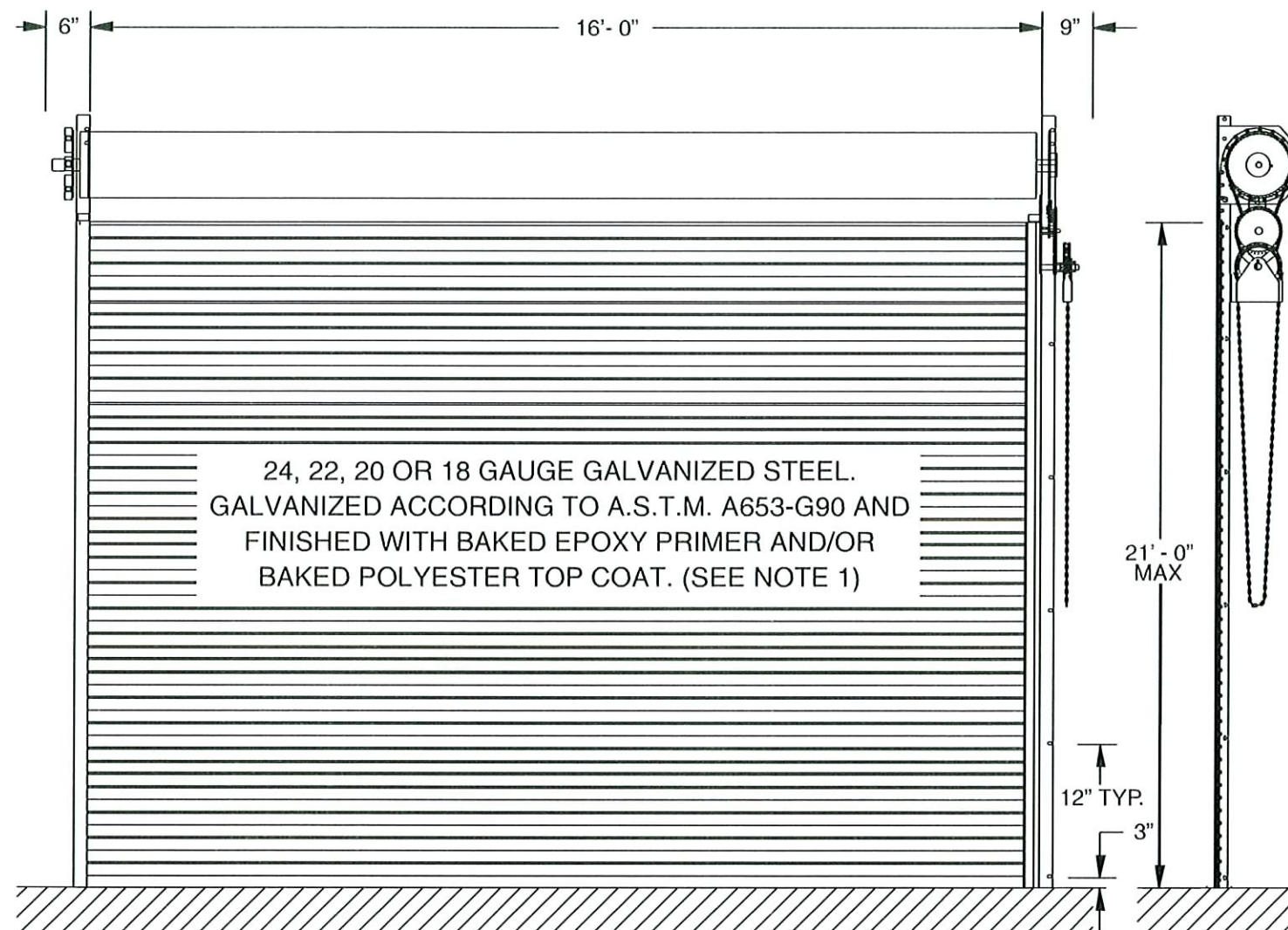
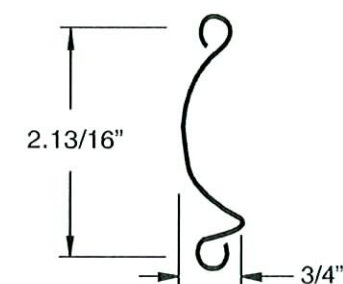
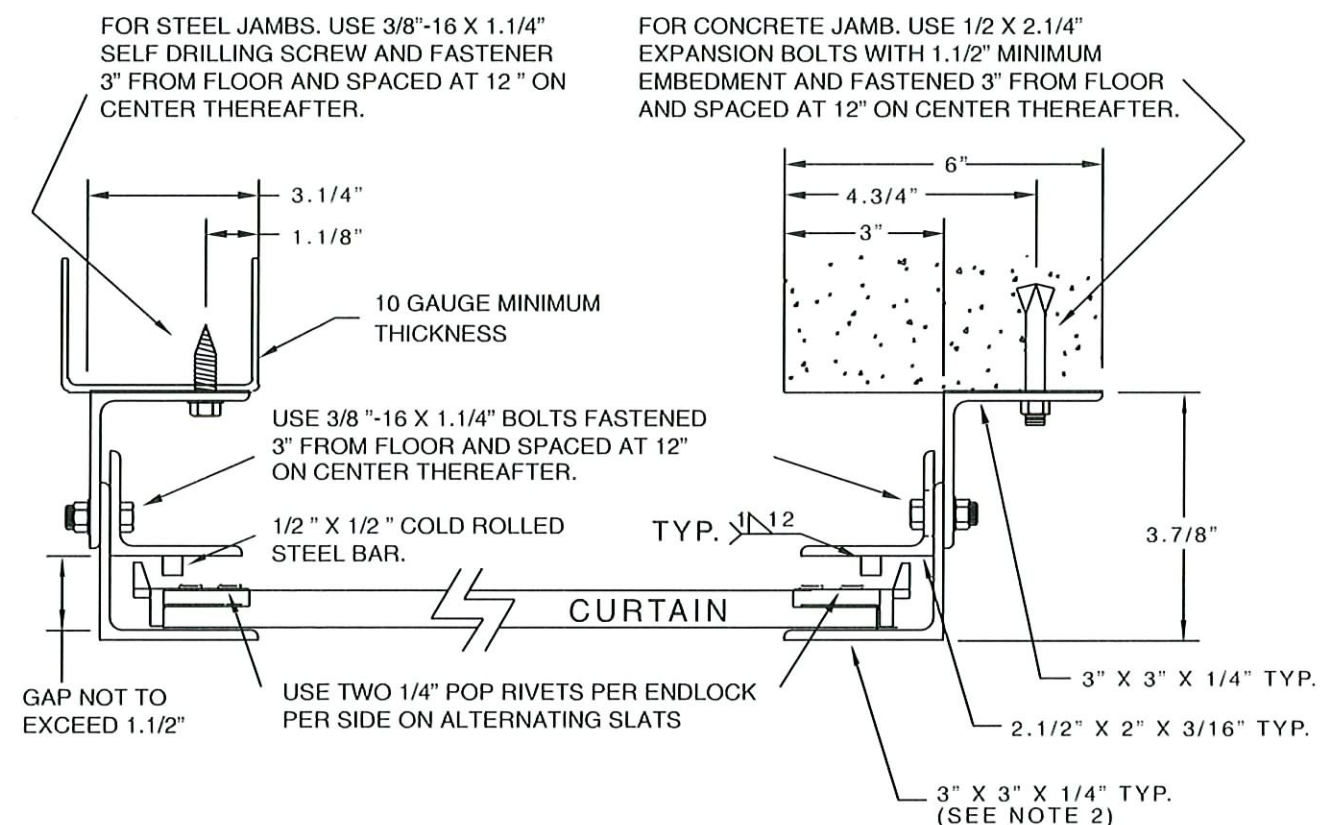


