

**Stair Treads**



# Stair Treads

Manufactured to match the full line of our grating, there is an AMICO stair tread to meet your needs. AMICO stair treads are safe, self-cleaning, skid-resistant and economical. Steel and aluminum stair treads are available in a variety of styles: welded, riveted, press-locked, swage-locked and Duo-Grip™ extruded aluminum.

Welded steel stair treads are the most widely used for their strength and ease of installation and are universally used in most industrial and commercial applications. Riveted steel stair treads have a greater load carrying capacity for the same span and depth of bearing bar and greater walking comfort. Both can be ordered with a serrated surface for additional safety.

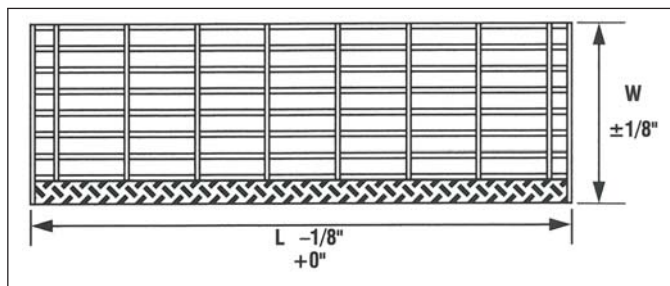
Aluminum stair treads, due to their light weight, high strength, corrosion resistance, rust proof and non-sparking properties, are ideally suited for

corrosive environments, food preparation and storage areas, and volatile areas. Swage-locked I-bar stair treads offer you high strength at less weight and lower cost. Rectangular bar, press-locked or swage-locked, stair treads provide a higher strength and stiffness-to-weight ratio and are available with a serrated surface when additional safety is required. Our Duo-Grip™ plank stair treads give you an exceptional strength and stiffness-to-weight ratio.

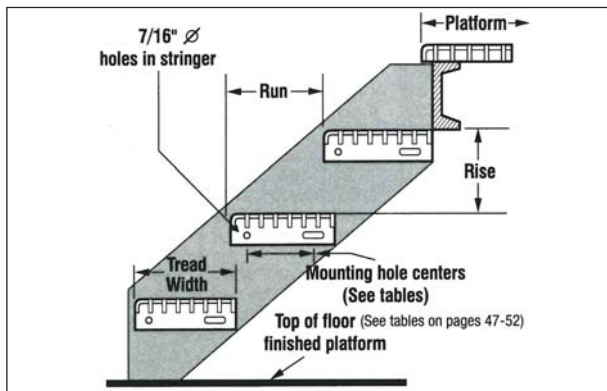
All stair treads are custom fabricated to meet the size, width and length specifications of a particular job. In addition, standard end plates can be custom fabricated to meet special bolt hole size or location requirements.

Both steel and aluminum nosings are available to add strength at the point of greatest impact and provide a definitive visible edge for extra safety. Choose our checkered plate nosing for normal use. For additional

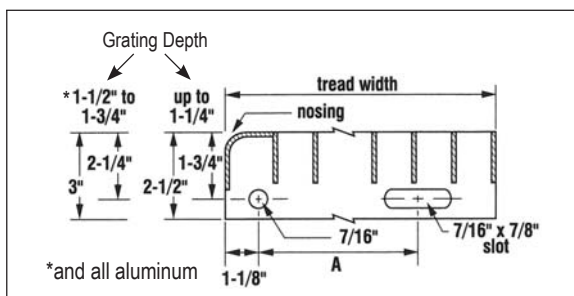
## STAIR TREAD TOLERANCES AND DETAILS



Tread Length and Width Tolerance



Typical Stair Tread Stringer Detail



Typical Tread Dimensions

## STANDARD SIZES

Bearing Bars: 1" x 3/16", 1 1/4" x 3/16", 1 1/2" x 3/16"

Widths: 9 3/4", 10 15/16", 12 1/8"

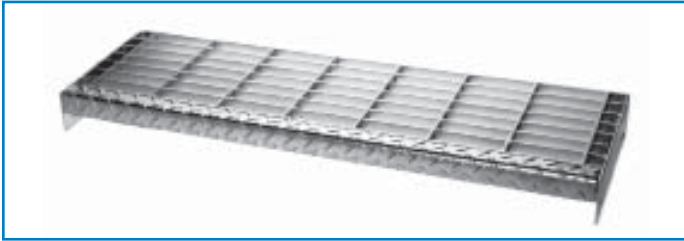
Lengths: 30" and 36"

All standard sizes available in painted and galvanized finishes.

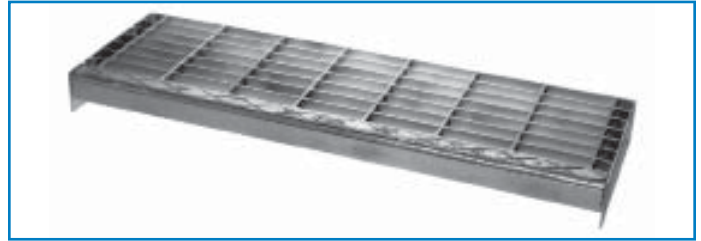
We also provide excellent lead times on non-stock treads!

# Stair Treads

## STEEL/WELDED BAR



**Welded (W)**  
Checked Plate Nosing (CP)

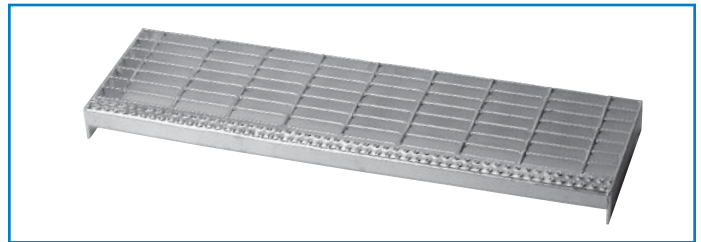


**Welded (W)**  
Cast Aluminum (CAA) Abrasive Nosing

### MAXIMUM TREAD LENGTHS

Bearing Bar Size	Bearing Bar Spacing			
	1-3/16" (19 space)		15/16" (15 space)	
	Plain	Serrated	Plain	Serrated
3/4" x 3/16"	2'-4"	1'-11"	2'-8"	2'-2"
1" x 1/8"	2'-7"	2'-3"	3'-0"	2'-6"
1" x 3/16"	3'-5"	2'-10"	4'-0"	3'-4"
1-1/4" x 1/8"	3'-7"	3'-1"	4'-2"	3'-7"
1-1/4" x 3/16"	4'-8"	4'-2"	5'-1"	4'-6"
1-1/2" x 3/16"	5'-6"	5'-3"	5'-6"	5'-6"

When tread length exceeds 5'-6", design tread for 300 lb concentrated loads at 1/3 points. Maximum tread length based on 300 lb concentrated load on front 5 in of tread at center of tread length and deflection limitation of 1/240 of length.



