

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
22'-04"	30	345
23'-04"	29	350
24'-04"	28	350
25'-04"	26	340
26'-04"	26	350
27'-04"	24	335
28'-04"	23	335
30'-04"	20	310

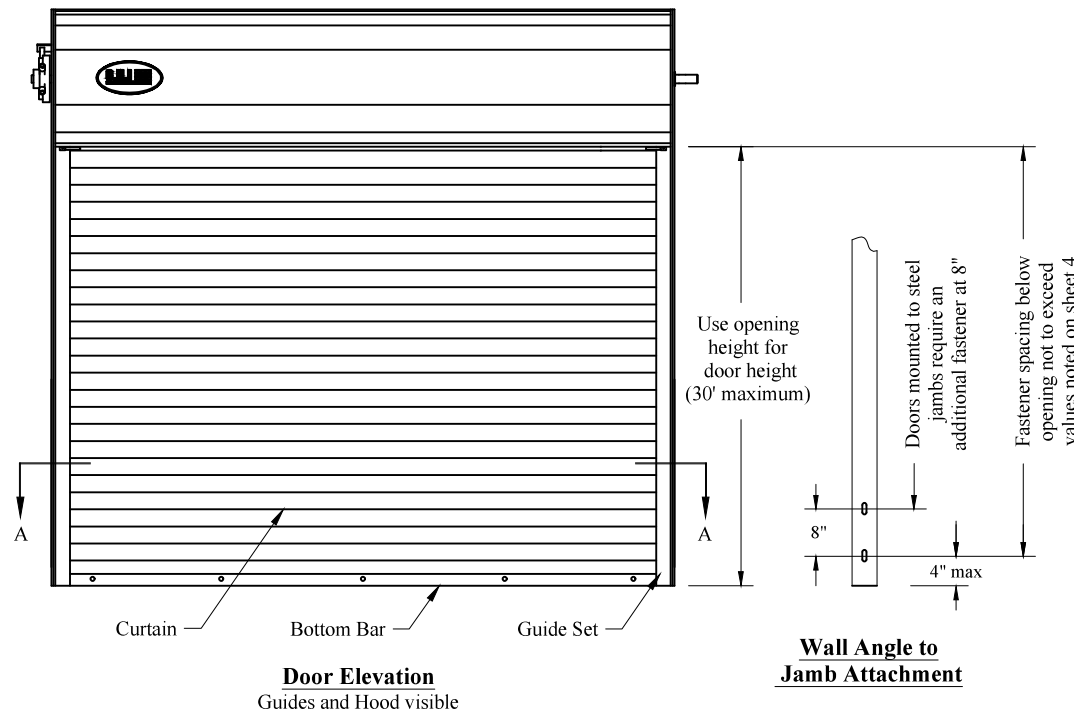
Table B: Catenary Forces

(pounds per foot of door height per jamb)

Catenary forces are always in the directions shown.

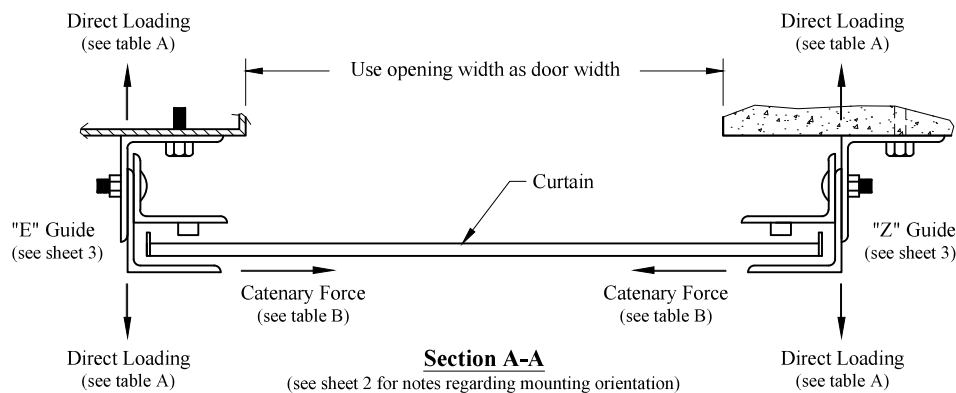
Lower PSF exposures will generate lower values.