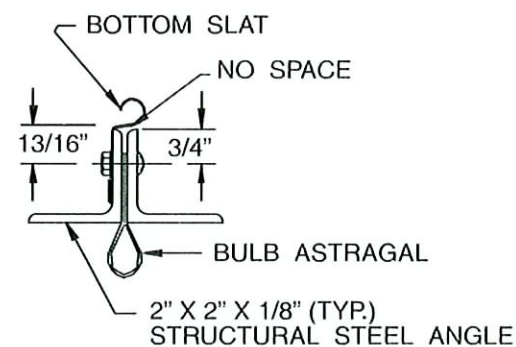


INTERIOR ELEVATION

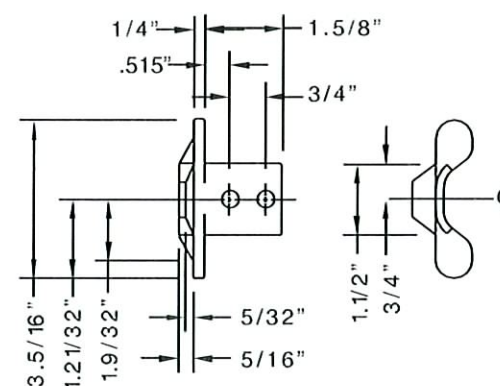
SIDE ELEVATION



CURVED SLAT 24, 22, 20 OR 18 GA.