**Welded (W)**  
Dimple Plate Nosing (DP)

### END PLATE DIMENSIONS

Grating Depth	"B" dimension	"C" dimension
up to 1-1/4"	1-3/4"	2-1/2"
*1-1/2" to 1-3/4"	2-1/4"	3"

See Tread Width and Bolt Hole Spacing for "A" dimension.  
\*and all aluminum

### TREAD WIDTH AND BOLT HOLE SPACING

19-W-4			
No. of Bearing Bars and Nosing	Bearing Bar		**Bolt Hole Spacing "A"
	1/8"	3/16"	
	Tread Width		
5	6-1/8"	6-3/16"	2-1/2"
6	7-5/16"	7-3/8"	4-1/2"
7	8-1/2"	8-9/16"	4-1/2"
8	9-11/16"	9-3/4"	7"
9	10-7/8"	10-15/16"	7"
10	12-1/16"	12-1/8"	7"

15-W-4			
No. of Bearing Bars and Nosing	Bearing Bar		**Bolt Hole Spacing "A"
	1/8"	3/16"	
	Tread Width		
6	6-1/16"	6-1/8"	2-1/2"
7	7"	7-1/16"	4-1/2"
8	7-15/16"	8"	4-1/2"
9	8-7/8"	8-15/16"	4-1/2"
10	9-13/16"	9-7/8"	7"
11	10-3/4"	10-13/16"	7"

\*\*See drawing above.  
NOTE: Weights are for Welded only. Call for Press-Locked Weights.

\*\*See drawing above.

### STAIR TREAD WEIGHTS (per lineal inch of tread length)

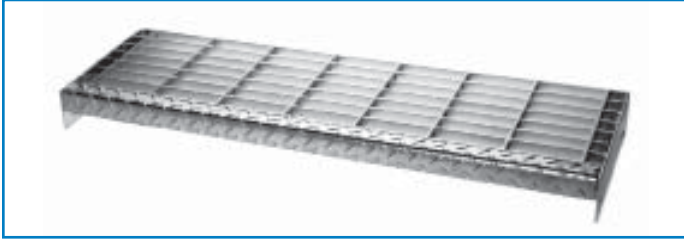
19-W-4								
No. of Bearing Bars	Nosing	Bearing Bar Size						
		1" x 1/8"	1-1/4" x 1/8"	3/4" x 3/16"	1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"	
5	CP/DP	.30	.35	.33	.39	.46	.55	
	CAA	.34	.38	.36	.43	.49	.59	
6	CP/DP	.35	.40	.38	.46	.53	.65	
	CAA	.38	.44	.41	.49	.57	.68	
7	CP/DP	.39	.45	.43	.52	.61	.74	
	CAA	.43	.49	.46	.56	.65	.77	
8	CP/DP	.44	.51	.48	.53	.69	.84	
	CAA	.48	.54	.51	.62	.72	.87	
9	CP/DP	.48	.56	.53	.64	.76	.93	
	CAA	.52	.60	.56	.68	.80	.97	
10	CP/DP	.53	.62	.58	.71	.84	1.02	
	CAA	.56	.65	.61	.74	.88	1.06	

15-W-4								
No. of Bearing Bars	Nosing	Bearing Bar Size						
		1" x 1/8"	1-1/4" x 1/8"	3/4" x 3/16"	1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"	
6	CP/DP	.34	.39	.36	.44	.53	.63	
	CAA	.37	.43	.40	.48	.56	.67	
7	CP/DP	.38	.44	.41	.51	.60	.72	
	CAA	.42	.58	.45	.54	.63	.76	
8	CP/DP	.43	.49	.46	.57	.67	.81	
	CAA	.46	.53	.49	.60	.71	.85	
9	CP/DP	.47	.55	.51	.63	.75	.91	
	CAA	.50	.58	.54	.66	.78	.94	
10	CP/DP	.51	.60	.55	.69	.82	1.00	
	CAA	.55	.63	.59	.73	.86	1.03	
11	CP/DP	.55	.65	.60	.75	.89	1.09	
	CAA	.59	.69	.64	.79	.93	1.13	

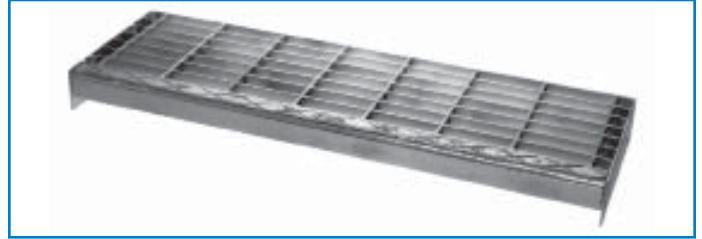
CP-Checked Plate  
DP-Dimple Plate  
CAA-Cast Aluminum Abrasive

# Stair Treads

## STEEL/PRESS-LOCKED



**Press-Locked (P)**  
Checkered Plate Nosing (CP)

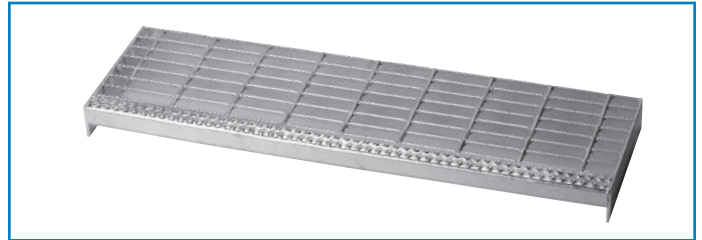


**Press-Locked (P)**  
Cast Aluminum (CAA) Abrasive Nosing

### MAXIMUM TREAD LENGTHS

Bearing Bar Size	Bearing Bar Spacing			
	1-3/16" (19 space)		15/16" (15 space)	
	Plain	Serrated	Plain	Serrated
3/4" x 3/16"	2'-4"	1'-11"	2'-8"	2'-2"
1" x 1/8"	2'-7"	2'-3"	3'-0"	2'-6"
1" x 3/16"	3'-5"	2'-10"	4'-0"	3'-4"
1-1/4" x 1/8"	3'-7"	3'-1"	4'-2"	3'-7"
1-1/4" x 3/16"	4'-8"	4'-2"	5'-1"	4'-6"
1-1/2" x 3/16"	5'-6"	5'-3"	5'-6"	5'-6"

When tread length exceeds 5'-6", design tread for 300 lb concentrated loads at 1/3 points. Maximum tread length based on 300 lb concentrated load on front 5 in of tread at center of tread length and deflection limitation of 1/240 of length.



