

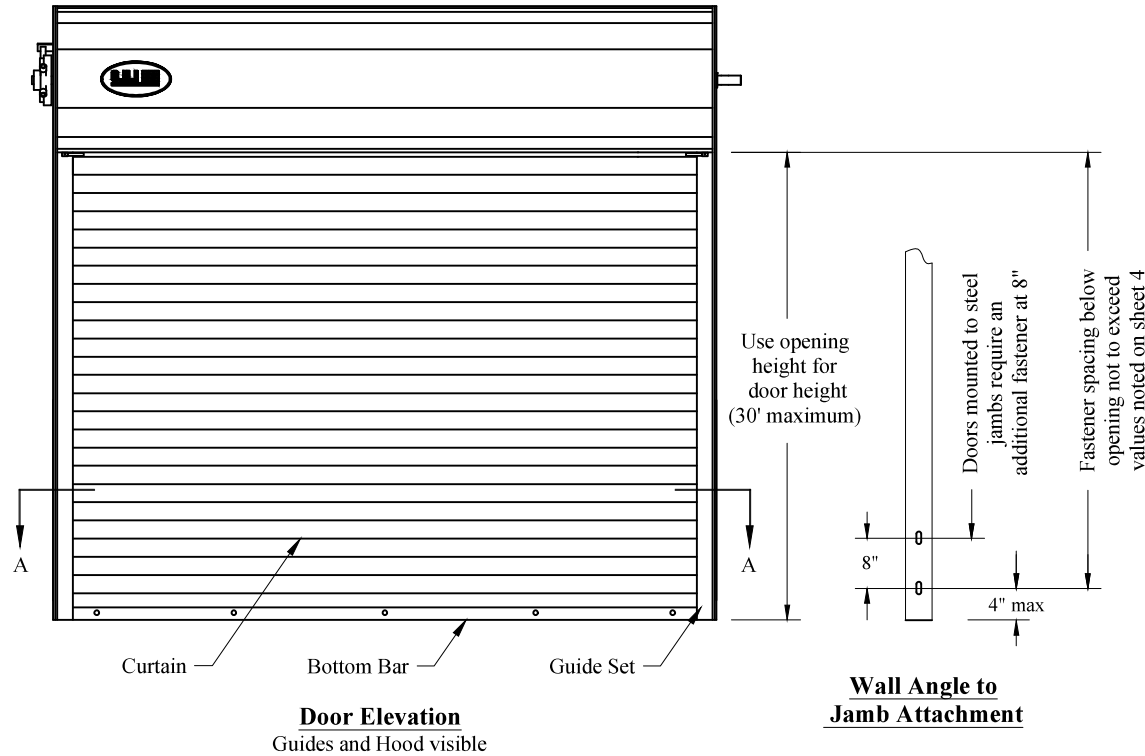
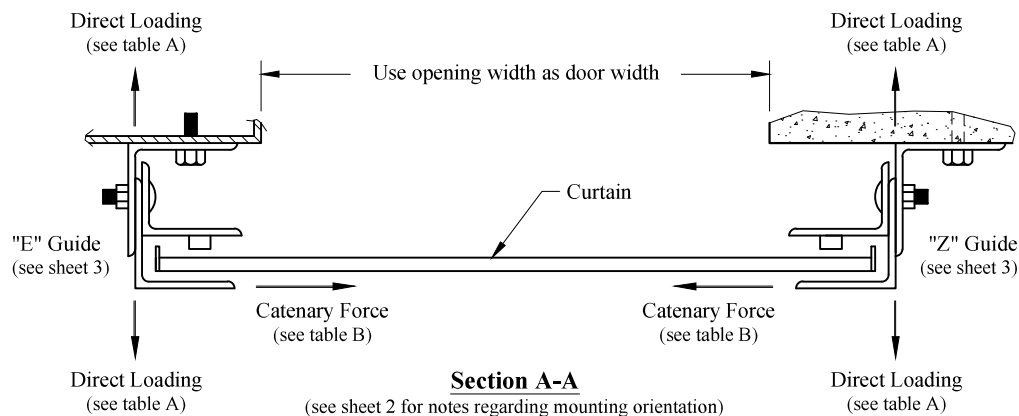


Table A: Direct Loading
(pounds per foot of door height per jamb)
Direct loading forces occur in both (+) and (-) directions.
Lower PSF exposures will generate lower values.

door width	max psf (+/-)	direct loading
8'-04"	136	605
9'-04"	121	600
10'-04"	109	595
11'-04"	100	595
12'-04"	92	590
13'-04"	79	550
14'-04"	70	520
15'-04"	62	495
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.

