

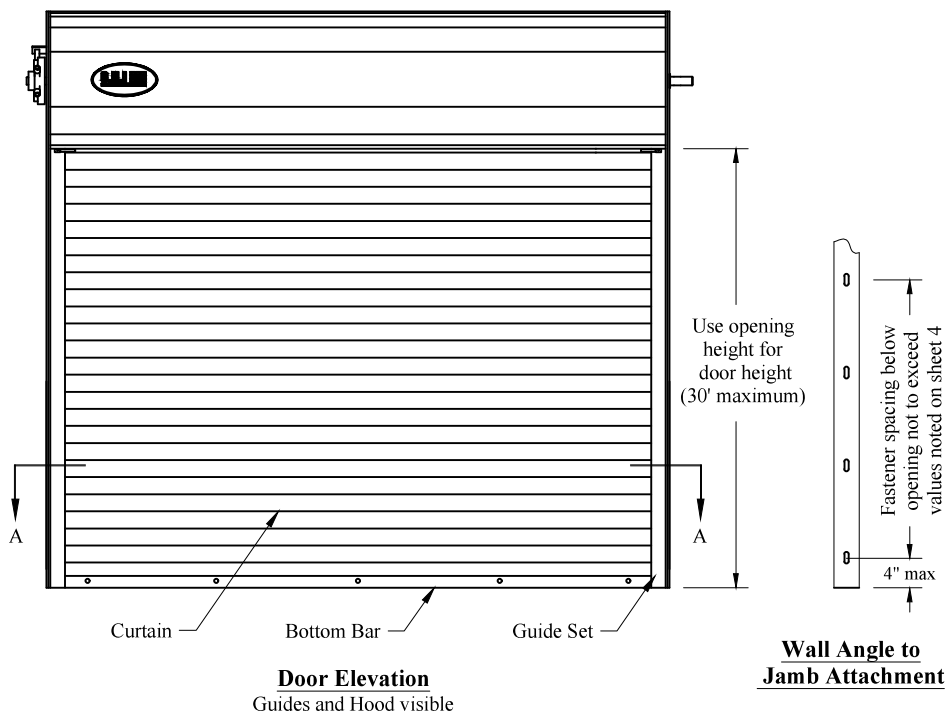


Table A: Direct Loading

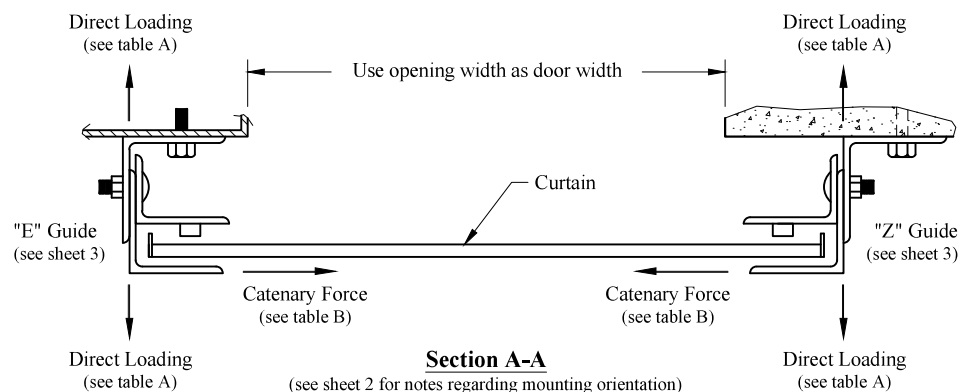
(pounds per foot of door height per jamb)
Direct loading forces occur in both (+) and (-) directions.
Lower PSF exposures will generate lower values.

door width	max psf (+/-)	direct loading
8'-04"	56	250
9'-04"	56	275
10'-04"	56	305
11'-04"	56	335
12'-04"	56	360
13'-04"	56	390
14'-04"	56	415
15'-04"	56	445
16'-04"	56	475

Table B: Catenary Forces

(pounds per foot of door height per jamb)
Catenary forces are always in the directions shown.
Lower PSF exposures will generate lower values.