BOTTOM BAR



MATERIAL: CAST IRON

WINDLOCK

NOTES:

1. STEEL USED FOR SLATS IS ASTM-A653 WITH A MINIMUM YIELD STRENGTH OF 50 KSI AND TENSILE STRENGTH OF 65 KSI. (GRADE 50)
2. GUIDES COMPOSED OF STRUCTURAL STEEL ANGLES. (.1875" MIN. THICKNESS)



SCALE = Varies

TOLERANCES
FRACTION = $\pm 1/32$

.X = $\pm .032$
.XX = $\pm .015$
.XXX = $\pm .005 \leq \pm .5$

DRAWN BY: JCF
ISSUE: 5-15-07



4255 McEver Industrial Drive
Acworth, GA 30101
Phone: (770) 974-2600 / Fax: (770) 974-1455
Web Site: www.astadoor.com

400 Series Rolling Steel Service Door

TEST SIZE	DESIGN PRESSURE	TEST PRESSURE
16'0" WIDE x 7'0" HIGH	± 31.0	± 46.5

MAXIMUM SIZE 424 (24 GAUGE) 20'0" WIDE x 21'0" HIGH
422, 420, 418 (22, 20, & 18 GAUGE) 24'0" WIDE x 21'0" HIGH

MODELS
424 - 24 GAUGE
422 - 22 GAUGE
420 - 20 GAUGE
418 - 18 GAUGE

TEST LOCATION
CERTIFIED TESTING LABORATORIES
7252 NARCOOSEE ROAD
ORLANDO, FL 32822

REFERENCE
CTL TEST REPORT #783W-2
EVALUATION REPORT #ER-07-0005

MODEL 424
24 GAUGE - CURVED SLAT

	Width	Design Windload		Door	
	ft	Pos psf	Neg psf	Model	gage in
16 x 7 Test Door	16	31.0	31.0	424C	0.022
Calibration calculations for test door					
Comparative forces by calculation to determine maximum design pressure					
Max Door Size					
8 x 21	8	110.8	110.8	424C	0.022
9 x 21	9	87.4	87.4	424C	0.022
10 x 21	10	71.3	71.3	424C	0.022
11 x 21	11	59.7	59.7	424C	0.022
12 x 21	12	50.9	50.9	424C	0.022
13 x 21	13	44.2	44.2	424C	0.022
14 x 21	14	38.9	38.9	424C	0.022
15 x 21	15	34.5	34.5	424C	0.022
16 x 21	16	31.0	31.0	424C	0.022
17 x 21	17	28.0	28.0	424C	0.022
18 x 21	18	25.5	25.5	424C	0.022
19 x 21	19	23.3	23.3	424C	0.022
20 x 21	20	21.5	21.5	424C	0.022
21 x 21	21	19.8	19.8	424C	0.022
22 x 21	22	18.4	18.4	424C	0.022
23 x 21	23	17.2	17.2	424C	0.022
24 x 21	24	16.0	16.0	424C	0.022

MODEL 422
22 GAUGE - CURVED SLAT

	Width	Design Windload		Door	
	ft	Pos psf	Neg psf	Model	gage in
16 x 7 Test Door	16	31.0	31.0	424C	0.022
Adjusted	16	31.6	31.6	422C	0.029
Calibration calculations for test door					
Comparative forces by calculation to determine maximum design pressure					
Max Door Size					
8 x 21	8	118.2	118.2	422C	0.029
9 x 21	9	92.3	92.3	422C	0.029
10 x 21	10	74.6	74.6	422C	0.029
11 x 21	11	62.0	62.0	422C	0.029
12 x 21	12	52.7	52.7	422C	0.029
13 x 21	13	45.5	45.5	422C	0.029
14 x 21	14	39.8	39.8	422C	0.029
15 x 21	15	35.3	35.3	422C	0.029
16 x 21	16	31.6	31.6	422C	0.029
17 x 21	17	28.5	28.5	422C	0.029
18 x 21	18	25.9	25.9	422C	0.029
19 x 21	19	23.6	23.6	422C	0.029
20 x 21	20	21.7	21.7	422C	0.029
21 x 21	21	20.1	20.1	422C	0.029
22 x 21	22	18.6	18.6	422C	0.029
23 x 21	23	17.3	17.3	422C	0.029
24 x 21	24	16.2	16.2	422C	0.029

