



WEAVER CONSTRUCTION MANAGEMENT, INC.
3679 S. Huron St., Suite 404
Englewood, CO 80110
Phone: (303) 789-4111 FAX: (303) 789-4310

SUBMITTAL TRANSMITTAL

October 21, 2011

WCM Submittal No: 05500-003

PROJECT: Harold Thompson Regional WRF
Birdsall Rd.
Fountain, CO 80817
Job No. 2908

ENGINEER: GMS, Inc.
611 No. Weber St., #300
Colorado Springs, CO 80903
719-475-2935 Roger Sams

OWNER: Lower Fountain Metropolitan
Sewage Disposal District
901 S. Santa Fe Ave.
Fountain, CO 80817
719-382-5303 James Heckman

CONTRACTOR: Weaver Construction Management

SUBJECT: McNichols® Company Heavy Duty GRIP STRUT® Safety Grating and Fastners for Walkways
at the Aerobic Digester and Aeration Basin - (H85010-W and H-BC-10)
Size: 36" width, 12' length with 5" side channel depth. 10 gauge

SPEC SECTION: 05500. - Metal Fabrications

PREVIOUS SUBMISSION DATES:

DEVIATIONS FROM SPEC: ___ YES X NO

CONTRACTOR'S STAMP: This submittal has been reviewed by WCM and approved with respect to the means, methods, techniques, & safety precautions & programs incidental thereto. Weaver General Construction also warrants that this submittal complies with contracted documents and comprises on deviations thereto.

Contractor's Stamp:

Engineer's Stamp:

Date: 10/21/11

Reviewed by: H.C. Myers
(X) Reviewed Without Comments
() Reviewed With Comments

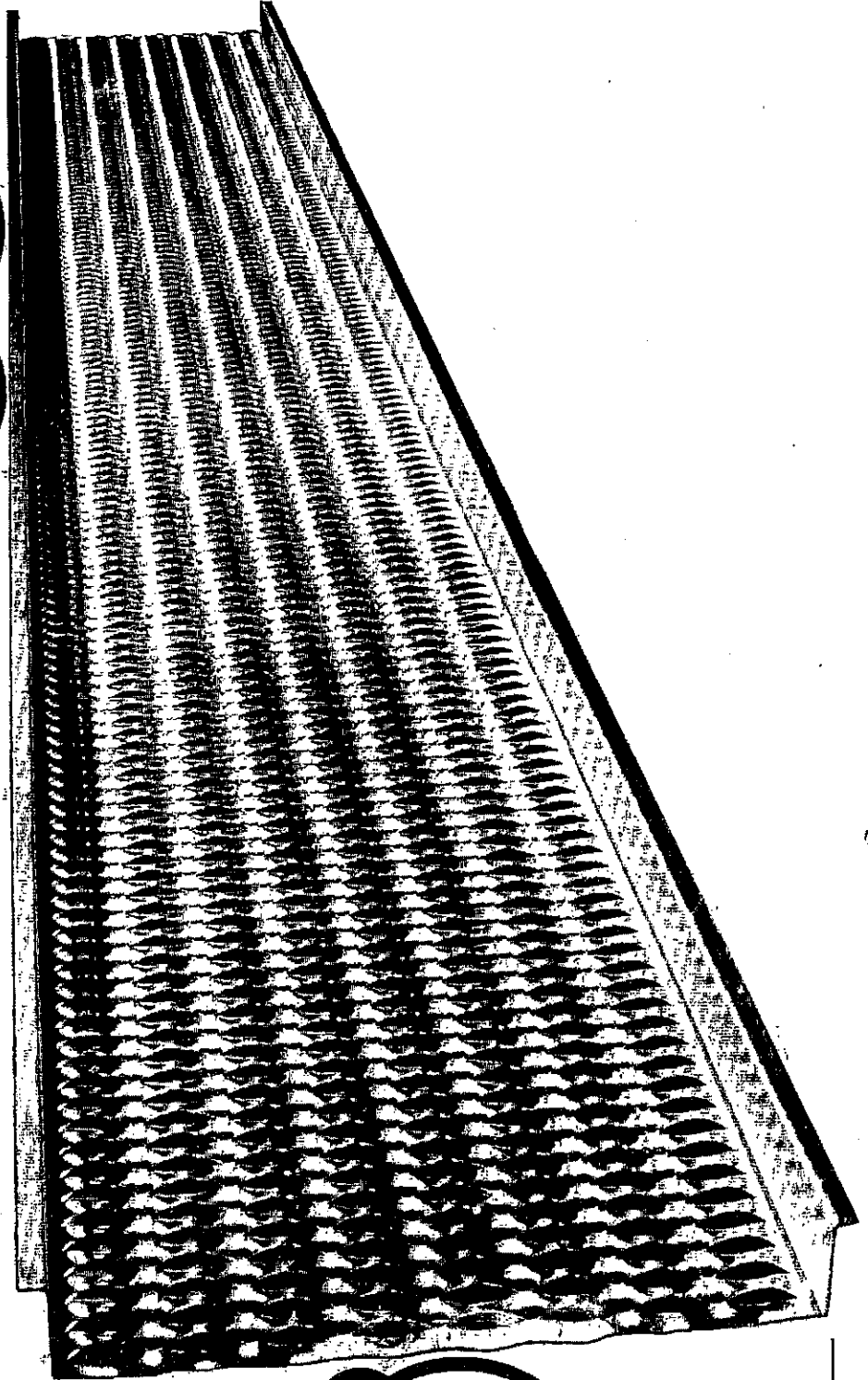
ENGINEER'S
COMMENTS:

Heavy-Duty

GRIP STRUT® Safety Grating

Long Span Walkways, Planks & Stair Treads

WALKWAYS
CLEAR SPAN
24 FEET
WITHOUT
EXTRA SUPPORT

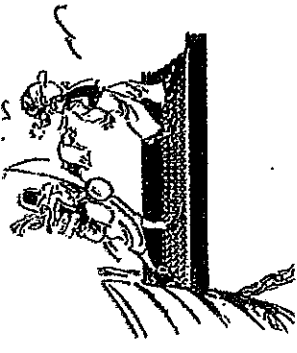


METALS

GRIP STRUT® GLOBE STRUT® GLOBETRAY®

R.R. 4, Box 7
Pinckneyville, Illinois 62274
618 • 357-5353
800 • 851-9341 (Outside Illinois)
FAX 618 • 357-3605

UP TO 36" WIDE



ALLOWABLE DESIGN LOADS/DEFLECTION

Steel/Aluminum WALKWAYS

5-diamond (24" wide)
6-diamond (30" wide)
8-diamond (36" wide)

STEEL WALKWAY SELECTION & DESIGN LOAD/DEFLECTIONS

Width	Thickness Gauge	Channel Depth in.	Weight lb./ft.	Catalog Number	Load Type	Clear Span																		
						4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	18'-0"	20'-0"	22'-0"	24'-0"		
24"	11	5	15.4	H-55011-W	U	750	460	534	245	187	148	120	99	83	71	62	54	47	37	30	25	21		
					D	0.34	0.35	0.38	0.34	0.34	0.35	0.42	0.50	0.59	0.69	0.79	0.91	1.13	1.43	1.70	2.03			
					C	3000	2400	2000	1714	1500	1334	1200	1091	1000	922	857	800	750	666	600	546	500		
					D	0.27	0.28	0.31	0.28	0.28	0.27	0.28	0.34	0.41	0.48	0.55	0.63	0.72	0.91	1.13	1.36	1.62		
24"	10	5	17.5	H-55010-W	U	937	600	417	306	234	185	150	124	104	89	77	67	59	46	38	31	26		
					D	0.38	0.39	0.42	0.38	0.38	0.39	0.47	0.56	0.66	0.77	0.88	1.01	1.26	1.59	1.89	2.25			
					C	3750	3000	2500	2143	1875	1667	1500	1364	1250	1153	1071	1000	938	833	750	682	625		
					D	0.30	0.31	0.34	0.31	0.30	0.30	0.31	0.38	0.45	0.53	0.61	0.70	0.80	1.01	1.25	1.51	1.80		
24"	9	5	19.6	H-5509-W	U	1031	650	459	337	257	204	165	136	114	98	85	74	65	51	42	34	29		
					D	0.36	0.39	0.42	0.38	0.38	0.39	0.47	0.56	0.66	0.77	0.88	1.01	1.26	1.59	1.89	2.25			
					C	4125	3300	2750	2357	2063	1834	1650	1500	1375	1268	1178	1100	1032	916	825	750	688		
					D	0.30	0.31	0.34	0.31	0.30	0.30	0.31	0.38	0.45	0.53	0.61	0.70	0.80	1.01	1.25	1.51	1.80		
30"	11	5	17.7	H-65011-W	U	732	468	325	239	183	145	116	96	81	69	60	52	45	36	28	24	20		
					D	0.33	0.39	0.36	0.41	0.38	0.37	0.37	0.44	0.51	0.59	0.68	0.77	0.98	1.20	1.46	1.73			