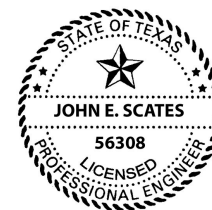
door width	max psf (+/-)	catenary force
8'-04"	56	-
9'-04"	56	200
10'-04"	56	600
11'-04"	56	900
12'-04"	56	1200
13'-04"	56	1400
14'-04"	56	1700
15'-04"	56	2000
16'-04"	56	2200



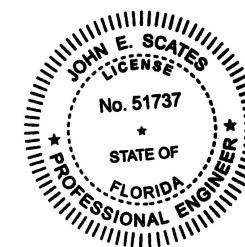
Digitally signed by John E Scates
Date: 2026.08.17 20:07:47 -05'00'

Professional Engineer's seal
provided only for verification of
windload construction details

Printed copies of this document are not
considered signed and sealed and the signature
must be verified on any electronic copies



John E. Scates
PO Box 5175
Frisco, TX 75035
FL PE 51737
TX PE 56308 / F-2203



DATE 10-10-2023

Sheet 1 of 4

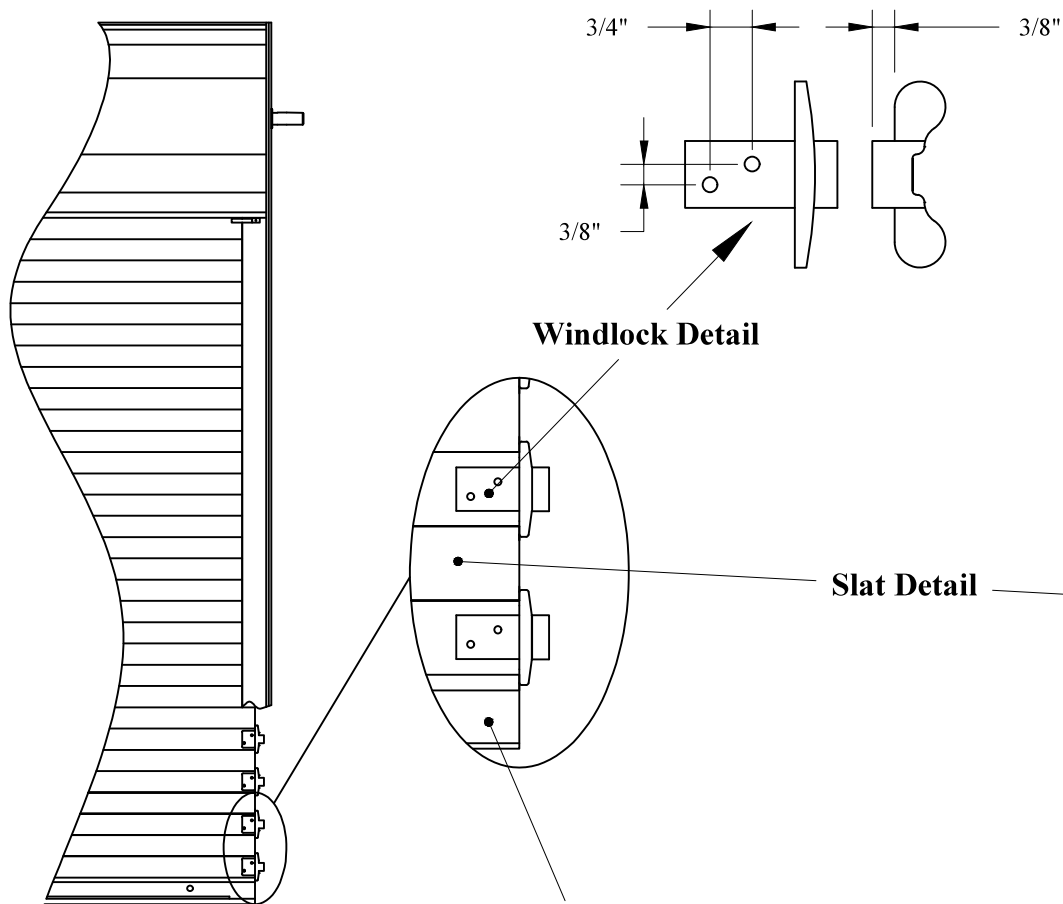
Rolling Steel Doors
Models: 6181, 6201, 6221 & 6266

Evaluated Widths
up through 16'-04"

Evaluated Pressures (PSF)
Table C - Sheet 4

Drawing
Z11i-16-94008

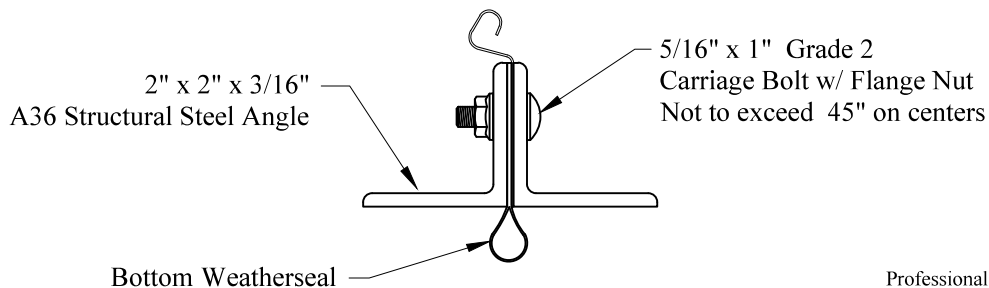
This door Complies with current FBC (See Eval Report)
This door complies with IBC/IRC 2018/2021/2024 (Texas)
Tested per ANSI/DASMA 108 and 115
This door has been tested for windborne debris