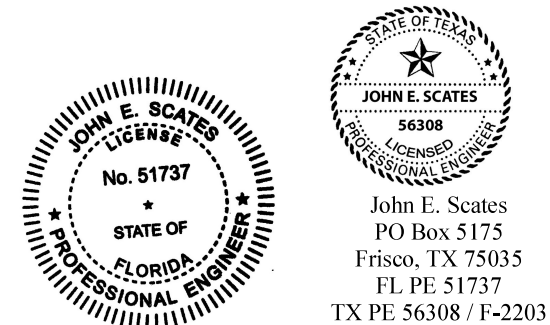
door width	max psf (+/-)	catenary force
8'-04"	136	1200
9'-04"	121	1500
10'-04"	109	1800
11'-04"	100	2000
12'-04"	92	2200
13'-04"	79	2200
14'-04"	70	2200
15'-04"	62	2200
16'-04"	56	2200



Digitally signed by John E Scates
Date: 2026.08.17 20:01:39 -05'00'

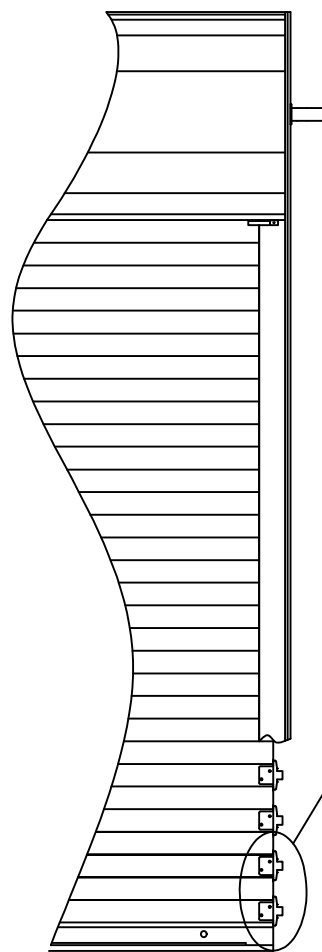
Professional Engineer's seal
provided only for verification of
windload construction details

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



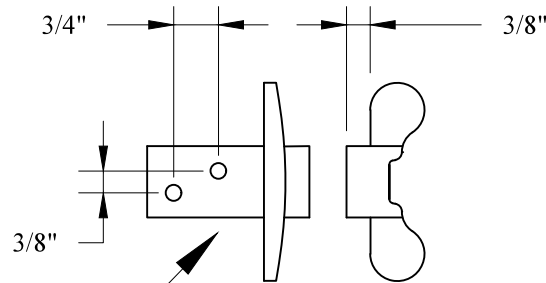
	DATE 12-17-2021
	Sheet 1 of 4
Rolling Steel Doors Models: 6181, 6201, 6221 & 6266	
Evaluated Pressures (PSF) Table C - Sheet 4	Evaluated Widths 8'-04" through 16'-04" Drawing Z12-12-92007

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

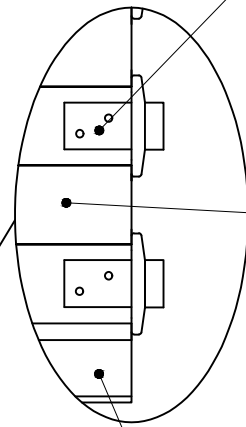


Door Elevation

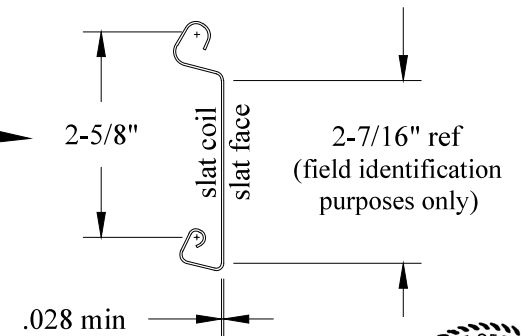
Guide partially removed to reveal curtain details
see page 1 for full elevation