					C	3657	2932	2444	2095	1832	1629	1467	1333	1222	1128	1047	977	916	815	732	667	610		
					D	0.27	0.31	0.29	0.29	0.33	0.31	0.30	0.30	0.35	0.41	0.48	0.55	0.62	0.78	0.97	1.17	1.40		
30"	10	5	19.9	H-65010-W	U	916	586	407	299	229	182	146	121	102	87	75	65	57	45	36	30	25		
					D	0.37	0.43	0.40	0.40	0.46	0.42	0.41	0.49	0.57	0.66	0.75	0.86	1.09	1.33	1.62	1.92			
					C	4894	3866	3056	2619	2291	2037	1834	1667	1528	1410	1309	1222	1146	1019	916	834	763		
					D	0.30	0.34	0.32	0.32	0.37	0.34	0.33	0.33	0.39	0.45	0.53	0.61	0.69	0.87	1.08	1.30	1.55		
30"	9	5	22.1	H-6509-W	U	1007	644	447	328	251	200	160	133	112	95	82	71	62	49	39	33	27		
					D	0.37	0.43	0.40	0.40	0.46	0.42	0.41	0.49	0.57	0.66	0.75	0.86	1.09	1.33	1.62	1.92			
					C	5042	4082	3361	2880	2520	2240	2017	1833	1660	1551	1439	1344	1260	1120	1007	917	838		
					D	0.30	0.34	0.32	0.32	0.37	0.34	0.33	0.33	0.39	0.45	0.53	0.61	0.69	0.87	1.08	1.30	1.55		
36"	11	5	20.2	H-85011-W	U	444	284	197	144	111	88	71	58	49	42	36	31	28	21	17	14	11		
					D	0.35	0.35	0.30	0.29	0.30	0.32	0.35	0.38	0.46	0.54	0.62	0.71	0.82	1.04	1.26	1.50	1.76		
					C	2864	2183	1777	1524	1333	1184	1066	969	888	820	761	711	666	592	533	484	444		
					D	0.28	0.28	0.23	0.23	0.23	0.26	0.28	0.31	0.37	0.43	0.50	0.58	0.65	0.83	1.02	1.23	1.47		
36"	10	5	22.7	H-85010-W	U	556	356	247	181	139	110	89	73	62	53	45	39	35	27	22	18	14		
					D	0.39	0.39	0.33	0.32	0.33	0.36	0.39	0.42	0.51	0.60	0.69	0.79	0.91	1.15	1.40	1.67	1.94		
					C	3300	2567	2222	1905	1667	1481	1333	1212	1111	1026	952	889	833	741	667	606	554		
					D	0.31	0.31	0.26	0.26	0.26	0.29	0.31	0.34	0.41	0.48	0.55	0.64	0.72	0.92	1.13	1.37	1.64		
36"	9	5	25.3	H-8509-W	U	611	391	271	199	152	121	97	80	68	58	49	42	38	29	24	19	14		
					D	0.39	0.39	0.33	0.32	0.33	0.36	0.39	0.42	0.51	0.60	0.69	0.79	0.91	1.15	1.40	1.67	1.94		
					C	3583	2933	2444	2095	1833	1629	1466	1333	1222	1128	1047	977	916	815	733	666	610		
					D	0.31	0.31	0.26	0.26	0.26	0.29	0.31	0.34	0.41	0.48	0.55	0.64	0.72	0.92	1.13	1.37	1.64		