**Press-Locked (P)**  
Dimple Plate Nosing (DP)

### END PLATE DIMENSIONS

Grating Depth	"B" dimension	"C" dimension
up to 1-1/4"	1-3/4"	2-1/2"
*1-1/2" to 1-3/4"	2-1/4"	3"

See Tread Width and Bolt Hole Spacing for "A" dimension.  
\*and all aluminum

### TREAD WIDTH AND BOLT HOLE SPACING

19-P-4			
No. of Bearing Bars and Nosing	Bearing Bar		**Bolt Hole Spacing "A"
	1/8"	3/16"	
	Tread Width		
5	6-1/8"	6-3/16"	2-1/2"
6	7-5/16"	7-3/8"	4-1/2"
7	8-1/2"	8-9/16"	4-1/2"
8	9-11/16"	9-3/4"	7"
9	10-7/8"	10-15/16"	7"
10	12-1/16"	12-1/8"	7"

15-P-4			
No. of Bearing Bars and Nosing	Bearing Bar		**Bolt Hole Spacing "A"
	1/8"	3/16"	
	Tread Width		
6	6-1/16"	6-1/8"	2-1/2"
7	7"	7-1/16"	4-1/2"
8	7-15/16"	8"	4-1/2"
9	8-7/8"	8-15/16"	4-1/2"
10	9-13/16"	9-7/8"	7"
11	10-3/4"	10-13/16"	7"

\*\*See drawing above.  
NOTE: Weights are for Welded only. Call for Press-Locked Weights.

\*\*See drawing above.

### STAIR TREAD WEIGHTS (per lineal inch of tread length)

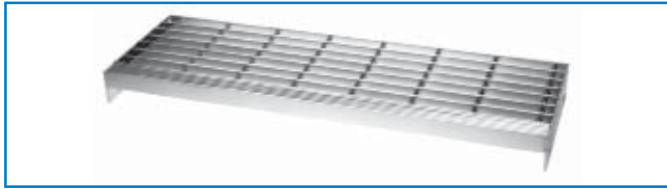
19-P-4								
No. of Bearing Bars	Nosing	Bearing Bar Size						
		1" x 1/8"	1-1/4" x 1/8"	3/4" x 3/16"	1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"	1-1/2" x 3/16"
5	CP/DP	0.33	0.38	0.36	0.43	0.50	0.60	
	CAA	0.37	0.41	0.39	0.47	0.53	0.64	
6	CP/DP	0.38	0.44	0.41	0.50	0.58	0.71	
	CAA	0.41	0.48	0.45	0.53	0.62	0.74	
7	CP/DP	0.43	0.49	0.47	0.57	0.66	0.81	
	CAA	0.47	0.53	0.50	0.61	0.71	0.84	
8	CP/DP	0.48	0.56	0.52	0.58	0.75	0.92	
	CAA	0.52	0.59	0.56	0.68	0.78	0.95	
9	CP/DP	0.52	0.61	0.58	0.70	0.83	1.01	
	CAA	0.57	0.65	0.61	0.74	0.87	1.06	
10	CP/DP	0.58	0.68	0.63	0.77	0.92	1.11	
	CAA	0.61	0.71	0.66	0.81	0.96	1.16	

15-P-4								
No. of Bearing Bars	Nosing	Bearing Bar Size						
		1" x 1/8"	1-1/4" x 1/8"	3/4" x 3/16"	1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"	1-1/2" x 3/16"
6	CP/DP	0.37	0.43	0.39	0.48	0.58	0.69	
	CAA	0.40	0.47	0.44	0.52	0.61	0.73	
7	CP/DP	0.41	0.48	0.45	0.56	0.65	0.78	
	CAA	0.46	0.63	0.49	0.59	0.69	0.83	
8	CP/DP	0.47	0.53	0.50	0.62	0.73	0.88	
	CAA	0.50	0.58	0.53	0.65	0.77	0.93	
9	CP/DP	0.51	0.60	0.56	0.69	0.82	0.99	
	CAA	0.55	0.63	0.59	0.72	0.85	1.02	
10	CP/DP	0.56	0.65	0.60	0.75	0.89	1.09	
	CAA	0.60	0.69	0.64	0.80	0.94	1.12	
11	CP/DP	0.60	0.71	0.65	0.82	0.97	1.19	
	CAA	0.64	0.75	0.70	0.86	1.01	1.23	

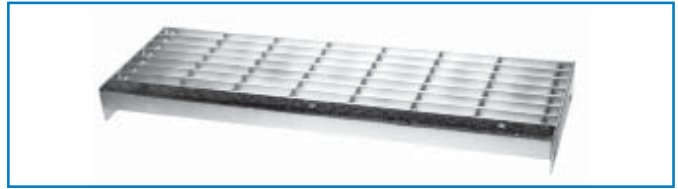
CP-Checkered Plate  
DP-Dimple Plate  
CAA-Cast Aluminum Abrasive

# Stair Treads

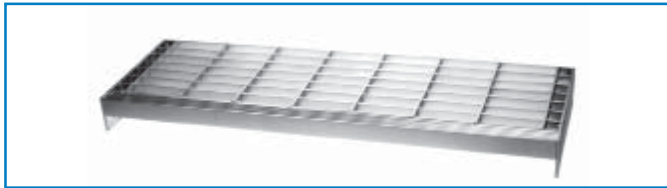
## ALUMINUM/RECTANGULAR BAR SWAGE-LOCKED & PRESS-LOCKED



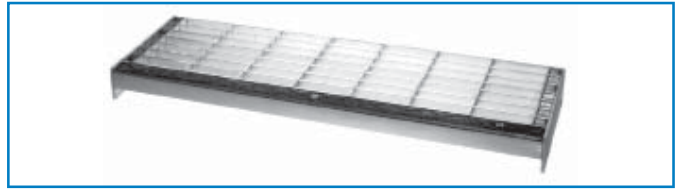
**Swage-Locked (SR)**  
Corrugated Aluminum Nosing (CORR)



**Swage-Locked (SR)**  
Cast Aluminum Abrasive Nosing (CAA)



**Press-Locked (AP)**  
Corrugated Aluminum Nosing (CORR)



**Press-Locked (AP)**  
Cast Aluminum Abrasive Nosing (CAA)

### MAXIMUM TREAD LENGTHS

Bearing Bar Size	Bearing Bar Spacing		
	1-3/16" (19 space)	15/16" (15 space)	
	Plain	Serrated	Serrated
1" x 3/16"	2'-4"	2'-2"	2'-6"
1-1/4" x 3/16"	2'-10"	2'-7"	2'-9"
1-1/2" x 3/16"	3'-6"	3'-2"	3'-10"
1-3/4" x 3/16"	4'-3"	3'-10"	4'-8"

When tread length exceeds 5'-6", design tread for 300 lb concentrated loads at 1/3 points. Maximum tread length based on 300 lb concentrated load on front 5 in of tread at center of tread length and deflection limitation of 1/240 of length.