door width	max psf (+/-)	catenary force
22'-04"	30	2000
23'-04"	29	2000
24'-04"	28	2100
25'-04"	26	2100
26'-04"	26	2200
27'-04"	24	2200
28'-04"	23	2200
30'-04"	20	2100



Door Elevation
Guides and Hood visible

Wall Angle to Jamb Attachment



Section A-A

(see sheet 2 for notes regarding mounting orientation)

Digitally signed by John E Scates
Date: 2026.08.17 20:18:45 -05'00'

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

This door Complies with current FBC (See Eval Report)
This door complies with IBC/IRC 2018/2021/2024 (Texas)
Tested per ANSI/DASMA 108
This door has not been tested for windborne debris

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

STATE OF TEXAS

JOHN E. SCATES

56308

LICENSED PROFESSIONAL ENGINEER

JOHN E. SCATES

LICENSE

No. 51737

STATE OF FLORIDA

PROFESSIONAL ENGINEER

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: 6202, 6222, & 6242

Evaluated Widths

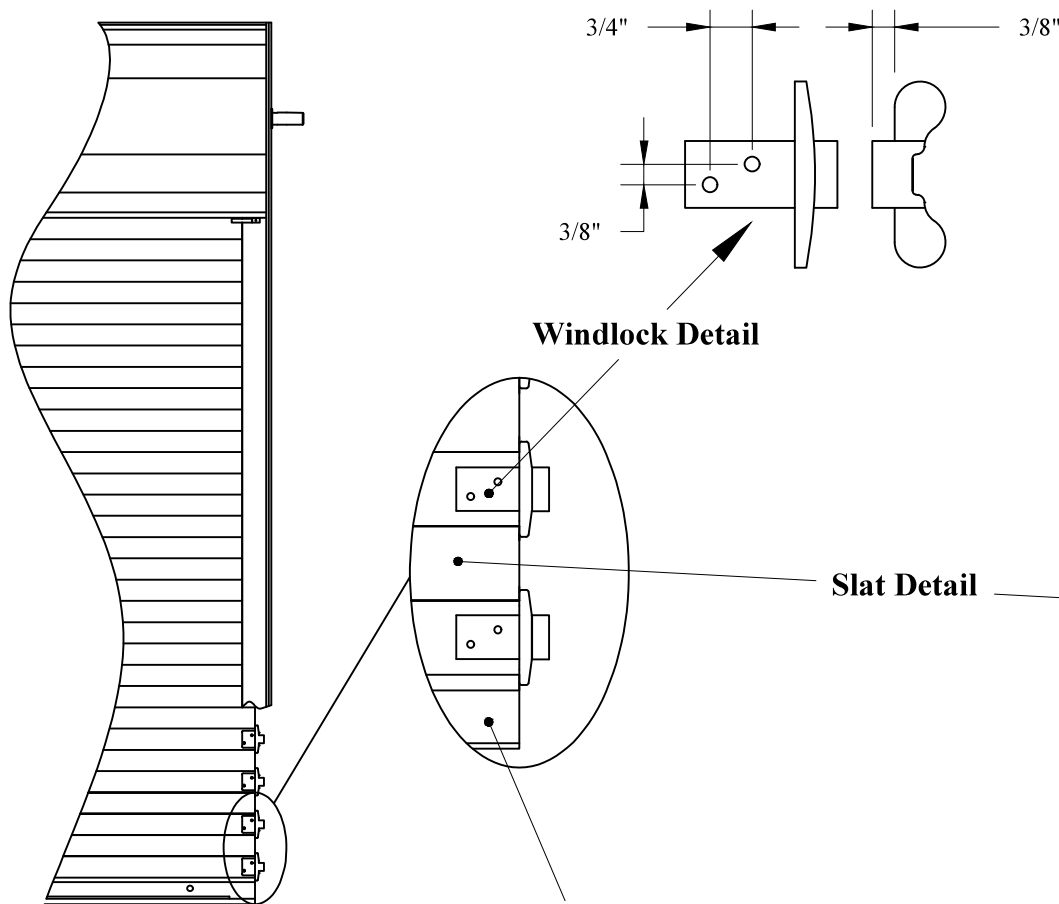
22'-04" through 30'-04"