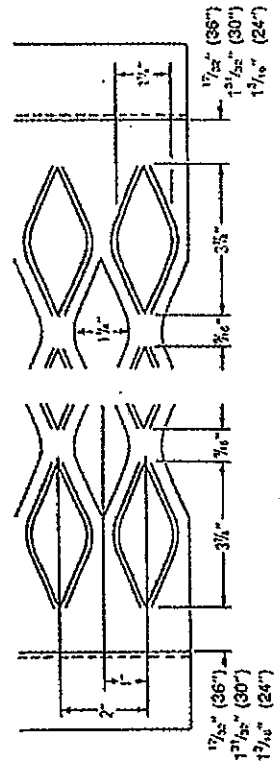
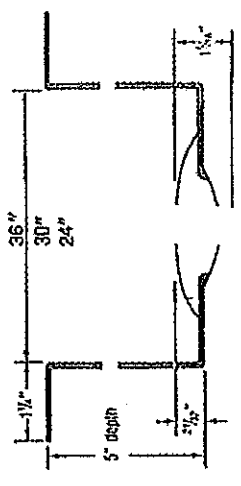
ALUMINUM WALKWAY SELECTION & DESIGN LOAD/DEFLECTIONS (30" wide)

Width	Thickness Gauge	Channel Depth in.	Weight lb./ft.	Catalog Number	Load Type	Clear Span																		
						4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	18'-0"	20'-0"	22'-0"	24'-0"		
30"	11	5	17.7	H-65011-W	U	732	468	325	239	183	145	116	96	81	69	60	52	45	36	28	24	20		
					D	0.33	0.39	0.36	0.41	0.38	0.37	0.37	0.44	0.51	0.59	0.68	0.77	0.98	1.20	1.46	1.73			
					C	3657	2932	2444	2095	1832	1629	1467	1333	1222	1128	1047	977	916	815	732	667	610		
					D	0.27	0.31	0.29	0.29	0.33	0.31	0.30	0.30	0.35	0.41	0.48	0.55	0.62	0.78	0.97	1.17	1.40		
30"	10	5	19.9	H-65010-W	U	916	586	407	299	229	182	146	121	102	87	75	65	57	45	36	30	25		
					D	0.37	0.43	0.40	0.40	0.46	0.42	0.41	0.49	0.57	0.66	0.75	0.86	1.09	1.33	1.62	1.92			
					C	4894	3866	3056	2619	2291	2037	1834	1667	1528	1410	1309	1222	1146	1019	916	834	763		
					D	0.30	0.34	0.32	0.32	0.37	0.34	0.33	0.33	0.39	0.45	0.53	0.61	0.69	0.87	1.08	1.30	1.55		