### END PLATE DIMENSIONS

Grating Depth	"B" dimension	"C" dimension
up to 1-1/4"	1-3/4"	2-1/2"
*1-1/2" to 1-3/4"	2-1/4"	3"

See Tread Width and Bolt Hole Spacing for "A" dimension.  
\*and all aluminum

With Cast Aluminum Abrasive Nosing

### TREAD WIDTH & BOLT HOLE SPACING

19-SR-4 and 19-AP-4		
No. of Bearing Bars and Nosing	Bearing Bar 3/16"	**Bolt Hole Spacing "A"
	Tread Width	
5	6-3/16"	2-1/2"
6	7-3/8"	4-1/2"
7	8-9/16"	4-1/2"
8	9-3/4"	7"
9	10-15/16"	7"
10	12-1/8"	7"

\*\*See drawing above.

15-SR-4 and 15-AP-4		
No. of Bearing Bars and Nosing	Bearing Bar 3/16"	**Bolt Hole Spacing "A"
	Tread Width	
6	6-1/8"	2-1/2"
7	7-1/16"	4-1/2"
8	8"	4-1/2"
9	8-15/16"	4-1/2"
10	9-7/8"	7"
11	10-13/16"	7"

\*\*See drawing above.

### STAIR TREAD WEIGHTS (per lineal inch of tread length)

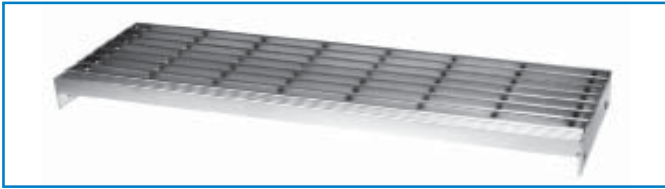
19-SR-4					
No. of Bearing Bars	Nosing	Bearing Bar Size			
		1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"	1-3/4" x 3/16"
5	CORR	.15	.17	.20	.22
	CAA	.19	.21	.24	.26
6	CORR	.17	.20	.23	.26
	CAA	.21	.23	.27	.30
7	CORR	.19	.23	.27	.30
	CAA	.23	.26	.31	.33
8	CORR	.22	.25	.30	.34
	CAA	.26	.29	.34	.38
9	CORR	.24	.28	.33	.38
	CAA	.28	.32	.37	.41
10	CORR	.26	.31	.37	.41
	CAA	.30	.35	.41	.46

15-SR-4					
No. of Bearing Bars	Nosing	Bearing Bar Size			
		1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"	1-3/4" x 3/16"
6	CORR	.16	.19	.23	.25
	CAA	.21	.23	.27	.29
7	CORR	.19	.22	.26	.29
	CAA	.23	.26	.30	.33
8	CORR	.21	.24	.29	.33
	CAA	.25	.29	.33	.36
9	CORR	.23	.27	.32	.36
	CAA	.27	.31	.36	.41
10	CORR	.25	.30	.35	.40
	CAA	.29	.34	.39	.44
11	CORR	.28	.33	.39	.44
	CAA	.32	.37	.43	.48

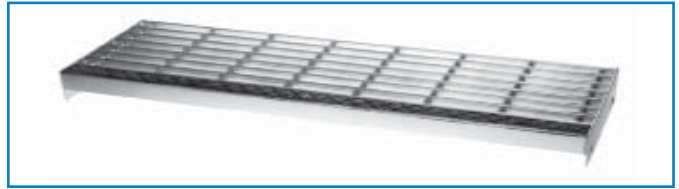
**NOTE:**  
Weights are for Swage-Locked only. Call for Weights on Pressed-Locked.

# Stair Treads

## ALUMINUM / I-BAR SWAGE-LOCK



**Swage-Locked (SI)**  
Corrugated Aluminum Nosing (CORR)



**Swage-Locked (SI)**  
Cast Aluminum Abrasive Nosing (CAA)

### MAXIMUM TREAD LENGTHS

Bearing Bar Size	Bearing Bar Spacing	
	1-3/16" (19 space)	15/16" (15 space)
1" x 1/4"	2'-4"	2'-6"
1-1/4" x 1/4"	2'-10"	3'-1"
1-1/2" x 1/4"	3'-6"	3'-10"
1-3/4" x 1/4"	4'-3"	4'-8"

When tread length exceeds 5'-6", design tread for 300 lb concentrated loads at 1/3 points. Maximum tread length based on 300 lb concentrated load on front 5 in of tread at center of tread length and deflection limitation of 1/240 of length.

### TREAD WIDTH & BOLT HOLE SPACING

19-SI-4		
No. of Bearing Bars and Nosing	Bearing Bar 1/4"	**Bolt Hole Spacing "A"
	Tread Width	
5	6-1/4"	2-1/2"
6	7-7/16"	4-1/2"
7	8-5/8"	4-1/2"
8	9-13/16"	7"
9	11"	7"
10	12-3/16"	7"

\*\*See drawing above.

15-SI-4		
No. of Bearing Bars and Nosing	Bearing Bar 1/4"	**Bolt Hole Spacing "A"
	Tread Width	
6	6-3/16"	2-1/2"
7	7-1/8"	4-1/2"
8	8-1/16"	4-1/2"
9	9"	4-1/2"
10	9-15/16"	7"
11	10-7/8"	7"

\*\*See drawing above.

### STAIR TREAD WEIGHTS (per lineal inch of tread length)

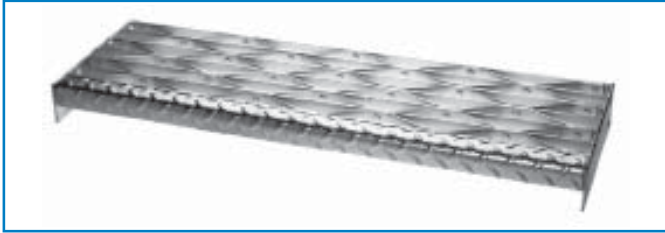
19-SI-4 and 19-P-4					
No. of Bearing Bars	Nosing	Bearing Bar Size			
		1" x 1/4"	1-1/4" x 1/4"	1-1/2" x 1/4"	1-3/4" x 1/4"
5	CORR	.13	.14	.16	.18
	CAA	.17	.18	.20	.22
6	CORR	.14	.16	.19	.21
	CAA	.18	.21	.23	.25
7	CORR	.16	.19	.21	.24
	CAA	.20	.23	.25	.28
8	CORR	.18	.21	.24	.26
	CAA	.22	.25	.28	.31
9	CORR	.20	.23	.26	.29
	CAA	.24	.27	.31	.34
10	CORR	.22	.25	.29	.33
	CAA	.26	.29	.33	.36

