

Product Evaluation

GDR62 | 0719

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-62

Effective Date: July 1, 2019

Re-evaluation Date: June 2023

Product Name: Residential Sectional Steel Garage Doors, Impact Resistant

Manufacturer: Amarr Garage Door
165 Carriage Ct.
Winston-Salem, NC 27105
(336) 744-5100

Brand Names: Amarr
Reliabilt
Pella
Thermastar
Encompass
Sears
Champion
Precision
Home Depot
Orchard Supply

Will be accepted for use in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with this product evaluation. Installation instructions and the appropriate design drawings for the particular model, as shown in Tables 4 through 17, must be provided and available on the job site during installation

General Description:

Amarr Garage Doors are sectional overhead doors constructed from galvanized steel with a baked on polyester finish. Doors may be raised panel or flush and have a smooth or embossed wood grain texture. Doors may be single skin model 600, 625, 650, 675, 950, 500, 2000, 2400, 2500, 2700, and 2720, 2" thick, with or without insulation. Doors may be insulated models P500, C500, D500, 1000, 1200, 1350, 1380, 1480, 1500, 1550, 1600, and 1650 with an interior skin and 1-3/8" or 2" polystyrene insulation between the skins. Doors may be insulated sectional model 3000, 2" thick, with an interior skin and polyurethane insulation. Model dimensions, drawing number, glazing option, and vertical reinforcement are shown in Tables 4 through 17.

Product Identification: The garage doors are marketed under several retail names. Refer to the "Retailing Branding Product Cross Reference Chart" in Table 3 to determine the appropriate Amarr model number. An Amarr label will be affixed to each garage door. The Amarr label must include the manufacturer's name (**Amarr**), the model number, test standards, allowable design pressure rating, and the design drawing number.

Product Brand Names: Product brand names for individual retailers are shown in Table 3. The brand names are cross referenced to the Amarr model number.

Limitations:

This evaluation report includes impact resistant sectional garage doors.

Doors include optional impact resistant glazing. Refer to Tables 4 through 17 for glazing options for a particular door model. Refer to the design drawings for the glazing construction.

The maximum height of each door section is specified on the design drawings.

The doors must have a maximum allowable width of 18' 2". Refer to Tables 4 through 17 for the allowable width of the door for a particular door model.

The doors must have a maximum allowable height of 24' 1". Refer to Tables 4 through 17 for the allowable height of the door for a particular door model.

The design pressure rating for a particular model door is specified in Tables 4 through 17.

Each model door may have multiple design pressure ratings based upon the type of horizontal, vertical, and end reinforcing that is utilized. To attain the specified design pressure ratings, doors must be installed and reinforced according to the appropriate design drawing shown in Tables 4 through 17. Doors using the Vertical Post system must have the system activated in order to achieve the allowable design pressure rating as noted in this evaluation report and on the design drawings.

Impact Resistance: The garage door assemblies listed in Tables 4 through 17 satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These garage door

assemblies will not need to be protected with an impact protective system when installed in the Inland I zone and the Seaward zone.

Installation:

Design Drawings: The doors must be installed as specified on the design drawings. The design drawings must be provided with the door. Each page of the design drawings must be sealed, signed and dated by Thomas Shelmerdine, PE. The following information, as a minimum, must be provided within boxes located on each page of the design drawings:

- Model Number
- Amarr Brand Names
- Drawing Number
- Drawing Revision Number
- Design Pressure Rating
- Maximum Door Size (Width and Height)

Door Installation: Doors must be installed according to the appropriate design drawing specified for the particular model and design pressure shown in Tables 4 through 17. Wall framing members and 2x6 wood jambs must be minimum Spruce-Pine-Fir dimension lumber unless otherwise specified on the approved drawings or in this evaluation report.

Attachment of Doors to Wall Framing: The door track brackets must be attached either directly to the wall framing or to minimum 2x6 wood jambs that are secured to the wall framing with fasteners.

Track Bracket Spacing: Fastener requirements for track brackets must be as specified on the design drawings. Wood jambs must be minimum Spruce-Pine-Fir dimension lumber. Wall framing for the direct attachment of track brackets must be minimum Spruce-Pine-Fir dimension lumber. Track bracket spacing must not exceed either the spacing specified on the design drawings for the door to be installed or the spacing specified in Table 1, whichever is closer.

Table 1
Track Bracket Spacing (1)
Direct Attachment of Brackets to Wall Framing
Attachment of Track Brackets to Wood Jambs

Door Width	Maximum Positive Design Load	Track Bracket Spacing
9'	+45.5	24"
9'	+60.6	18"
9'	+68.3	16"
9'	+91.0	12"
16'	+25.6	24"
16'	+34.1	18"
16'	+38.4	16"
16'	+51.2	12"
18'	+22.7	24"
18'	+30.3	18"
18'	+34.1	16"
18'	+45.5	12"

- 1) Wood framing members must be Spruce-Pine-Fir Pine Lumber ($SG \geq 0.42$).