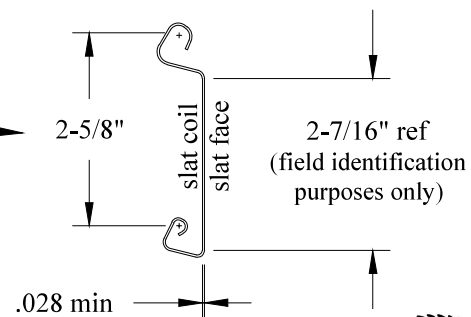
Door Elevation

Guide partially removed to reveal curtain details
see page 1 for full elevation

Bottom Bar Detail

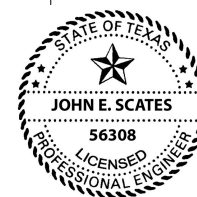
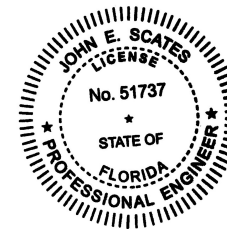


Slat Detail



Interior / Exterior Mounted Doors

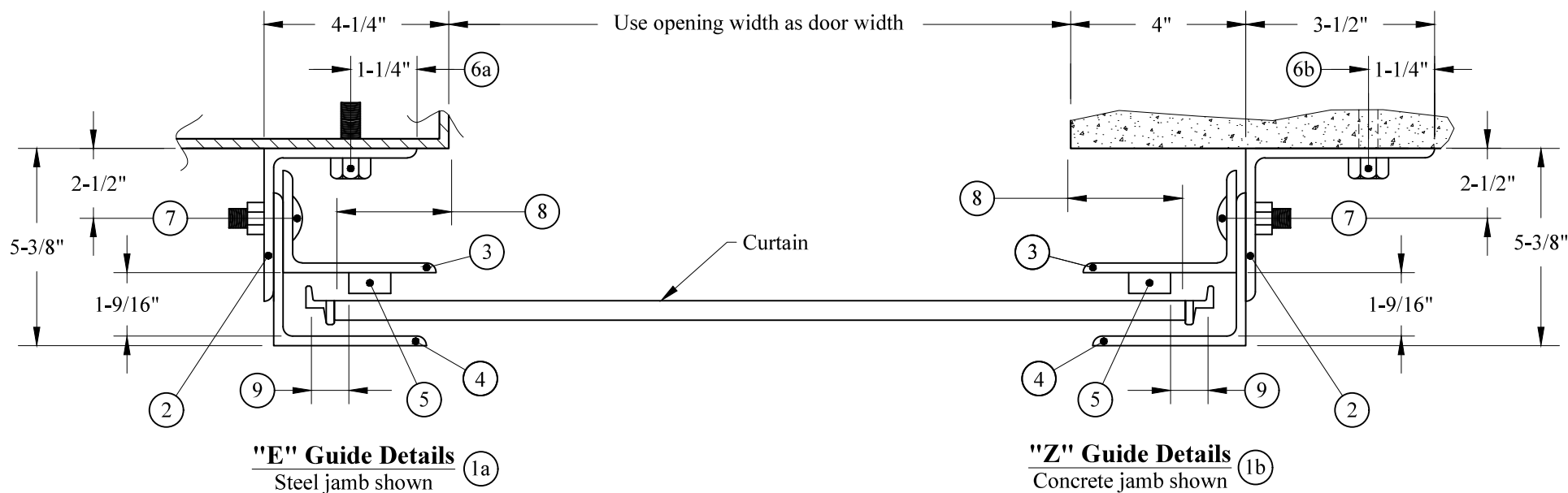
- When this type of door is mounted on the interior of an exterior wall, the slat face is exposed to the building exterior and the slat coil is exposed to the building interior. Pressure values in Table C, sheet 4 are for this installation type. See detail below for slat terms.
- When this type of door is mounted on the exterior of an exterior wall, the slat coil is exposed to the building exterior and the slat face is exposed to the building interior. Pressure values in Table C, sheet 4 need to be reversed. See sheet 4 for details.