15-SI-4 and 15-P-4					
No. of Bearing Bars	Nosing	Bearing Bar Size			
		1" x 1/4"	1-1/4" x 1/4"	1-1/2" x 1/4"	1-3/4" x 1/4"
6	CORR	.14	.16	.18	.20
	CAA	.18	.20	.22	.24
7	CORR	.16	.18	.20	.23
	CAA	.20	.22	.24	.27
8	CORR	.17	.20	.22	.26
	CAA	.21	.24	.27	.29
9	CORR	.19	.22	.25	.28
	CAA	.23	.26	.29	.33
10	CORR	.21	.24	.28	.31
	CAA	.25	.28	.30	.35
11	CORR	.23	.26	.30	.33
	CAA	.27	.31	.34	.38

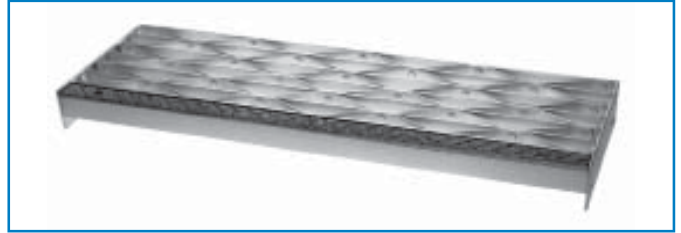
CORR-Corrugated Aluminum Nosing  
CAA-Cast Aluminum Abrasive Nosing

# Stair Treads

## STEEL/RIVETED



**Riveted (R)**  
Checker Plate Nosing (CP)



**Riveted (R)**  
Cast Aluminum (CAA) Abrasive Nosing

### MAXIMUM TREAD LENGTHS

Bearing Bar Size	Bearing Bar Spacing			
	1-1/4" (18 space)		3/4" (12 space)	
	Plain	Serrated	Plain	Serrated
3/4" x 3/16"	2'-0"	1'-5"	2'-8"	1'-9"
1" x 1/8"	2'-7"	1'-11"	3'-0"	2'-1"
1" x 3/16"	2'-10"	2'-0"	4'-0"	2'-8"
1-1/4" x 1/8"	3'-7"	2'-7"	4'-2"	3'-0"
1-1/4" x 3/16"	3'-10"	2'-10"	5'-1"	4'-0"
1-1/2" x 3/16"	5'-2"	3'-10"	5'-6"	5'-1"

When tread length exceeds 5'-6", design tread for 300 lb concentrated loads at 1/3 points. Maximum tread length based on 300 lb concentrated load on front 5 in of tread at center of tread length and deflection limitation of 1/240 of length. Maximum lengths for serrated apply only if bearing bars are serrated.

### END PLATE DIMENSIONS

Grating Depth	"B" dimension	"C" dimension
up to 1-1/4"	1-3/4"	2-1/2"
*1-1/2" to 1-3/4"	2-1/4"	3"

See Tread Width and Bolt Hole Spacing for "A" dimension.  
\*and all aluminum

### TREAD WIDTH AND BOLT HOLE SPACING

18-R-7			
No. of Bearing Bars and Nosing	Bearing Bar		**Bolt Hole Spacing "A"
	1/8"	3/16"	
	Tread Width		
5	6-3/8"	6-11/16"	2-1/2"
6	7-5/8"	8"	4-1/2"
7	8-7/8"	9-5/16"	4-1/2"
8	10-1/8"	10-5/8"	7"
9	11-3/8"	11-15/16"	7"
10	12-5/8"	13-1/4"	7"

\*\*See drawing above.

12-R-7			
No. of Bearing Bars and Nosing	Bearing Bar		**Bolt Hole Spacing "A"
	1/8"	3/16"	
	Tread Width		
6	5-3/4"	6-1/8"	2-1/2"
7	6-5/8"	7-1/16"	4-1/2"
8	7-1/2"	8"	4-1/2"
9	8-3/8"	8-15/16"	4-1/2"
10	9-1/4"	9-7/8"	7"
11	10-1/8"	10-13/16"	7"

\*\*See drawing above.

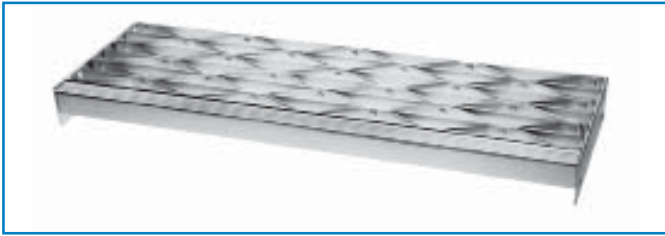
### STAIR TREAD WEIGHTS (per lineal inch of tread length)

18-R-7							
No. of Bearing Bars	Nosing	Bearing Bar Size					
		1" x 1/8"	1-1/4" x 1/8"	3/4" x 3/16"	1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"
5	CP	.38	.41	.42	.48	.54	.59
	CAA	.43	.43	.49	.53	.58	.64
6	CP	.45	.49	.49	.57	.64	.71
	CAA	.50	.54	.57	.62	.69	.76
7	CP	.53	.57	.57	.66	.75	.84
	CAA	.58	.62	.65	.71	.80	.89
8	CP	.60	.65	.65	.75	.85	.96
	CAA	.65	.70	.74	.80	.90	1.01
9	CP	.67	.72	.73	.85	.96	1.08
	CAA	.72	.77	.83	.90	1.01	1.13
10	CP	.74	.80	.81	.94	1.07	1.20
	CAA	.79	.85	.90	.99	1.12	1.25

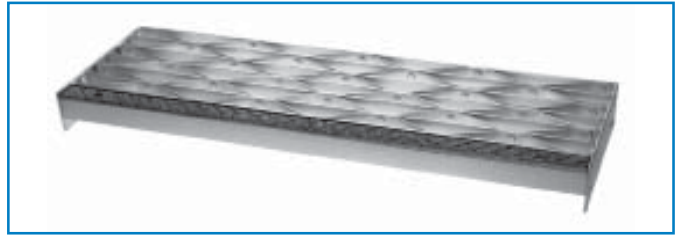
12-R-7							
No. of Bearing Bars	Nosing	Bearing Bar Size					
		1" x 1/8"	1-1/4" x 1/8"	3/4" x 3/16"	1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"
6	CP	.45	.49	.47	.55	.61	.68
	CAA	.50	.54	.52	.60	.66	.73
7	CP	.52	.57	.59	.63	.71	.80
	CAA	.56	.62	.59	.68	.76	.84
8	CP	.58	.64	.62	.72	.81	.91
	CAA	.63	.69	.67	.77	.86	.96
9	CP	.65	.72	.69	.81	.91	1.02
	CAA	.70	.77	.74	.86	.96	1.03
10	CP	.72	.80	.77	.90	1.01	1.14
	CAA	.77	.85	.81	.94	1.04	1.19
11	CP	.79	.88	.84	.98	1.11	1.25
	CAA	.84	.92	.89	1.03	1.16	1.30