Width	Thickness Gauge	Channel Depth in.	5	19.9	H-85010-W	U	316	536	407	299	229	182	146	121	102	87	75	65	57	46	36	30	25
30"	.150	5	5	19.9	H-85010-W	D	0.37	0.43	0.40	0.40	0.46	0.42	0.41	0.41	0.49	0.57	0.66	0.75	0.85	1.09	1.33	1.82	1.92
						C	4594	3666	3056	2619	2291	2037	1654	1567	1928	1410	1309	1222	1146	1019	916	834	763
						D	0.30	0.34	0.32	0.32	0.37	0.34	0.33	0.33	0.39	0.45	0.53	0.61	0.87	1.08	1.30	1.55	1.55
30"	.150	5	5	22.1	H-8509-W	U	1007	642	447	326	251	200	160	139	112	95	82	71	62	49	39	33	27
						D	0.37	0.43	0.40	0.40	0.46	0.42	0.41	0.41	0.49	0.57	0.66	0.75	0.86	1.09	1.33	1.62	1.92
						C	5042	4032	3361	2860	2520	2240	2017	1633	1660	1551	1439	1344	1260	1120	1007	917	839
						D	0.30	0.34	0.32	0.32	0.37	0.34	0.33	0.33	0.39	0.45	0.53	0.61	0.89	1.08	1.30	1.55	1.55
36"	.150	5	5	20.2	H-85011-W	U	444	284	197	144	111	88	71	58	49	42	36	31	26	21	17	14	12
						D	0.35	0.35	0.30	0.29	0.30	0.32	0.35	0.38	0.46	0.54	0.62	0.71	0.82	1.04	1.26	1.50	1.78
						C	2664	2133	1777	1524	1333	1184	1066	969	888	820	761	711	666	592	533	484	444
						D	0.28	0.28	0.23	0.23	0.23	0.23	0.28	0.31	0.37	0.43	0.50	0.58	0.85	1.02	1.23	1.47	1.47
36"	.150	5	5	22.7	H-85010-W	U	556	356	247	181	139	110	89	73	62	53	45	39	35	27	22	18	15
						D	0.39	0.39	0.33	0.32	0.33	0.36	0.39	0.42	0.51	0.60	0.69	0.79	0.91	1.15	1.40	1.67	1.98
						C	3330	2667	2222	1905	1667	1481	1333	1212	1111	1026	952	889	833	741	667	606	556
						D	0.31	0.31	0.26	0.26	0.26	0.29	0.31	0.34	0.41	0.48	0.55	0.64	0.72	0.92	1.13	1.37	1.63
36"	.150	5	5	25.3	H-8509-W	U	611	391	271	198	152	121	97	80	68	58	49	42	38	29	24	19	16
						D	0.39	0.39	0.33	0.32	0.33	0.36	0.39	0.42	0.51	0.60	0.69	0.79	0.91	1.15	1.40	1.67	1.98
						C	3663	2933	2444	2095	1833	1629	1466	1333	1222	1128	1047	977	916	815	733	666	611
						D	0.31	0.31	0.26	0.26	0.26	0.29	0.31	0.34	0.41	0.48	0.55	0.64	0.72	0.92	1.13	1.37	1.63

ALUMINUM WALKWAY SELECTION & DESIGN LOAD/DEFLECTIONS (30" wide)

Width	Thickness Gauge	Channel Depth in.	Weight lb./ft.	Catalog Number	Load Type	Clear-Span																
						4'-0"	5'-0"	5'-0"	7'-0"	8'-0"	9'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"	16'-0"	18'-0"	20'-0"	22'-0"
ALUM.	.150	5	8.4	H-850-W -150-A	U	633.00	405.00	281.00	207.00	158.00	125.00	101.00	84.00	70.00	60.00	51.60	45.00	39.50	35.00	31.20	28.00	25.30
					D	0.31	0.35	0.40	0.48	0.58	0.67	0.77	0.86	1.02	1.20	1.39	1.60	1.82	2.06	2.30	2.57	2.85
					C	3163.00	2530.00	2108.00	1807.00	1581.00	1405.00	1255.00	1150.00	1054.00	973.00	904.00	843.00	791.00	744.00	703.00	666.00	639.00
					D	0.26	0.28	0.32	0.39	0.47	0.54	0.61	0.69	0.82	0.96	1.12	1.28	1.46	1.64	1.84	2.06	2.28



ALLOWABLE DESIGN Loads/Deflections — for
 Heavy-Duty Grip Strut® Walkways/Planks: UNIFORM
 and CONCENTRATED Loads (U and C), corresponding
 sidereal DEFLECTIONS (D); for individual grating struts:
 CONCENTRATED Loads (C_s) and corresponding strut