Methods of Door Attachment: The allowable methods of attachment of the doors to the wall framing and illustrations of the allowable methods of attachment are specified below (Use one of the following options):

1. **Direct attachment of track to wood-framed walls:** Brackets for the vertical tracks and flag angles of the door may be attached directly to the wall framing with the fasteners specified on the design drawings, therefore eliminating the need for the 2x6 wood jamb called for on the design drawings. The attachment of the vertical tracks must be as shown in Figure 1. Track bracket spacing must be as specified in the Installation section of this evaluation report.
2. **Attachment of track to concrete, masonry block or wood-framed walls using a wood jamb:** For drawings beginning with the prefix "IRC" or "IBC," if 2x6 wood jambs are used, attach using the type, number and minimum embedment for fasteners shown on each drawing. The attachment of the vertical tracks must be as shown in Figure 2. Track bracket spacing must be as specified in the Installation section of this evaluation report. For the attachment of wood jambs to Spruce-Pine-Fir wall framing, attach using the type, number, and minimum embedment for fasteners shown on Table 2.
3. **Attachment of garage door brackets directly to structure through wood jamb:** Brackets for the vertical tracks and flag angles of the door may be attached directly to the wall framing through the wood back jamb with 5/16" x 3-1/2" lag screws as shown in Figure 3. This configuration will eliminate the need for the back jamb to have additional fastenings to the

structure due to the load being transferred from the door directly to the wood framed structure. Track bracket spacing must be as specified in the Installation section of this evaluation report.

4. **Attachment of garage door brackets directly to structure through wood jamb with finishing material behind jamb:** Brackets for the vertical tracks and flag angles of the door may be attached directly to the wall framing through a wood back jamb and wall finishing material with 5/16" x 4" lag screws as shown in Figure 4. This configuration will eliminate the need for the back jamb to have additional fastenings to the structure due to the load being transferred from the door directly to the wood framed structure. Track bracket spacing must be as specified in the Installation section of this evaluation report.
5. **Overlap of jamb trim boards:** Doors that are not required to overlap the jamb may overlap jamb trim boards shown in Figures 3 and 4. Jamb trim boards may also be installed on construction types shown in Figures 1 and 2. Doors requiring 1" overlap must have 1" of overlap extending over the framing studs and (or) the wood back jamb when installed over the framing studs. Framing "studs" may also be concrete or steel.

Note: Keep the manufacturer's installation instructions and the design drawings available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.

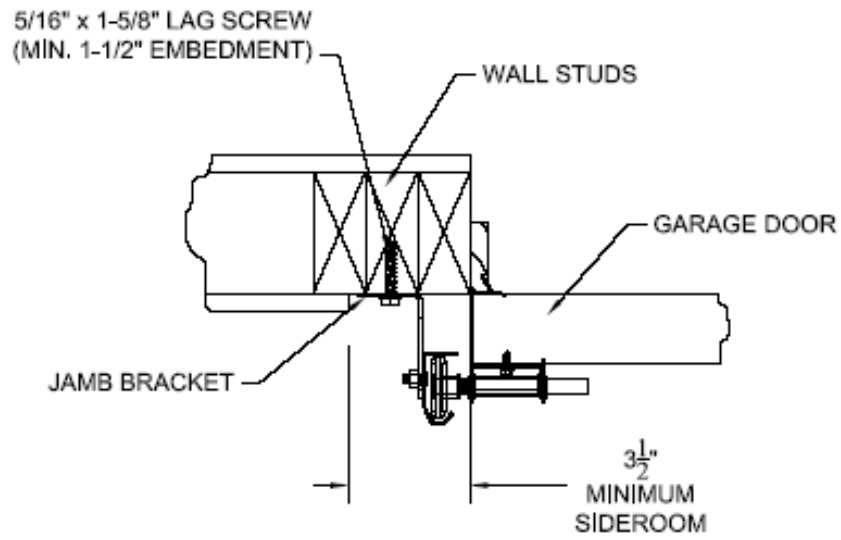


Figure 1: Attachment of garage door brackets directly to wood wall framing (Option 1)

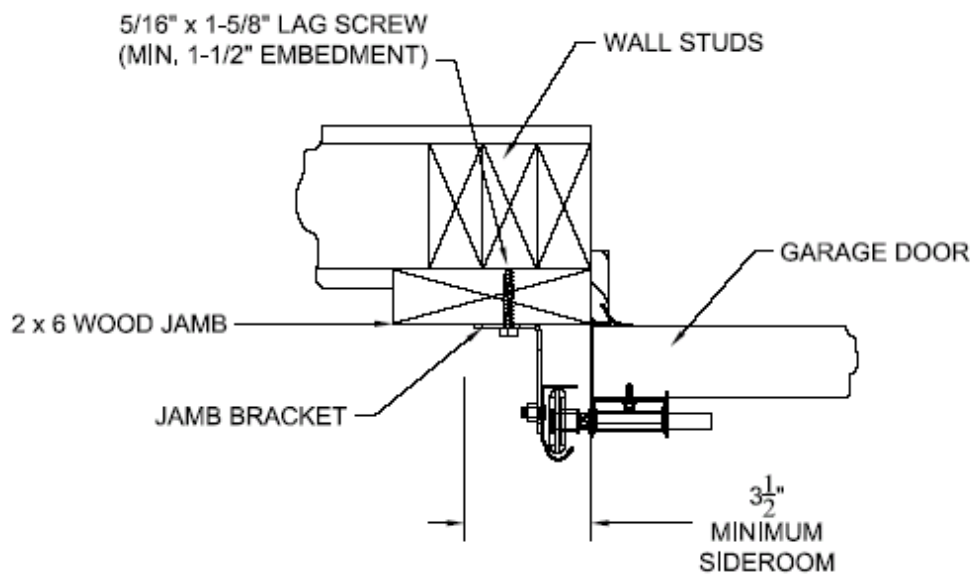


Figure 2: Attachment of garage door brackets directly 2 x 6 wood jamb (Option 2)