# Stair Treads

## ALUMINUM/RIVETED



**Riveted (R)**  
Corrugated Aluminum Nosing (CORR)



**Riveted (R)**  
Cast Aluminum Abrasive Nosing (CAA)

### MAXIMUM TREAD LENGTHS

Bearing Bar Size	Bearing Bar Spacing			
	1-1/4" (18 space)		3/4" (12 space)	
	Plain	Serrated	Plain	Serrated
1" x 1/8"	2'-0"	1'-6"	2'-3"	1'-8"
1" x 3/16"	2'-2"	1'-7"	2'-6"	2'-1"
1-1/4" x 1/8"	2'-6"	2'-0"	2'-8"	2'-3"
1-1/4" x 3/16"	2'-7"	2'-2"	3'-1"	2'-6"
1-1/2" x 3/16"	3'-2"	2'-7"	3'-10"	3'-1"

When tread length exceeds 5'-6", design tread for 300 lb concentrated loads at 1/3 points. Maximum tread length based on 300 lb concentrated load on front 5 in of tread at center of tread length and deflection limitation of 1/240 of length. Maximum lengths for serrated apply only if bearing bars are serrated.

### END PLATE DIMENSIONS

Grating Depth	"B" dimension	"C" dimension
up to 1-1/4"	1-3/4"	2-1/2"
*1-1/2" to 1-3/4"	2-1/4"	3"

See Tread Width and Bolt Hole Spacing for "A" dimension.  
\*and all aluminum

### TREAD WIDTH AND BOLT HOLE SPACING

18-AR-7			
No. of Bearing Bars and Nosing	Bearing Bar		**Bolt Hole Spacing "A"
	1/8"	3/16"	
	Tread Width		
5	6-3/8"	6-11/16"	2-1/2"
6	7-5/8"	8"	4-1/2"
7	8-7/8"	9-5/16"	4-1/2"
8	10-1/8"	10-5/8"	7"
9	11-3/8"	11-15/16"	7"
10	12-5/8"	13-1/4"	7"

\*\*See drawing above.

12-AR-7			
No. of Bearing Bars and Nosing	Bearing Bar		**Bolt Hole Spacing "A"
	1/8"	3/16"	
	Tread Width		
6	5-3/4"	6-1/8"	2-1/2"
7	6-5/8"	7-1/16"	4-1/2"
8	7-1/2"	8"	4-1/2"
9	8-3/8"	8-15/16"	4-1/2"
10	9-1/4"	9-7/8"	7"
11	10-1/8"	10-13/16"	7"

\*\*See drawing above.

### STAIR TREAD WEIGHTS (per lineal inch of tread length)

18-AR-7						
No. of Bearing Bars	Nosing	Bearing Bar Size				
		1" x 1/8"	1" x 1/8" x 1/8"	1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"
5	CORR	.14	.15	.18	.20	.22
	CAA	.18	.18	.22	.23	.26
6	CORR	.17	.18	.21	.24	.26
	CAA	.20	.22	.25	.27	.30
7	CORR	.20	.21	.24	.28	.31
	CAA	.23	.25	.28	.32	.35
8	CORR	.22	.24	.28	.32	.36
	CAA	.26	.28	.32	.35	.39
9	CORR	.25	.27	.32	.36	.40
	CAA	.29	.30	.35	.39	.44
10	CORR	.27	.30	.35	.40	.44
	CAA	.31	.33	.39	.43	.48

12-AR-7						
No. of Bearing Bars	Nosing	Bearing Bar Size				
		1" x 1/8"	1-1/4" x 1/8"	1" x 3/16"	1-1/4" x 3/16"	1-1/2" x 3/16"
5	CORR	.17	.18	.20	.23	.25
	CAA	.20	.22	.24	.26	.29
6	CORR	.19	.21	.23	.26	.30
	CAA	.23	.25	.27	.30	.33
7	CORR	.21	.24	.27	.30	.34
	CAA	.25	.27	.30	.34	.37
8	CORR	.24	.27	.30	.34	.38
	CAA	.28	.30	.34	.37	.41
9	CORR	.27	.30	.33	.37	.42
	CAA	.30	.33	.37	.41	.46
10	CORR	.29	.33	.36	.41	.46
	CAA	.33	.36	.40	.45	.50

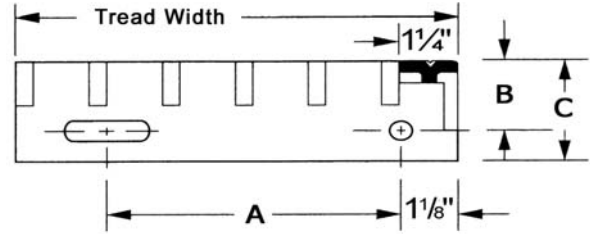
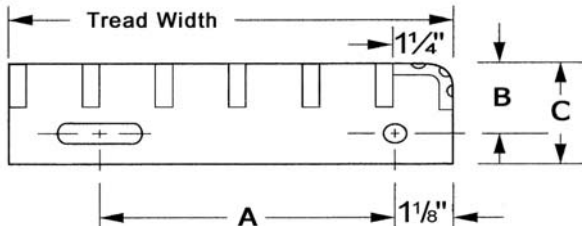


# Stair Treads

## STEEL / WELDED & PRESS-LOCKED TREAD END PLATE DETAILS

With Checkered Plate Nosing

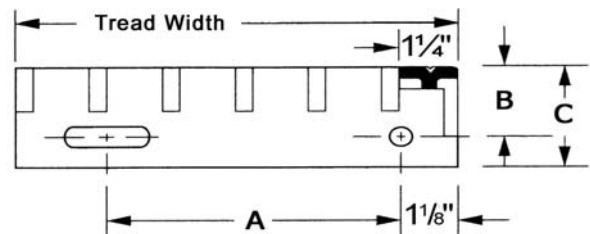
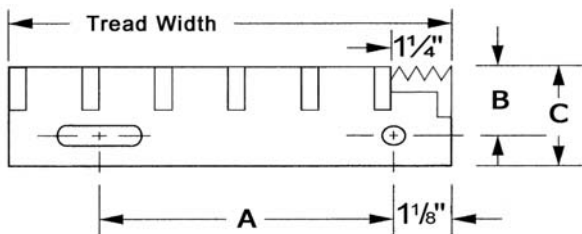
With Cast Aluminum Abrasive Nosing