STRUT UNIFORM/CONCENTRATED Loads/Deflections⁽²⁾

walk-way width	material thickness	UNIFORM U (lb/ft ²)	CONCENTRATED C _s (lb/ft)	
			Serrated	Non-serr
8-d	11 ga.	298	Serrated	Non-serr
36" wide steel	10 ga.	343	447	510
	9 ga.	391	515	587
	DEFLEC (in)	0.20	0.16	0.15
6-d	11 ga.	429	537	612
30" wide steel	10 ga.	494	618	704
	9 ga.	563	703	800
	DEFLEC (in)	0.14	0.11	0.10
5-d	11 ga.	798	917	917
24" wide steel	10 ga.	912	1048	1048
	9 ga.	1026	1179	1179
	DEFLEC (in)	0.11	0.10	0.07

Heavy-Duty GRIP STRUT® Walkways— the safety of OSHA-required toeboards, built-in

Heavy-Duty GRIP STRUT® Safety Grating Walkways, like Heavy-Duty Planks, offer additional strength for walkway applications with greater load requirements. Grating surface design is identical. The walkway difference is in the side channels, which are turned up

as 5-inch toeboards, exceeding OSHA requirements. Walkways offer all the slip-resistance and self-cleaning advantages of planks, and are available in the following material/thickness combinations:

Availability of Heavy-Duty GRIP-STRUT Walkways*

material	thickness	walkway width		
		36"	30"	24"
STEEL	11 ga.	✓	✓	✓
	10 ga.	✓	✓	✓
	9 ga.	✓	✓	✓
ALUMINUM	150 in.	—	✓	✓

*All in one toeboard depth of 5 inches.

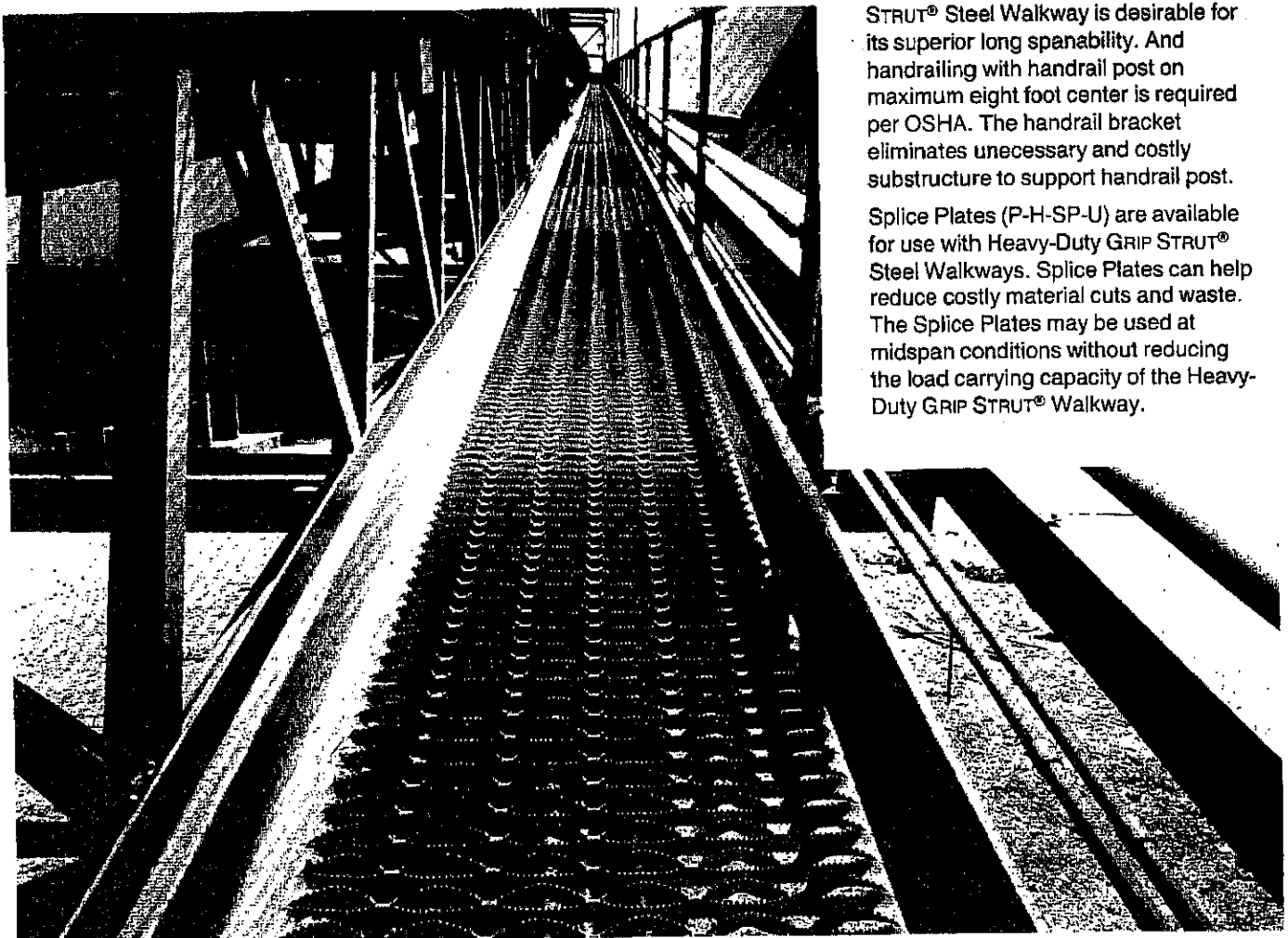
Heavy-Duty GRIP STRUT® Walkways are ideal for many types of applications. They are equally at home in process plants, refineries, grain elevators, conveyor walkways and large machines in paper mills. Allowable design load/deflection data are complete on page 18.

