model number; the test

standards (ANSI/DASMA 108-2017); the design drawing number; and the allowable design pressure rating for the door.

Compliance: The doors comply with ANSI/DASMA 108-17.

Limitations:

The doors are non-impact resistant.

Some door options include glazing.

The doors do not contain louvers.

The maximum height of each door section must not exceed 24". Refer to the design drawings for the actual height for a specific door.

The doors have a maximum width as shown on Sheet 1 of each design drawing. Refer to Table 1 in this evaluation report.

The doors have a maximum allowable height of 20'.

Design Pressures: The design pressure ratings for the door are specified in Table 1 and on the design drawings.

Glazing: The glass construction can consist of 1/8" annealed or tempered monolithic glass; insulating glass units consisting of two (2) 1/8" tempered, monolithic glass lites; 1/8" acrylic (Sabic Innovative Plastics); or 1/8" polycarbonate (Lexan or Makrolon/Tuffak). The glass is held in place with a plastic frame that is secured to the door with fasteners. The daylight opening dimensions and the attachment method for the glazing are specified on the design drawings.

Impact protection: These doors have not been tested for windborne debris resistance. Doors that contain glazing will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Table 1 - Non-Impact Rated Assemblies

Design Drawing Number	Model Numbers	Allowable Dimensions		Design	
		Maximum Door Width	Maximum Door Height	Pressure (psf)	Glazing
WLT-2000-0110-08-21-24L Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx,	8'-2"	20'-0"	+23.9 / -27.0	Yes
	C25xx, C20xx	9'-2"		+21.3 / -24.1	
WLT-2000-0110-08-25-28L Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx,	8'-2"	- 20'-0"	+27.8 / -31.4	Yes
	C24xx, C25xx, C20xx	9'-2"		+24.8 / -28.0	
WLT-2000-0110-26-30 Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx,	8'-2"	20'-0"	+30.0 / -33.9	No
		9'-2"		+26.7 / -30.2	
	C25xx, C20xx	10'-2"		+21.7 / -24.6	
WLT-2000-0122-08-21-24 Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx,	8'-2"	20'-0"	+26.5 / -30.0	No
		9'-2"		+23.6 / -26.7	
	C25xx, C20xx	10'-2"		+21.3 / -24.1	
WLT-2000-0122-08-21-24L Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx,	8'-2"	20'-0"	+26.5 / -30.0	Yes
		9'-2"		+23.6 / -26.7	
	C25xx, C20xx	10'-2"		+21.3 / -24.1	
WLT-2000-0194-08-18-20 Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx,	12'-2"	20'-0"	+24.3 / -27.1	No
		14'-2"		+20.8 / -23.2	
	C25xx, C20xx	16'-2"		+18.3 / -20.4	
WLT-2000-0194-08-18-20L Rev A 3/08/2022 Sealed: 4/18/2022	R24xx,	12'-2"		+24.3 / -27.1	
	R25xx, C24xx,	14'-2"	20'-0"	+20.8 / -23.2	Yes
	C25xx, C20xx	16'-2"		+18.3 / -20.4	

Design Drawing Number	Model Numbers	Allowable Dimensions		Design	
		Maximum Door Width	Maximum Door Height	Pressure (psf)	Glazing
WLT-2000-0194-08-20-23L Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx, C25xx, C20xx	12'-2"	20'-0"	+27.1 / -30.1	Yes
		14'-2"		+23.2 / -25.9	
		16'-2"		+20.4 / -22.7	
WLT-2000-0194-08-24-27L Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx, C25xx, C20xx	14'-2"	20'-0"	+27.2 / -30.4	Yes
		16'-2"		+23.9 / -26.7	
		18'-2"		+18.9 / -21.1	
WLT-2000-0194-08-25-28L Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx, C25xx, C20xx	12'-2"	20'-0"	+32.9 / -36.6	Yes
		14'-2"		+28.3 / -31.5	
		16'-2" 18'-2"		+24.8 / -27.6 +19.6 / -21.8	
WLT-2000-0218-24-27L Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx, C25xx, C20xx	14'-2"	20'-0"	+30.6 / -34.2	Yes
		16'-2"		+26.8 / -30.0	
		18'-2"		+23.9 / -26.7	
WLT-2000-0218-08-30-33 Rev A 3/08/2022 Sealed: 4/18/2022	R24xx, R25xx, C24xx, C25xx, C25xx, C20xx	20'-2" 14'-2"	20'-0"	+19.4 / -21.6 +38.4 / -42.4	No
		16'-2"		+33.7 / -37.2	
		18'-2"		+30.0 / -33.1	
		20'-2" 22'-2"		+24.3 / -26.8 +20.1 / -22.2	