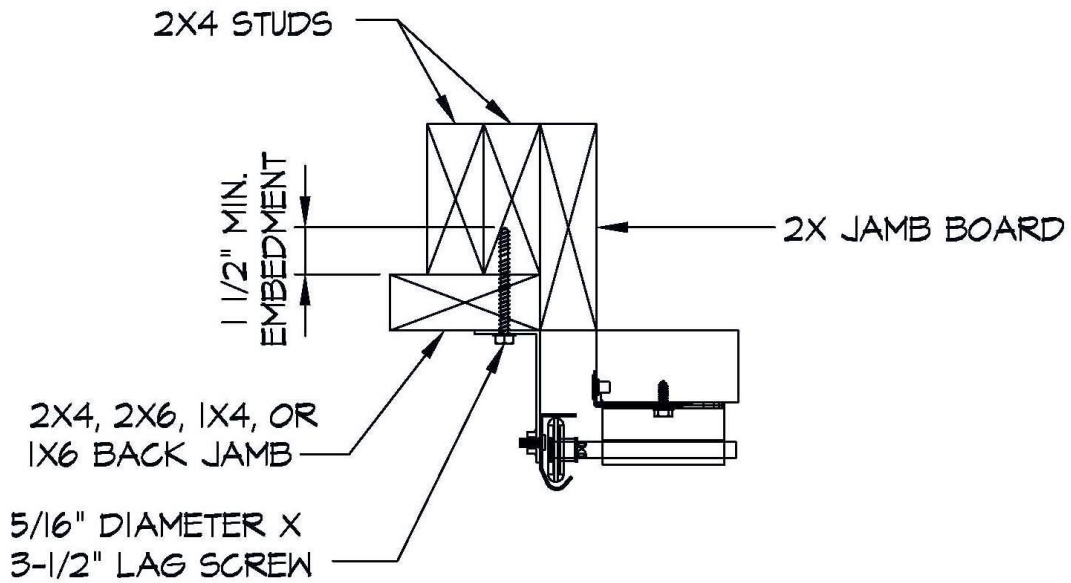


Figure 3: Attachment of garage door brackets directly to structure through wood jamb (Option 3)

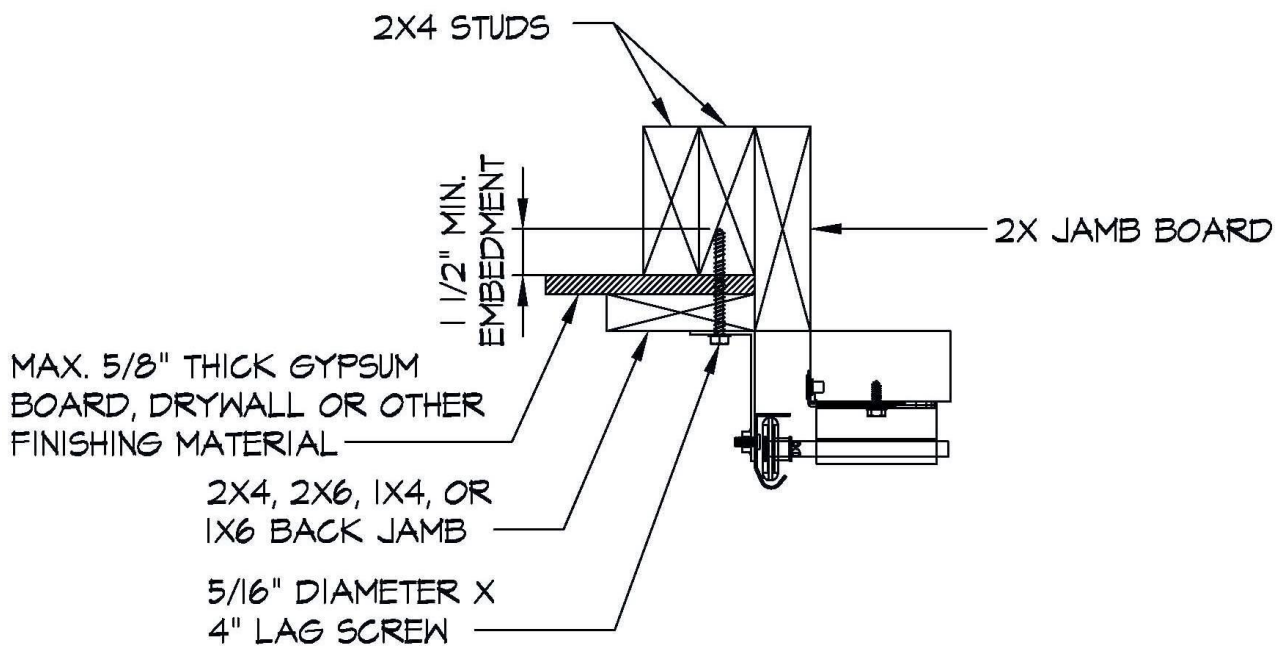


Figure 4: Attachment of garage door brackets directly to structure through wood jamb with finishing material behind jamb (Option 4)