Evaluated Pressures (PSF)

Table C - Sheet 4

Drawing

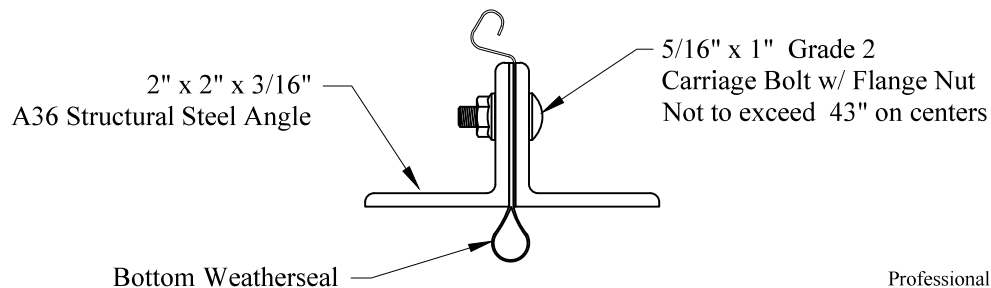
Z5-26-93008



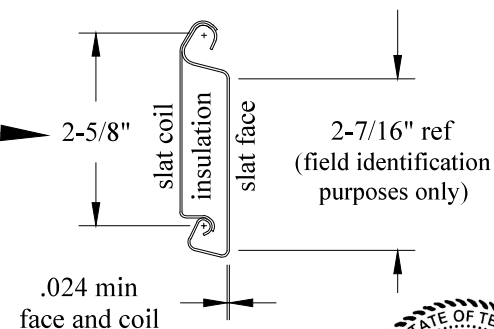
Door Elevation

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

Bottom Bar Detail

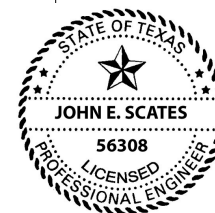
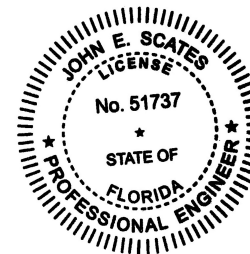


Slat Detail



Interior / Exterior Mounted Doors

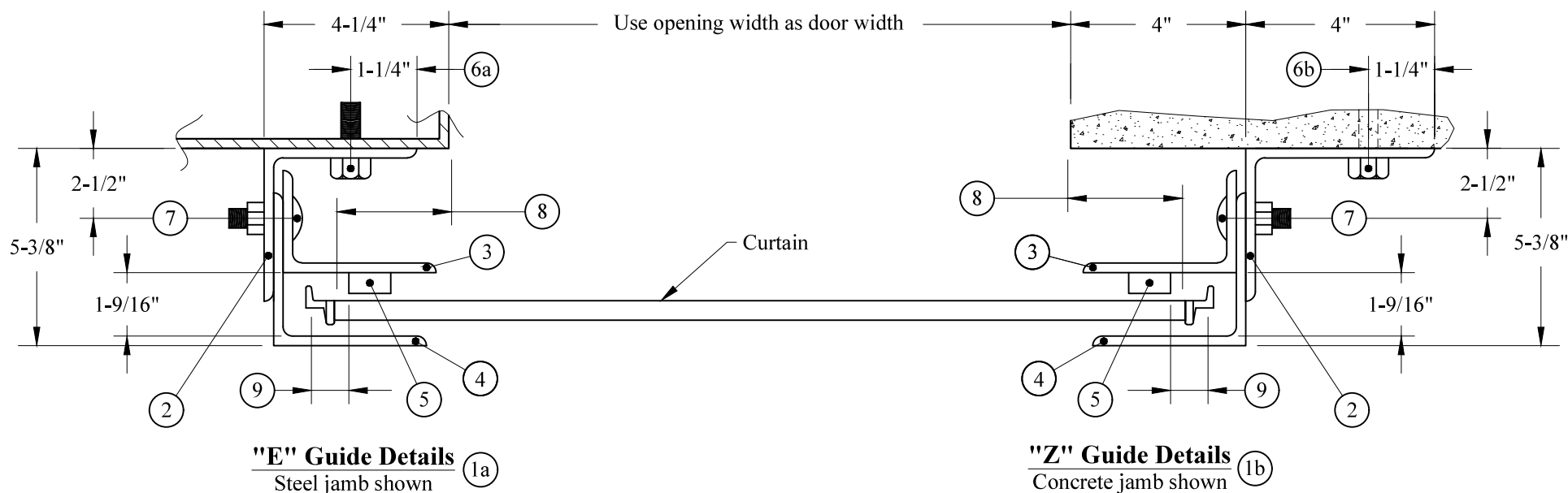
- When this type of door is mounted on the interior of an exterior wall, the slat face is exposed to the building exterior and the slat coil is exposed to the building interior. Pressure values in Table C, sheet 4 are for this installation type. See detail below for slat terms.
- When this type of door 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: 6202, 6222, & 6242	
Evaluated Pressures (PSF) Table C - Sheet 4	Evaluated Widths 22'-04" through 30'-04" Drawing Z5-26-93008

