

## GRS24: Grip-Strut Bridge Channel



### Features:

- Serrated diamond pattern allows flexibility in attaching hardware
- 24" wide channels with 3" side rails

### Construction:

- 12 gauge steel

### Related Products:

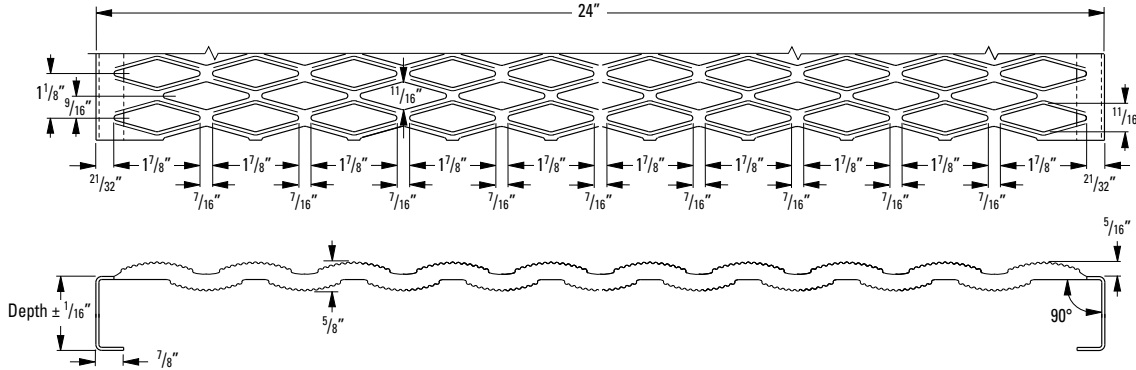
- GRS12, GRS12-10, and GRS7 Grip-Strut Bridge Channels; B501 Solid Bridge Channel

Part #	Size	Gauge	Depth
GRS24	24" x 10'	12	3"
GRS24-12	24" x 12'	12	3"

# GRS24: Grip-Strut Bridge Channel

## Safe Loading Tables

### 10-Diamond Plank – 24" Width



### Product Selection/Design Tables

Allowable Loads and Deflections: U=Uniform Load (lb./ft.) C= Concentrated Load (lb.) D=Deflection (in.)  
 Spans to the left of heavy red line produce a deflection of 1/4" or less under a uniform load of 100 lb./ft.<sup>2</sup>

Material Gauge	Channel Depth in. (mm)	Weight lb./lin. ft. (kg/m)	Catalog Number	Span																	
				2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	
Steel 14 ga.	2" (50.8)	7.4 (11.0)	102014	U	300	300	228	168	128	102	82	68	57	49	42						
				D	.46	.48	.42	.38	.38	.41	.44	.49	.55	.62	.70						
				C	400	400	343	294	257	229	206	187	172	158	147						
	D	.34	.35	.32	.30	.29	.29	.30	.31	.33	.35	.37									
	3" (76.2)	7.9 (11.8)	103014	U	300	300	300	264	202	160	130	107	90	77	66	58	51	40			
				D	.42	.43	.46	.44	.39	.36	.35	.36	.39	.44	.45	.49	.54	.65			
C				400	400	400	400	400	360	324	295	270	249	232	216	203	180				
D	.33	.33	.34	.35	.37	.35	.33	.33	.32	.32	.33	.34	.35	.38							
Steel 12 ga.	2" (50.8)	10.4 (15.5)	102012	U	475	416	289	212	162	128	104	86	72	62	53	46					
				D	.40	.39	.33	.31	.31	.34	.38	.44	.48	.56	.63	.71					
				C	650	520	434	372	325	289	260	237	217	200	186	174					
	D	.26	.22	.19	.20	.20	.21	.22	.23	.25	.28	.31	.34								
	3" (76.2)	11.1 (16.5)	103012	U	475	475	475	392	300	237	192	159	133	114	98	85	75	59	48		
				D	.38	.39	.42	.38	.36	.34	.35	.37	.39	.43	.47	.52	.58	.70	.85		
C				900	900	800	686	600	534	480	437	400	369	343	320	300	267	240			
D	.34	.35	.33	.29	.27	.26	.26	.26	.26	.26	.27	.29	.30	.32	.36	.41					

### Engineering Data For Both Channels

Material Gauge	Channel Depth in.	Sx in. <sup>3</sup>	Ix in. <sup>4</sup>	EI lb. x in. <sup>6</sup>
Steel	2"	.303	.232	6.73 x 10 <sup>6</sup>
14 ga.	3"	.484	.713	20.68 x 10 <sup>6</sup>
Steel	2"	.387	.346	10.03 x 10 <sup>6</sup>
12 ga.	3"	.715	.959	27.81 x 10 <sup>6</sup>

### Strut Loading

Material Gauge	Type Loading**	Load	Deflection in.
Steel	U	300	.49
14 ga.	Cs	300	.40
Steel	U	475	.45
12 ga.	Cs	475	.36

\*\* U = Allowable Uniform Load (lb./ft.)  
 Cs = Allowable Concentrated Load per ft. of length at mid-width (lb./ft.)