Table 2
Jamb Attachment to Structure

Wall Type	Bolt Type	Bolt Diameter	Anchor Diameter	Hole Diameter	Embedment Length	Bolt Spacing For		
						9' wide (9)	16' wide (10)	18' wide (11)
Concrete	Hilti Kwik Bolt	3/8"	3/8"	3/8"	2-1/2"	24" O.C. (2)	24" O.C. (2)	24" O.C. (2)
	ITW/Ramset Red Head	3/8"	3/8"	3/8"	2-1/2"	24" O.C. (2)	24" O.C. (2)	24" O.C. (2)
	Hilti Sleeve Anchor	3/8"	5/16"	3/8"	1-1/4"	24" O.C. (2)	24" O.C. (2)	16" O.C. (2)
Hollow Block	ITW/Ramset Tapcon	1/4"	1/4"	3/16"	1-1/4"	Pair at 16" O.C. (2)(3)	Pair at 16" O.C. (2)(3)	Pair at 12" O.C. (2)(3)
	Hilti Sleeve Anchor	3/8"	5/16"	3/8"	1-1/4"	24" O.C. (2)	16" O.C. (2)	16" O.C. (2)
Wood (5)	Lag Bolts	5/16"	5/16"	3/16"	1-1/2"	24" O.C. (2)	16" O.C. (2)	16" O.C. (2)
Wood (6)	Lag Bolts	5/16"	5/16"	3/16"	1-1/2"	18" O.C. (2)	16" O.C. (2)	12" O.C. (2)
Steel (12 Ga. Min)	Hilti Kwik-Pro	1/4"-14 x 3/4" HWH #3		Self Drilling	N/A	12" O.C. (2)	16" O.C. (2)	16" O.C. (2)

Notes:

- 1) Chart used only when 2 x 6 or 2 x 8 jambs are attached to structure for attachment of track.
- 2) Install first anchor a maximum of 6" from each end of jamb.
- 3) Pair of anchors must be approximately 3" center to center.
- 4) For 9' wide doors maximum allowable design load to jamb is +274 PLF; 16' wide doors maximum allowable design load to jamb is +300 PLF; 18' wide doors maximum allowable design load to jamb is +396 PLF.
- 5) Wood framing members must be Southern Yellow Pine lumber (SG≥0.55).
- 6) Wood framing members must be Spruce-Pine-Fir Pine lumber (SG≥0.42).
- 7) Concrete must have minimum f'c = 2000 psi.
- 8) Steel structure members must be minimum 12 gauge (0.1046").
- 9) This chart applies to openings up to 9' wide with maximum design pressures of +60.9 psf.
- 10) This chart applies to openings up to 16' wide with maximum design pressures of +37.5 psf.
- 11) This chart applies to openings up to 18' wide with maximum design pressures of +44.0 psf.

Table 3
Retail Branding Product Cross Reference Chart

Product Brand Name					
Amarr Model	Amarr	Reliabilt	Pella	Sears	Champion
600	Stratford 1000	Model 300	Sutherland	Sears Traditional 1000	Medallion 1000
600i	Stratford 2000	Model 500	Sutherland	Sears Traditional 2000	Medallion 2000
650	Oak Summit 1000	Model 800	Onslow	Steel CH 1000	Triumph 1000
650i	Oak Summit 2000	Model 850	Onslow	Steel CH 2000	Triumph 2000
950	Heritage 1000	Heritage 1000	Hillsboro	Traditional Plus 1000	Heritage 1000
950i	Heritage 2000	Heritage 2000	Hillsboro	Traditional Plus 1000	Heritage 2000
1200 / 1200D	Heritage 3000 / Oak Summit 3000	Model 700 / Model 800	Hillsboro / Onslow	Traditional Plus 3000 / Steel CH 3000	Heritage 3000 / Triumph 3000
1500 / 1550	Stratford 3000 / Oak Summit 3000	Model 700 / Model 800	Sutherland / Onslow	Sears Traditional 3000 / Steel CH 3000	Medallion 3000 / Triumph 3000
1600	Lincoln 3000	Lincoln 3000	Ladora	Sears Traditional 3500	Lincoln 3000
1650	Hillcrest 3000	Hillcrest 3000	Hamilton	Steel Carriage House 3500	Hillcrest 3000
500	Classica 1000	890 Series	Colesburg	Premier 1000	Winner's Circle 1000
500i	Classica 2000	900 Series	Colesburg	Premier 2000	Winner's Circle 2000
3000	Classica 3000	950 Series	Colesburg	Premier 3000	Winner's Circle 3000
P500, C500, D500	Olympus / Designers Choice	N/A	Otteson / Dansbury	Traditional Max 4000, 5000 / Steel Carriage House 4000, 5000	Victory Lane 500