## ALUMINUM / RECTANGULAR BAR SWAGE-LOCKED & PRESS-LOCKED TREAD END PLATE DETAILS

With Corrugated Aluminum Nosing

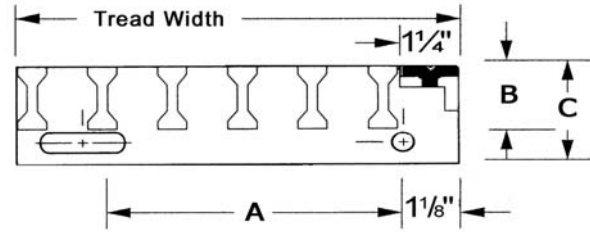
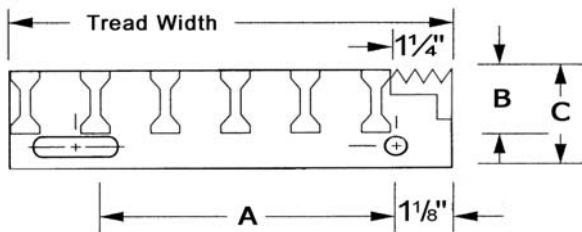
With Cast Aluminum Abrasive Nosing



## ALUMINUM / I-BAR SWAGE-LOCK TREAD END PLATE DETAILS

With Corrugated Aluminum Nosing

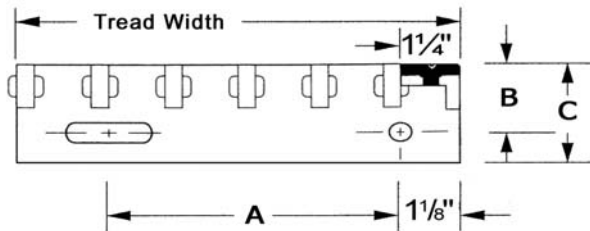
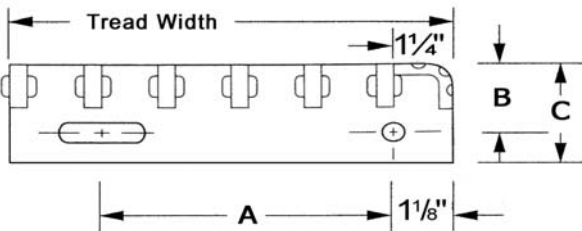
With Cast Aluminum Abrasive Nosing



## STEEL / RIVETED TREAD END PLATE DETAILS

With Checkered Plate Nosing

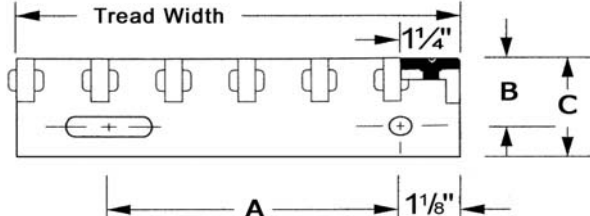
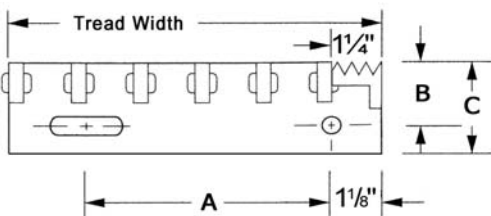
With Cast Aluminum Abrasive Nosing



## ALUMINUM / RIVETED TREAD END PLATE DETAILS

With Corrugated Aluminum Nosing

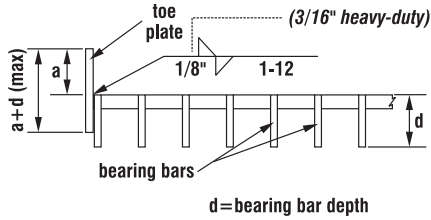
With Cast Aluminum Abrasive Nosing



# Welding Standards

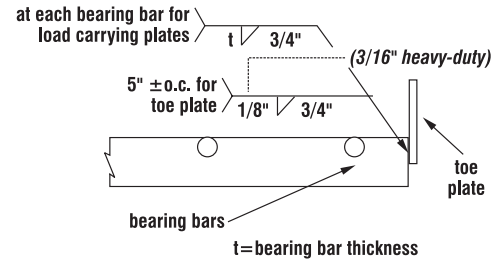
## TOEPLATES

Maximum depth of toeplate is  $(a+d)$ . It should not extend below the bearing bars. The minimum recommended dimension for "a", the projection of toe plate above the grating, is 4".



### Attachment to Length of Bearing Bar

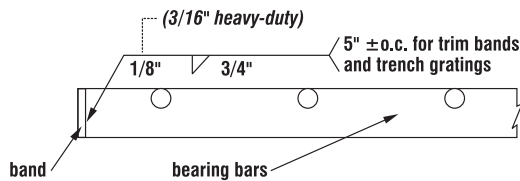
Toeplate to be welded with alternating 1/8" fillet welds, 1" long every 12".



### Attachment to End of Bearing Bar

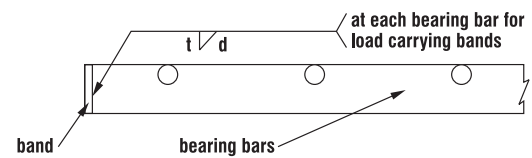
Load carrying toeplates to be welded at each bearing bar with a fillet weld the size of the bearing bar thickness ( $t$ ), 3/4" long. Non-load carrying toeplates to be welded to bearing bars with 1/8" fillet weld (3/16" for heavy-duty), 3/4" long every 5".