 Table 1 - Non-Impact Rated Assemblies (Continued)

Installation:

Design Drawings: Install the doors as specified on the design drawings. The manufacturer will provide the design drawings with the door. John E. Scates, PE sealed each page of the design drawings. The first page of the design drawing has the seal date. The drawing date and seal date are specified in Table 1. The following information is provided on the design drawings:

- Product Description
- Drawing Number
- Model Numbers
- Design Pressure Ratings
- Maximum Width and Maximum Height

Attachment of Doors to Wall Framing:

These doors are provided 2" wider than the nominal opening width, and thus will overlap the jambs by 1" on each side when installed. There are two methods of attaching the door to the building:

- 1. **Method 1:** Add a 2x6 to the face of the opening. Add Southern Pine (aka Southern Yellow Pine) wood jambs consisting of 2x6 laid flat on the interior face of the wall. The 2x6 jambs are secured to the wall framing, then the door track is secured to the 2x6 jambs. The 2x6 jambs must be Southern Pine. The wall framing may be Southern Pine or Spruce-Pine-Fir. Details are provided on Sheet 3 of each door design drawing. If the species of wood is uncertain, then use the Spruce-Pine-Fir fastener values.
- 2. **Method 2:** Attach the door track directly to the wall construction. The door track may be attached directly to existing wood, steel, or concrete wall construction. Details are provided on Sheet 4 of each door design drawing. If drywall is present, then it must be removed around the full perimeter of the door (jambs and header) to provide the door with a flush contact surface across its sides and top when closed. No portion of a track bracket may rest on drywall. Each track bracket must be in full contact with wood, concrete, or steel.
 - a. If the wood wall construction is Southern Yellow Pine, then no additional track brackets are needed.
 - b. If the wood wall construction <u>is not</u> Southern Yellow Pine, then additional track brackets may be required to maintain the "Maximum on Center Spacing" specified under the illustration for "Direct Wood Mounting Detail" (which assumes Spruce-Pine-Fir).
 - c. If the wall construction is concrete or steel, then refer to Sheet 4 of each design drawing for details. Additional track mounting fasteners may be required to maintain the "Maximum on Center Spacing" under the "Direct Steel Mounting" or "Direct Concrete Mounting" details of Sheet 4.
 - d. If the wall construction is grout-filled CMU, then refer to the Haas Door "Wind Load Door Installation Supplement"; Revision F; dated April 18, 2022; Sealed by John E. Scates and digitally signed on April 21, 2022.
 - e. For all other building wall construction, Method 1 must be used.

Note: The lag screws required for mounting a 2x6 to the building are 3/8" diameter (refer to Sheet 3 of the design drawings). The lag screws required for mounting the door track bracket to a wood surface are 5/16" diameter (refer to Sheet 4 of the design drawings). Do not intermix the rated loads/spacing of these charts.

Note: If the edge of the door does not overlap the jamb by 1", an alternate method using Stop Moulding is available. Refer to the Haas Door "Wind Load Door Installation Supplement"; Revision F; dated April 18, 2022; Sealed by John E. Scates and digitally signed on April 21, 2022.

Note: Maintain the manufacturer's installation instructions, the appropriate design drawing, and the Haas Door "Wind Load Door Installation Supplement" on the job site during installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.