Table 3 (Continued)
Retail Branding Product Cross Reference Chart

Product Brand Name				
Amarr Model	Amarr	Precision	Home Depot	Orchard Supply
600	Stratford 1000	Distinct Precision 100	Home Depot Traditional 1000	Vintage Oaks 1000
600i	Stratford 2000	Distinct Precision 200	Home Depot Traditional 2000	Vintage Oaks 2000
650	Oak Summit 1000	Oak Ridge Precision 100	Home Depot Carriage House 1000	Vintage Oaks 1000
650i	Oak Summit 2000	Oak Ridge Precision 200	Home Depot Carriage House 1000	Turtle Creek 2000
950	Heritage 1000	Enduring Precision 100	N/A	Heritage 1000
950i	Heritage 2000	Enduring Precision 200	N/A	Heritage 2000
1200 & 1200D	Heritage 3000 / Oak Summit 3000	Enduring Precision 300 / Oak Ridge Precision 300	Home Depot Carriage House 3000	Heritage 3000 / Turtle Creek 3000
1500 / 1550	Stratford 3000 / Oak Summit 3000	Distinct Precision 300 / Oak Ridge Precision 300	Home Depot Traditional 3000 / Carriage House 3000	Vintage Oaks 3000 / Turtle Creek 3000
1600	Lincoln 3000	Lincoln 3000	N/A	N/A
1650	Hillcrest 3000	Hillcrest 3000	N/A	N/A
500	Classica 1000	Cambridge Precision 100	N/A	Echo Canyon 1000
500i	Classica 2000	Cambridge Precision 200	N/A	Echo Canyon 2000
3000	Classica 3000	Cambridge Precision 300	The Home Depot Carriage House 4000	Echo Canyon 3000
P500, C500, D500	Olympus / Designers Choice	Olympus / Designers Choice	N/A	N/A

Table 4
Model 600, 650, and 950

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-0"	14'-0"	IRC-6009-130-15-I Rev B, 12-20-12 Sealed 2-05-13	+26.7; -31.6	Yes	None	Ext. - 25 or 24 ga.
9'-0"	14'-0"	IRC-6009-150-15-I Rev. B, 12-19-12 Sealed 2-05-13	+35.6; -42.1	Yes	None	Ext. - 25 or 24 ga.
9'-0"	14'-0"	IRC-6009-169-15-I Rev. B, 12-19-12 Sealed 2-05-13	+45.3; -51.2	Yes	None	Ext. - 25 or 24 ga.
16'-0"	14'-0"	IRC-6016-130-15-I Rev. B, 12-20-12 Sealed 2-05-13	+25.6; -29.1	Yes	None	Ext. - 25 or 24 ga.
16'-0"	14'-0"	IRC-6016-133-17-I 3-03-14 Sealed 5-05-14	+27.4; -30.5	Yes	None	Ext. - 25 or 24 ga.
16'-0"	14'-0"	IRC-6016-140-24-I Rev. B, 4-20-12 Sealed 6-26-12	+29.7; -33.1	No	None	Ext. - 25 or 24 ga.
16'-0"	14'-0"	IRC-6016-140-24-G Rev. B, 12-19-12 Sealed 2-05-13	+29.7; -33.9	Yes	None	Ext. - 25 or 24 ga.
16'-0"	14'-0"	IRC-6016-155-26-I Rev. B, 12-19-12 Sealed 2-05-13	+37.0; -41.0	Yes	None	Ext. - 25 or 24 ga.
16'-0"	14'-0"	IRC-6016-156-26-I 2-05-14 Sealed 5-05-14	+38.0; -42.0	Yes	None	Ext. - 25 or 24 ga
18'-0"	14'-0"	IRC-6018-130-24-I Rev. A, 5-1-12 Sealed 7-29-12	+25.4; -28.7	Yes	None	Ext. - 25 or 24 ga.
18'-0"	14'-0"	IRC-6018-155-26-I Rev. A, 5-1-12 Sealed 6-26-12	+37.0; -40.6	Yes	None	Ext. - 25 or 24 ga.

Table 5
Model 625 and 675

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-0"	14'-0"	IRC-6209-169-15-I 11-9-17 Sealed 4-12-18	+45.2; -53.4	Yes	None	25 ga.
10'-0"	14'-0"	IRC-6210-175-21-I 11-28-17 Sealed 4-27-18	+48.0; -56.1	Yes	None	25 ga.
12'-0"	14'-0"	IRC-6212-175-24-I 12-4-17 Sealed 4-27-18	+47.4; -54.8	Yes	None	25 ga.

Table 6
Model 950

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-0"	14'-0"	IRC-9509-169-15 Rev. C, 1-28-13 Sealed 4-11-13	+45.3; -51.2	No	None	24 ga.
9'-0"	14'-0"	IRC-9509-169-15-G 3-12-13 Sealed 7-12-13	+45.3; -51.2	No	Yes	24 ga.
9'-0"	14'-0"	IRC-9509-180-21 Rev. B, 5-1-12 Sealed 6-13-13	+51.1; -60.3	No	None	24 ga.
9'-0"	14'-0"	IRC-9509-180-21-G 3-12-13 Sealed 7-16-13	+51.1; -60.3	No	Yes	24 ga.
9'-0"	14'-0"	IRC-9509-185-15-I Rev. C, 1-19-12 Sealed 6-07-12	+54.4; -62.0	No	None	24 ga.
9'-0"	14'-0"	IRC-9509-189-21-I Rev. C, 5-1-12 Sealed 6-26-12	+57.0; -67.0	Yes	None	24 ga.
16'-0"	14'-0"	IRC-9516-169-26 Rev. C, 2-04-13 Sealed 6-13-13	+45.8; -49.3	No	None	24 ga.
16'-0"	14'-0"	IRC-9516-169-26-G 3-12-13 Sealed 7-17-13	+45.8; -49.3	Yes	None	24 ga.
16'-0"	14'-0"	IRC-9516-185-26-I 9-28-15 Sealed 12-1-15	+51.9; -58.9	Yes	None	24 ga.