MODEL 420
20 GAUGE - CURVED SLAT

	Width	Design Windload		Door	
	ft	Pos psf	Neg psf	Model	gage in
16 x 7 Test Door	16	31.0	31.0	424C	0.022
Adjusted	16	32.2	32.2	420c	0.036
Calibration calculations for test door					
Comparative forces by calculation to determine maximum design pressure					
Max Door Size					
8 x 21	8	124.5	124.5	420C	0.036
9 x 21	9	96.5	96.5	420C	0.036
10 x 21	10	77.6	77.6	420C	0.036
11 x 21	11	64.2	64.2	420C	0.036
12 x 21	12	54.3	54.3	420C	0.036
13 x 21	13	46.7	46.7	420C	0.036
14 x 21	14	40.8	40.8	420C	0.036
15 x 21	15	36.0	36.0	420C	0.036
16 x 21	16	32.2	32.2	420C	0.036
17 x 21	17	29.0	29.0	420C	0.036
18 x 21	18	26.3	26.3	420C	0.036
19 x 21	19	24.0	24.0	420C	0.036
20 x 21	20	22.0	22.0	420C	0.036
21 x 21	21	20.3	20.3	420C	0.036
22 x 21	22	18.8	18.8	420C	0.036
23 x 21	23	17.5	17.5	420C	0.036
24 x 21	24	16.3	16.3	420C	0.036

MODEL 418
18 GAUGE - CURVED SLAT

	Width	Design Windload		Door	
	ft	Pos psf	Neg psf	Model	gage in
16 x 7 Test Door	16	31.0	31.0	424C	0.022
Adjusted	16	32.9	32.9	418c	0.045
Calibration calculations for test door					
Comparative forces by calculation to determine maximum design pressure					
Max Door Size					
8 x 21	8	132.2	132.2	418C	0.045
9 x 21	9	101.6	101.6	418C	0.045
10 x 21	10	81.2	81.2	418C	0.045
11 x 21	11	66.7	66.7	418C	0.045
12 x 21	12	56.2	56.2	418C	0.045
13 x 21	13	48.1	48.1	418C	0.045
14 x 21	14	41.9	41.9	418C	0.045
15 x 21	15	36.9	36.9	418C	0.045
16 x 21	16	32.9	32.9	418C	0.045
17 x 21	17	29.6	29.6	418C	0.045
18 x 21	18	26.8	26.8	418C	0.045
19 x 21	19	24.4	24.4	418C	0.045
20 x 21	20	22.4	22.4	418C	0.045
21 x 21	21	20.6	20.6	418C	0.045
22 x 21	22	19.1	19.1	418C	0.045
23 x 21	23	17.7	17.7	418C	0.045
24 x 21	24	16.5	16.5	418C	0.045

GENERIC NOTES:

SUMMARY OF CATENARY FORCES FOR ALTERNATIVE DOORS

COMPARED TO CERTIFIED TESTING LABORATORIES REPORT NO.: CTLA-783W-2, DATED 12/12/01

ROLLING STEEL SLAT DOOR (CURVED SLAT)

TEST DOOR: 16' WIDE X 7' HIGH, DESIGN WINDLOAD +/- 31 PSF

STATIC AIR PRESSURE TEST CONDUCTED IN ACCORDANCE WITH ASTM E330-97

DESIGN WIND FORCES ARE CALCULATED TO PRODUCE CATENARY FORCES AT THE GUIDES EQUAL TO OR LESS THAN THOSE CALCULATED FOR THE TEST DOOR.

THIS INDICATES THAT THE CURTAIN, WINDLOCKS, WINDLOCK CONNECTIONS, GUIDE ANGLES, AND JAMB ANCHORAGES WILL ALL BE STRESSED TO APPROXIMATELY THE SAME AS THOSE IN THE TEST DOOR, PROVIDED THAT THE DOOR IS CONSTRUCTED THE SAME FOR ALL OPENING WIDTHS.



SCALE = VARIES

TOLERANCES
FRACTION = ± 1/32

.X = ± .032
.XX = ± .015
.XXX = ± .005 ≤ ± 5

DRAWN BY: JCF
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MODELS	TEST LOCATION
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	REFERENCE CTL TEST REPORT #783W-2 EVALUATION REPORT #ER-07-0005