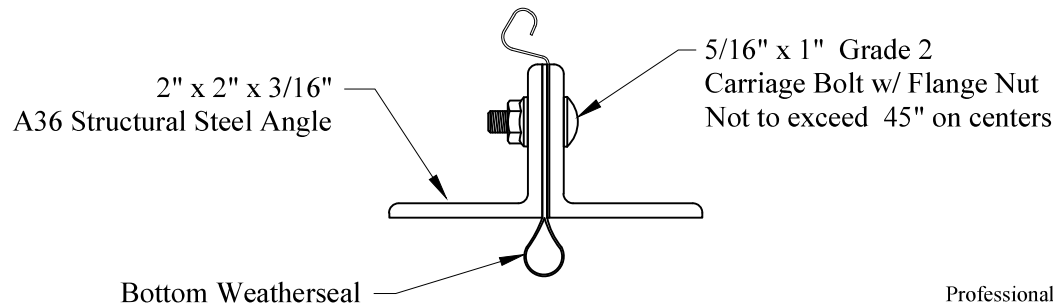
Windlock Detail



Slat Detail

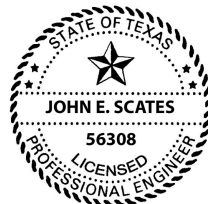
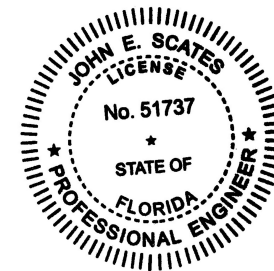


Bottom Bar Detail

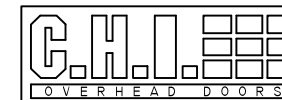


Interior / Exterior Mounted Doors

- 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 12-17-2021

Sheet 2 of 4

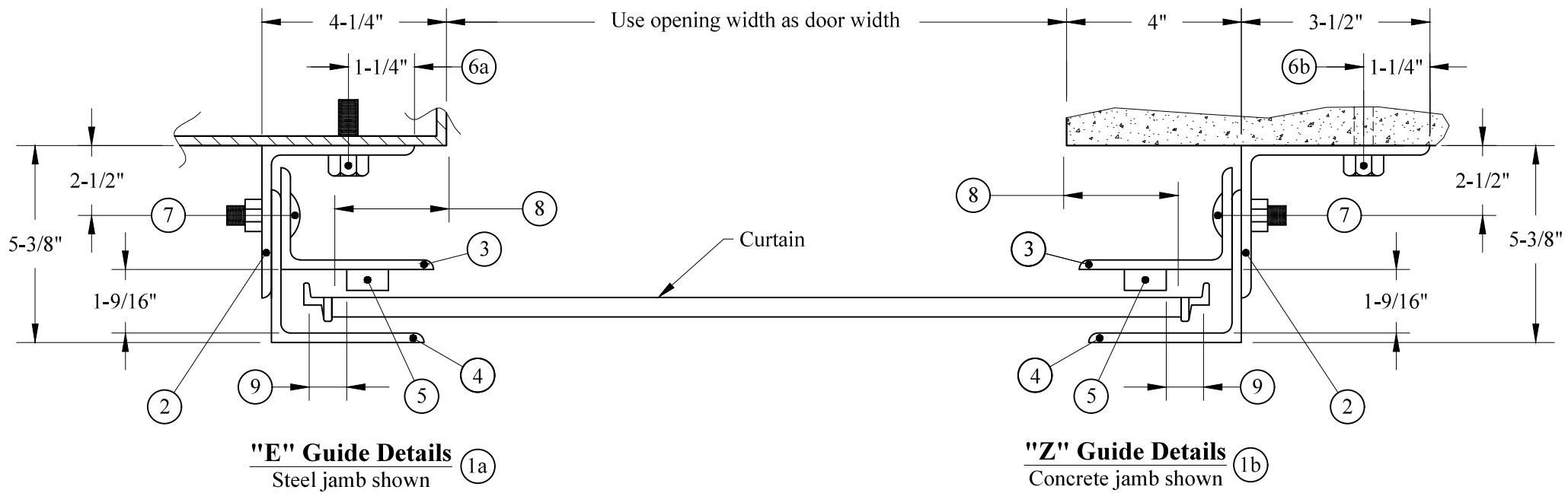
Rolling Steel Doors
Models: 6181, 6201, 6221 & 6266