Table 6 (Continued)
Model 950

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
16'-0"	14'-0"	IRC-9516-175-26-I Rev. E, 12-2-11 Sealed 6-07-12	+47.5; -52.0	Yes	None	24 ga.
18'-0"	14'-0"	IRC-9518-165-26-I Rev. B, 11-29-11 Sealed 4-11-13	+42.0; -46.0	No	None	24 ga.
18'-0"	14'-0"	IRC-9518-180-26-I 9-30-15 Sealed 12-1-15	+48.6; -55.0	No	None	24 ga.

Table 7
Model 500

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-0"	8'-0"	IRC-5309-180-45 Rev. E, 5-01-12 Sealed 6-26-12	+51.1; -60.3	No	Yes; Vertical Post (1)	24 ga.
9'-0"	14'-0"	IRC-5309-185-21-I Rev. A, 1-19-12 Sealed 3-02-12	+54.4; -62.0	No	None	24 ga.
16'-0"	8'-0"	IRC-5316-169-26-I Rev. A, 12-13-11 Sealed 6-07-12	+43.4; -49.3	No	None	24 ga.
16'-0"	14'-0"	IRC-5316-170-26-1 Rev. C, 5-2-12 Sealed 6-26-12	+43.4; -49.3	No	None	Ext - 24 ga.
16'-0"	8'-0"	IRC-5316-175-45 Rev. F, 5-1-12 Sealed 6-26-12	+45.9; -52.1	No	Yes; Vertical Post (1)	Ext - 24 ga.
18'-0"	8'-0"	IRC-5318-130-24-I 7-17-13 Sealed 2-27-14	+25.1; -28.4	No	None	Ext - 24 ga.
18'-0"	8'-0"	IRC-5318-140-26-I 6-25-12 Sealed 8-16-12	+29.4; -33.3	No	None	Ext - 24 ga.

**Table 8
Model 1380**

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-2"	24'-0"	IRC-1809-136-15-I 11-25-14 Sealed 7-12-15	+26.4; -31.1	No	No	Ext. - 27 ga. Int. - 27 ga.
12'-2"	24'-0"	IRC-1812-130-15-I 2-16-15 Sealed 9-16-15	+23.8; -27.3	No	No	Ext. - 27 ga. Int. - 27 ga.
16'-2"	24'-0"	IRC-1816-136-15-I 11-24-14 Sealed 7-10-15	+25.3; -28.7	No	None	Ext. - 27 ga. Int. - 27 ga.
16'-2"	24'-0"	IRC-1818-136-26-I 12-08-14 Sealed 7-31-15	+25.1; -28.4	No	None	Ext. - 27 ga. Int. - 27 ga.

**Table 9
Model 1200 and 1200D**

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-0"	14'-0"	IRC-1209-130-11-I 7-28-14 Sealed 10-2-14	+26.7; -31.6	Yes	None	Ext. - 24 ga. Int. - 27 ga.
9'-0"	14'-0"	IRC-1209-155-15-I 2-10-15 Sealed 9-16-15	+38.0; -45.0	Yes	None	Ext. - 24 ga. Int. - 27 ga.
9'-0"	14'-0"	IRC-1209-189-21-I Rev. C, 10-28-13 Sealed 3-21-14	+57.0; -67.5	Yes	None	Ext. - 24 ga. Int. - 27 ga.
9'-0"	14'-0"	IRC-1216-155-26-I 2-10-15 Sealed 11-12-15	+36.4; -41.4	Yes	None	Ext. - 24 ga. Int. - 27 ga.
16'-0"	14'-0"	IRC-1216-130-15-I 7-22-14 Sealed 11-12-15	+25.6; -29.1	Yes	None	Ext. - 24 ga. Int. - 27 ga.
16'-0"	14'-0"	SFC-590-010 Rev. D, 5-2-12 Sealed 9-13-12	+46.0; -56.0	No	None	Ext. - 24 ga. Int. - 27 ga.
16'-0"	14'-0"	IRC-1216-175-26-I Rev. B, 12-5-11 Sealed 3-02-12	+48.0; -52.0	No	None	Ext. - 24 ga. Int. - 27 ga.
16'-0"	14'-0"	IRC-1216-175-26-G 11-11-13 Sealed 5-1-15	+48.0; -52.0	Yes	None	Ext. - 24 ga. Int. - 27 ga.
18'-0"	14'-0"	IRC-1218-130-24-I 7-10-14 Sealed 10-2-14	+25.4; -28.7	Yes	None	Ext. - 24 ga. Int. - 27 ga.

Table 9 (Continued)
Model 1200 and 1200D

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
18'-0"	14'-0"	IRC-1218-155-26-I 6-12-14 Sealed 10-2-14	+37.0; -40.7	Yes	None	Ext. - 24 ga. Int. - 27 ga.
18'-0"	14'-0"	IRC-1218-165-26-I Rev. B, 11-13-13 Sealed 3-25-14	+42.0; -46.0	Yes	None	Ext. - 24 ga. Int. - 27 ga.

Table 10
Model 1500 and 1550

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-0"	14'-0"	IRC-1509-130-15-I 10-16-14 Sealed 7-13-15	+26.7; -30.7	Yes	None	Ext. - 27 ga. Int. - 27 ga.
9'-0"	14'-0"	IRC-1509-155-15-I 10-10-16 Sealed 1-2-17	+38.0; -45.0	Yes	None	Ext. - 27 ga. Int. - 27 ga.
16'-0"	14'-0"	IRC-1516-130-15-I 10-16-14 Sealed 11-12-15	+25.6; -29.1	Yes	None	Ext. - 27 ga. Int. - 27 ga.
18'-0"	14'-0"	IRC-1518-130-24-I 10-16-14 Sealed 7-12-15	+25.4; -28.7	Yes	None	Ext. - 27 ga. Int. - 27 ga.