John E. Scates
PO Box 5175
Frisco, TX 75035
FL PE 51737
TX PE 56308 / F-2203

	DATE	10-10-2023
		Sheet 2 of 4
Rolling Steel Doors Models: 6181, 6201, 6221 & 6266		
		Evaluated Widths up through 16'-04"
Evaluated Pressures (PSF) Table C - Sheet 4	Drawing Z11i-16-94008	

Professional Engineer's seal
provided only for verification of
windload construction details



1.) Jambs (by others) must be designed to withstand the direct loading and catenary forces shown on sheet 1, tables A & B

1a: 3/16" min thickness A500 structural material
or

1b: 2500 psi min concrete

2.) Wall Angle

3-1/2" x 3-1/2" x 1/4" A36 structural steel

3.) Back Angle

2" x 3" x 3/16" A36 structural steel

4.) Face Angle

3-1/2" x 3-1/2" x 1/4" A36 structural steel

5.) Windlock Bar

1/2" x 1" hot rolled steel bar welded to back angle,
3/16" x 3/8" fillet welds, alternating sides, not to
exceed 16" on center

6a.) Wall Angle to Jamb Attachment (see sheet 4 for fastener spacing)

Steel Jamb: Bolted

3/8"-16 x 1" ASME B18.6.3 self-tapping bolt

6b.) Wall Angle to Jamb Attachment (see sheet 4 for fastener spacing)

Concrete Jamb: Bolted

Simpson Strong-Tie Titen HD 3/8" x 4"

7.) Guide to Guide Fasteners

1/2"-13 x 1-1/4" grade 5 carriage bolt, serrated-flange
locknut, not to exceed 24" on centers

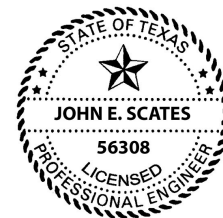
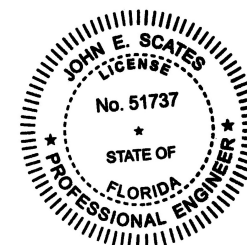
8.) Slat Length

Slat overlaps opening 2-3/8"

9.) Slip Dimension

5/8" from windlock tab to windlock bar

Professional Engineer's seal
provided only for verification of
windlock construction details



John E. Scates
PO Box 5175
Frisco, TX 75035
FL PE 51737
TX PE 56308 / F-2203

	DATE 10-10-2023
Sheet 3 of 4	
Rolling Steel Doors Models: 6181, 6201, 6221 & 6266	
Evaluated Pressures (PSF) Table C - Sheet 4	Evaluated Widths up through 16'-04" Drawing Z11i-16-94008

Table C: Fastening Type and Attachment Spacing of Wall Angle to Jamb

see sheet 3 for jamb and fastener specifications

3/16" A500 steel jambs

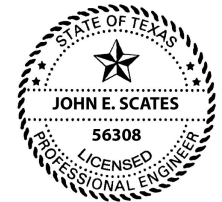
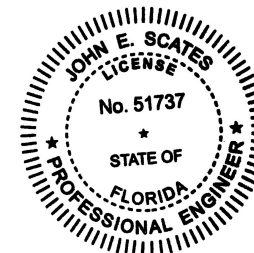
width	spacing	psf
8'-04"	20"	+56/-56
9'-04"	20"	+56/-56
10'-04"	20"	+56/-56
11'-04"	20"	+56/-56
12'-04"	20"	+56/-56
13'-04"	20"	+56/-56
14'-04"	20"	+56/-56
15'-04"	20"	+56/-56
16'-04"	20"	+56/-56

2500 PSI concrete jambs

width	spacing	psf
8'-04"	20"	+56/-56
9'-04"	20"	+56/-56
10'-04"	20"	+56/-56
11'-04"	20"	+56/-56
12'-04"	20"	+56/-56
13'-04"	20"	+56/-56
14'-04"	20"	+56/-56
15'-04"	20"	+56/-56
16'-04"	20"	+56/-56

Interior / Exterior Mounted Doors

- Values in Table C apply to this type of door when installed with the slat face exposed to the listed positive (+) pressure values and the slat coil exposed to the listed negative (-) pressure values, typical of this type of door when mounted on the interior of an exterior wall. See sheet 2 for slat terms.
- When this type of door is mounted on the exterior of an exterior wall, the slat coil is exposed to positive (+) pressure and the slat face exposed to negative (-) pressure. Values shown on Table C need to be reversed, i.e. negative (-) pressure values are to be used for positive (+) pressure requirements, positive (+) pressure values are to be used for negative (-) pressure requirements.



John E. Scates
PO Box 5175
Frisco, TX 75035
FL PE 51737
TX PE 56308 / F-2203

	DATE	10-10-2023
	Sheet 4 of 4	
Rolling Steel Doors Models: 6181, 6201, 6221 & 6266		
	Evaluated Widths up through 16'-04"	
Evaluated Pressures (PSF) Table C - Sheet 4	Drawing Z11i-16-94008	

Professional Engineer's seal
provided only for verification of
windload construction details