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

or

1b: 2000 psi min Filled CMU

2.) Wall Angle

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

or

1b: 4" x 3-1/2" x 5/16" 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"

or

Filled CMU Jamb: Through Bolted with Crush Plates

1/2"-13 bolt or rod (min 124,000 psi), nut, and 1" O.D. flat
washers with 3-1/2" x 3-1/2" x 1/4" A36 steel or better crush plates

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

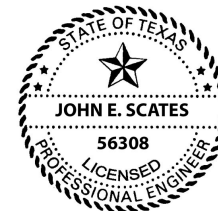
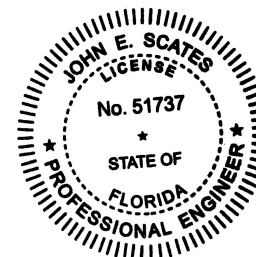
8.) Slat Length

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
windload 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: 6202, 6222, & 6242		
		Evaluated Widths 22'-04" through 30'-04"
Evaluated Pressures (PSF) Table C - Sheet 4	Drawing Z5-26-93008	

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
22'-04"	20"	+30/-30
23'-04"	20"	+29/-29
24'-04"	20"	+28/-28
25'-04"	20"	+27/-27
26'-04"	20"	+26/-26
27'-04"	20"	+24/-24
28'-04"	20"	+23/-23
30'-04"	20"	+20/-20

2500 PSI concrete jambs

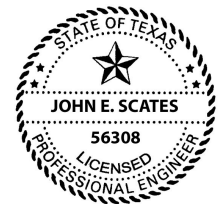
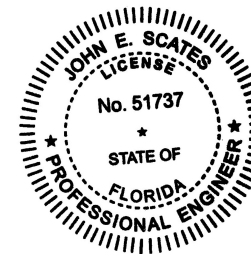
width	spacing	psf
22'-04"	20"	+30/-30
23'-04"	20"	+29/-29
24'-04"	20"	+28/-28
25'-04"	20"	+27/-27
26'-04"	20"	+26/-26
27'-04"	20"	+24/-24
28'-04"	20"	+23/-23
30'-04"	20"	+20/-20

Filled CMU

width	spacing	psf
22'-04"	16"	+30/-30
23'-04"	16"	+29/-29
24'-04"	16"	+28/-28
25'-04"	16"	+27/-27
26'-04"	16"	+26/-26
27'-04"	16"	+24/-24
28'-04"	16"	+23/-23
30'-04"	16"	+20/-20

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: 6202, 6222, & 6242		
	Evaluated Widths 22'-04" through 30'-04"	
Evaluated Pressures (PSF) Table C - Sheet 4	Drawing Z5-26-93008	

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