Evaluated Widths
8'-04" through 16'-04"

Evaluated Pressures (PSF)
Table C - Sheet 4

Drawing
Z12-12-92007

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

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"

or

Filled CMU Jamb: Through Bolted with Crush Plates

1/2"-13 bolt or rod (min 115,000 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

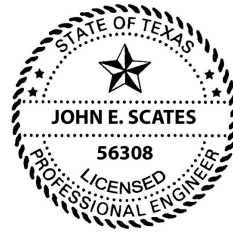
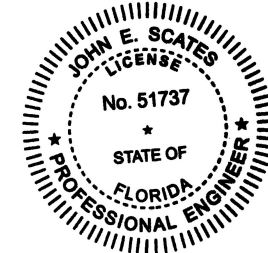
1/2"-13 x 1-1/4" grade 5 carriage bolt, serrated-flange locknut, not to exceed 24" on centers

8.) Slat Length

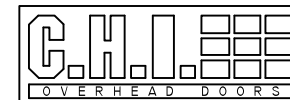
Slat overlaps opening 2-3/8"

9.) Slip Dimension

5/8" from windlock tab to windlock bar



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



DATE 12-17-2021

Sheet 3 of 4

Rolling Steel Doors

Models: 6181, 6201, 6221 & 6266

Evaluated Widths

8'-04" through 16'-04"

Evaluated Pressures (PSF)

Table C - Sheet 4

Drawing

Z12-12-92007

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

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"	+136/-136
9'-04"	20"	+121/-121
10'-04"	20"	+109/-109
11'-04"	20"	+100/-100
12'-04"	20"	+92/-92
13'-04"	20"	+79/-79
14'-04"	20"	+70/-70
15'-04"	20"	+62/-62
16'-04"	20"	+56/-56

2500 PSI concrete jambs

width	spacing	psf
8'-04"	20"	+136/-136
9'-04"	20"	+121/-121
10'-04"	20"	+109/-109
11'-04"	20"	+100/-100
12'-04"	20"	+92/-92
13'-04"	20"	+79/-79
14'-04"	20"	+70/-70
15'-04"	20"	+62/-62
16'-04"	20"	+56/-56

Filled CMU

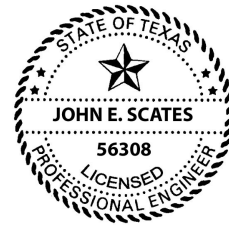
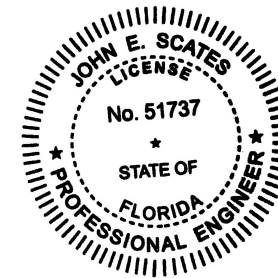
width	spacing	psf
8'-04"	18"	+136/-136
9'-04"	14"	+121/-121
10'-04"	12"	+109/-109
11'-04"	11"	+100/-100
12'-04"	10"	+92/-92
13'-04"	10"	+79/-79
14'-04"	10"	+70/-70
15'-04"	10"	+62/-62
16'-04"	10"	+56/-56

Filled CMU alternate spacing

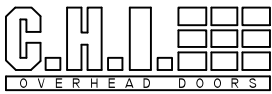
width	spacing	psf
8'-04"	-	-
9'-04"	16"	+121/-114
10'-04"	16"	+108/-92
11'-04"	16"	+89/-77
12'-04"	16"	+75/-65
13'-04"	16"	+65/-56
14'-04"	16"	+56/-49
15'-04"	16"	+49/-43
16'-04"	16"	+44/-39

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 12-17-2021
	Sheet 4 of 4
Rolling Steel Doors Models: 6181, 6201, 6221 & 6266	
	Evaluated Widths 8'-04" through 16'-04"
Evaluated Pressures (PSF) Table C - Sheet 4	Drawing Z12-12-92007

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