## BANDING



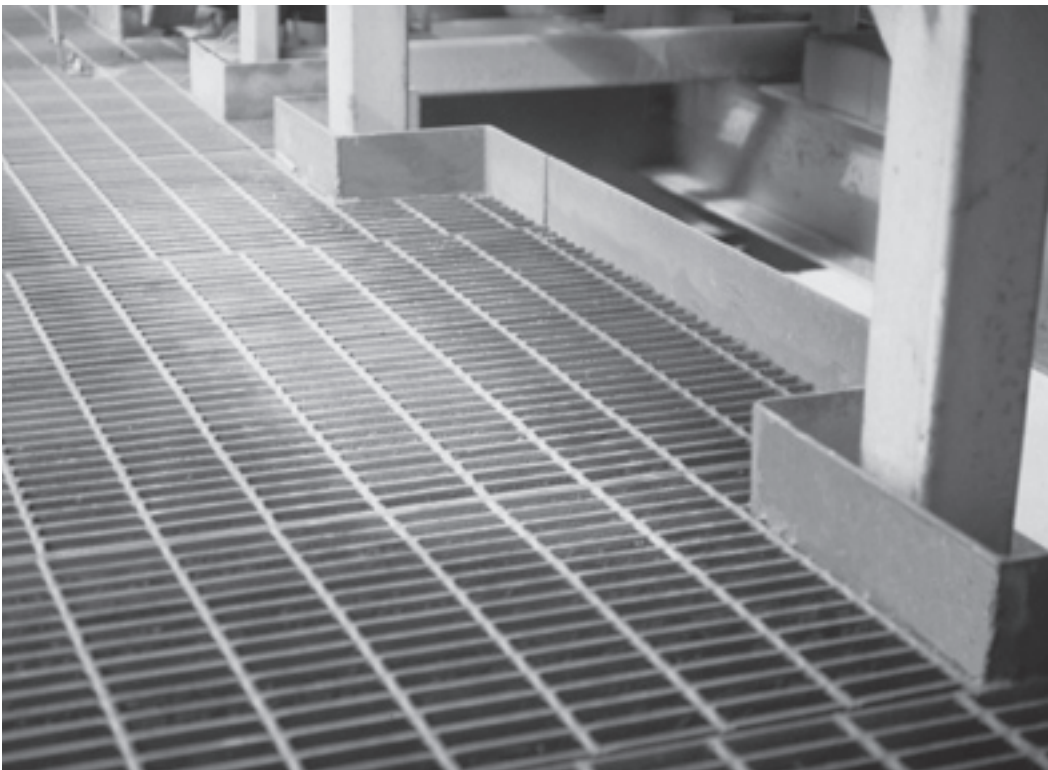
### Standard Trim Band

End band to be welded with 1/8" fillet welds (3/16" for heavy duty), 3/4" long every 5".



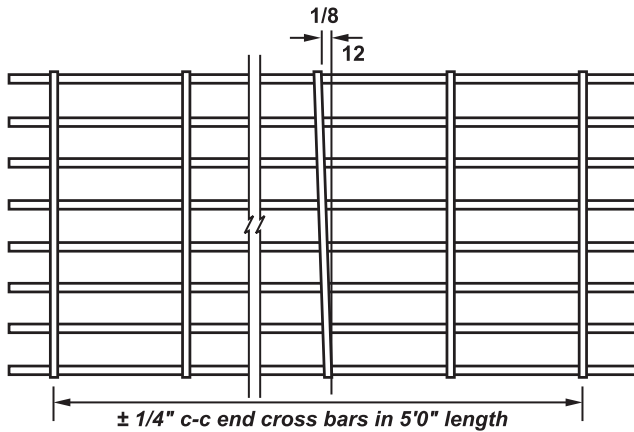
### Load Banding (must specify)

Load carrying end band to be welded with fillet weld the size of bearing bar thickness ( $t$ ) and the length of bearing bar depth ( $d$ ) at each bearing bar. This spec is for standard grating. Refer to NAAMM MBG 532 for heavy duty specification.



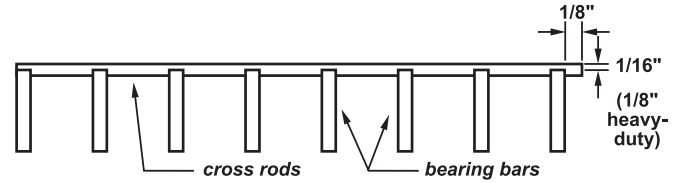
# Manufacturing Tolerances

## BEARING BAR AND CROSS ROD TOLERANCES



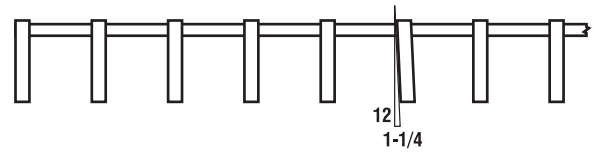
### Cross Rod Spacing and Alignment

Cross rods should not vary more than 1/8 in 12 in either direction from perpendicular alignment with bearing bars. The tolerance of the cross bar spacing for 5' in length is  $\pm 1/4$ ".



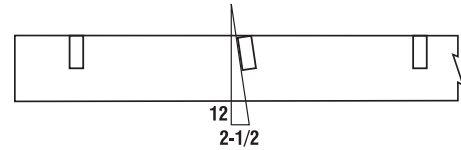
### Cross Rod Position

The top of the cross rod should not project more than 1/16" above the top of the bearing bars for standard grating (1/8" for heavy-duty) and should not extend more than 1/8" from side of bearing bars.



### Bearing Bar Lean

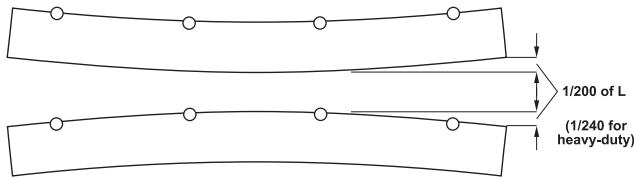
Bearing bar lean must not exceed a slope of 1-1/4 to 12.



### Cross Bar Lean

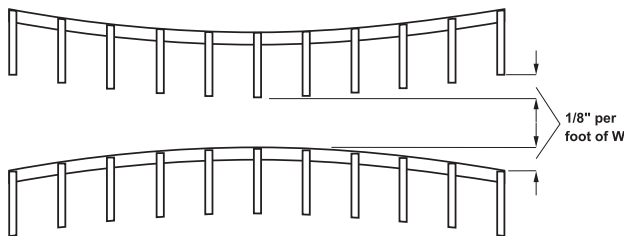
Cross bar lean must not exceed a slope of 2-1/2 to 12.

## PANEL TOLERANCES



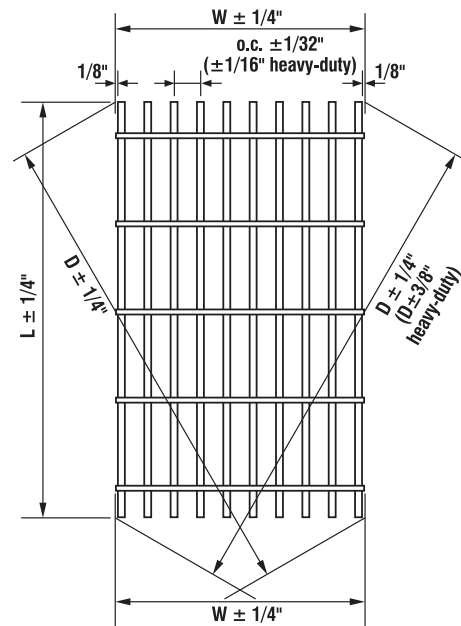
### Longitudinal Bow

Longitudinal bow should be less than 1/200 of the length for standard grating (1/240 for heavy duty).



### Transverse Bow

Before banding, the transverse bow should be less than 1/8" per foot of width.



### Overall Dimensions and Squareness

D = Overall diagonal dimension

W = Length of cross rods including extensions outside of bearing bars

L = Length of bearing bars

AMICO manufactures grating to meet or exceed ANSI/NAAMM MBG531; and Heavy Duty Metal Bar Grating to ANSI/NAAMM MBG532.



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