Table 11
Model 1480

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-2"	14'-0"	IRC-1409-130-15-I 1-22-15 Sealed 9-14-15	+26.4; -31.1	No	None	Ext. - 27 ga. Int. - 27 ga.
16'-2"	14'-0"	IRC-1416-130-15-I 11-20-14 Sealed 7-10-15	+25.3; -28.7	No	None	Ext. - 27 ga. Int. - 27 ga.
18'-2"	14'-0"	IRC-1418-130-26-I 12-08-14 Sealed 9-14-15	+25.1; -28.4	No	None	Ext. - 27 ga. Int. - 27 ga.

Table 12
Model 1600 and 1650

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-0"	14'-0"	IRC-1609-130-15-I Rev A, 10-21-13 Sealed 1-24-14	+26.7; -31.6	Yes	None	Ext. - 24 ga. Int. - 27 ga.
9'-0"	14'-0"	IRC-1609-155-15-I 2-16-14 Sealed 5-05-14	+38; -45.0	Yes	None	Ext. - 24 ga. Int. - 27 ga.
16'-0"	14'-0"	IRC-1616-130-15-I Rev A, 10-28-13 Sealed 1-24-14	+25.6; -29.1	Yes	None	Ext. - 24 ga. Int. - 27 ga.
16'-0"	14'-0"	IRC-1616-155-26-I 2-24-14 Sealed 5-05-14	+36.4; -41.4	Yes	None	Ext. - 24 ga. Int. - 27 ga.
18'-0"	14'-0"	IRC-1618-130-24-I Rev A, 10-21-13 Sealed 1-24-13	+25.4; -28.7	Yes	None	Ext. - 24 ga. Int. - 27 ga.
18'-0"	14'-0"	IRC-1618-155-26-I 2-24-14 Sealed 5-05-14	+36.1; -40.8	Yes	None	Ext. - 24 ga. Int. - 27 ga.

Table 13
Model 3000

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-0"	14'-0"	IRC-3309-150-15-I 3-23-16 Sealed 7-15-16	+35.6; -41.9	Yes	None	Ext. - 25 ga. Int. - 27 ga.
9'-0"	14'-0"	IRC-3309-180-15-I 1-25-18 Sealed 5-03-18	+50.8; -59.8	Yes	None	Ext. - 25 ga. Int. - 27 ga.
16'-0"	8'-0"	IRC-3316-130-24-I 3-06-14 Sealed 5-05-14	+25.3; -28.8	No	None	Ext. - 25 ga. Int. - 27 ga.
16'-0"	14'-0"	IRC-3316-150-26-I 4-14-16 Sealed 7-15-16	+34.0; -38.6	Yes	None	Ext. - 25 ga. Int. - 27 ga.
18'-0"	14'-0"	IRC-3318-150-26-I 4-14-16 Sealed 7-15-16	+33.7; -38.1	Yes	None	Ext. - 25 ga. Int. - 27 ga.

Table 14
Model P500, C500, and D500

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-0"	14'-0"	IRC-P509-155-15-I 2-06-18 Sealed 5-03-18	+38.0; -44.9	Yes	None	27 ga.
9'-0"	14'-0"	IRC-C509-155-15-I 12-22-15 Sealed 3-04-16	+38.0; -44.9	Yes	None	27 ga.
16'-0"	14'-0"	IRC-P516-155-26-I 2-1-18 Sealed 5-03-18	+37.0; -41.4	Yes	None	27 ga.
16'-0"	14'-0"	IRC-C516-155-26-I 1-13-16 Sealed 3-4-16	+36.4; -41.4	Yes	None	27 ga.
18'-0"	14'-0"	IRC-P518-130-24-I Rev. A, 12-14-11 Sealed 9-2-17	+25.4; -28.7	No	None	27 ga.
18'-0"	14'-0"	IRC-P518-155-26-I 2-06-18 Sealed 5-03-18	+37.0; -40.6	Yes	None	27 ga.
18'-0"	14'-0"	IRC-C518-155-26-I 1-19-16 Sealed 3-4-16	+37.0; -40.6	Yes	None	27 ga.

Table 15
Model 1350, 2700 and 2720

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-2"	24'-0"	IRC-1309-130-11-I 5-10-12 Sealed 7-10-12	+24.3; -28.5	No	None	27 ga.
9'-2"	24'-0"	IRC-1309-150-15-I Rev. A, 3-03-15 Sealed 11-18-15	+32.6; -38.3	No	None	27 ga.
12'-2"	24'-0"	IRC-1312-130-15-I 5-18-12 Sealed 7-10-12	+23.8; -27.3	No	None	27 ga.
12'-2"	24'-0"	IRC-1312-150-15-I 8-06-15 Sealed 11-18-15	+32.0; -36.7	No	None	27 ga.
18'-2"	24'-0"	IRC-2718-130-24-I 7-25-13 Sealed 3-31-14	+25.1; -28.4	No	None	Ext. 20 or 27 ga.
20'-2"	24'-0"	IRC-2720-130-26-I 5-10-13 Sealed 8-21-13	+22.9; -25.7	No	None	Ext. 20 or 27 ga.

Table 16
Model 2000, 2400, and 2500

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-2"	24'-1"	IRC-2009-130-11-I 8-01-17 Sealed 2-26-18	+24.2; -28.4	No	None	Ext. 20
9'-2"	24'-1"	IRC-2409-177-21-I Rev. A, 11-29-11 Sealed 3-02-12	+50.0; -62.0	No	None	Ext. 20 or 24 ga.
9'-2"	24'-0"	IBC-2409-169-15-I 10-12-16 Sealed 1-02-17	+41.0; -48.1	No	None	Ext. 20 or 24 ga.
9'-2"	24'-1"	IRC-2509-150-15-I 1-30-15 Sealed 9-16-15	+32.6; -38.3	No	None	Ext. 20, 24 or 25 ga.
10'-2"	24'-0"	IBC-2410-169-21-I 12-5-16 Sealed 1-02-17	+40.7; -47.3	No	None	Ext. 20 or 24 ga.
10'-2"	24'-0"	IBC-2410-195-24-I 6-1-16 Sealed 7-15-16	+54.2; -63.0	No	None	Ext. 20 or 24 ga.
12'-2"	24'-0"	IBC-2412-169-24-I 5-31-16 Sealed 7-15-16	+40.2; -46.1	No	None	Ext. 20 or 24 ga.
12'-2"	24'-0"	IBC-2412-188-26-I Rev. C, 11-29-11 Sealed 3-02-12	+50.0; -56.0	No	None	Ext. 20 or 24 ga.
16'-2"	24'-1"	IBC-2416-180-26-I 5-30-13 Sealed 8-20-13	+45.0; -52.0	No	None	Ext. 20 or 24 ga.
10'-2"	24'-0"	IBC-2416-150-26-I 5-31-16 Sealed 7-15-16	+31.4; -35.5	No	None	Ext. 20 or 24 ga.
16'-2"	24'-1"	IBC-2516-150-26-I 2-10-15 Sealed 9-17-15	+31.4; -35.5	No	None	Ext. 20, 24, or 25 ga.
18'-2"	24'-0"	IBC-2418-150-26-I Rev. B, 5-2-12 Sealed 5-22-12	+34.1; -38.5	No	None	Ext. 25 or 24 ga.
18'-2"	24'-0"	IBC-2418-170-26-I Rev. D, 1-19-12 Sealed 3-02-12	+39.5; -44.5	No	None	Ext. 20 or 24 ga.
20'-2"	24'-0"	IBC-2420-130-26-I Rev. A, 12-14-11 Sealed 3-28-12	+22.9; -25.7	No	None	Ext. 20 or 24 ga.

Table 17 Model 1000

Door Width (Max.)	Door Height (Max.)	Drawing Number	Design Pressure (PSF)	Glazing Option	Vertical Reinforcing	Skin (Min.)
9'-2"	24'-0"	IBC-1009-150-11-I 02-08-17 Sealed 3-15-17	+32.7; -38.4	Yes	No	Ext. 27 ga. Int. - 27 ga.
9'-2"	24'-0"	IBC-1009-150-15-F 06-05-17 Sealed 2-26-18	+32.7; -38.4	Yes	No	Ext. 27 ga. Int. - 27 ga.
9'-2"	24'-0"	IBC-1009-195-15-I 11-16-16 Sealed 1-02-17	+55.1; -64.5	Yes	No	Ext. 27 ga. Int. - 27 ga.
9'-2"	24'-0"	IBC-1009-195-15-F 06-05-17 Sealed 2-26-18	+55.1; -64.5	Yes	No	Ext. 27 ga. Int. - 27 ga.
10'-2"	24'-0"	IBC-1010-130-11-I 03-08-17 Sealed 6-08-17	+24.1; -28.0	Yes	No	Ext. 27 ga. Int. - 27 ga.
12'-2"	24'-0"	IBC-1012-130-15-I 03-09-17 Sealed 4-26-17	+23.8; -27.3	Yes	No	Ext. 27 ga. Int. - 27 ga.
12'-2"	24'-0"	IBC-1012-150-15-I 02-08-17 Sealed 3-16-17	+32.0; -36.7	Yes	No	Ext. 27 ga. Int. - 27 ga.
12'-2"	24'-0"	IBC-1012-195-24-I 03-23-17 Sealed 4-26-17	+54.0; -62.0	Yes	No	Ext. 27 ga. Int. - 27 ga.
16'-2"	24'-0"	IRC-1016-150-26-I 11-18-16 Sealed 1-02-17	+31.2; -35.3	Yes	No	Ext. - 27 ga. Int. - 27 ga.
16'-2"	24'-0"	IBC-1016-150-26-F 08-02-17 Sealed 2-26-18	+31.2; -35.3	Yes	No	Ext. 27 ga. Int. - 27 ga.
16'-2"	24'-0"	IBC-1016-185-26-F 01-22-18 Sealed 5-03-18	+47.1; -53.3	Yes	No	Ext. 27 ga. Int. - 27 ga.
16'-2"	24'-0"	IRC-1016-195-26-I 1-25-17 Sealed 3-15-17	+52.8; -59.7	Yes	No	Ext. - 27 ga. Int. - 27 ga.
18'-2"	24'-0"	IBC-1018-130-24-I 06-06-17 Sealed 2-26-18	+23.0; -26.0	Yes	No	Ext. 27 ga. Int. - 27 ga.