They can be combined with GRIP STRUT® Stair Treads for a complete walkway design. For further information on stair treads, see page 19. The pre-formed, integral design of stair treads reduces costs by saving not only material, but fabrication and detailing time as well.

Heavy-Duty GRIP STRUT® Walkways incorporate 5-inch integral toeboards, complying with OSHA regulations (appropriate safety devices may also be necessary during use — consult applicable safety regulations).

Handrail Brackets are available for application on Heavy-Duty GRIP STRUT® Steel Walkways. This is a valuable accessory for those projects where utilization of Heavy-Duty GRIP STRUT® Steel Walkway is desirable for its superior long spanability. And handrailing with handrail post on maximum eight foot center is required per OSHA. The handrail bracket eliminates unnecessary and costly substructure to support handrail post.

Splice Plates (P-H-SP-U) are available for use with Heavy-Duty GRIP STRUT® Steel Walkways. Splice Plates can help reduce costly material cuts and waste. The Splice Plates may be used at midspan conditions without reducing the load carrying capacity of the Heavy-Duty GRIP STRUT® Walkway.



Specifications

1. These specifications are presented as a general guide to the architect or structural engineer in preparing project specifications. Allowable loads, spans and other limiting conditions presented in this catalog are product data for use in design and construction. These products must not be used without prior structural design by a qualified engineer or architect.

2. GRIP STRUT® Safety Gratings are intended for general-purpose use in plants and process facilities by industry, commerce, and public utilities.

GRIP STRUT® Safety Grating Stair Treads are intended for utility stairs and fire escapes in commercial, industrial buildings where local code permits. They are not intended for staircases and other areas used regularly by the general public where flat closed surfaces are desired.

3. The following aids for drawing preparation are available — free — from GRIP STRUT® Safety Grating distributors, also from sales offices or representatives of GS Metals Corp.: G-413, "Specification Drawings of GRIP STRUT® Safety Grating Products"; G-404, full-scale "Drawings for Stair Systems"; and, to help assure compliance with federal OSHA regulations, G-583, "OSHA Standards for Walking-Working Surfaces".

4. All supports should provide 1½-in. minimum bearing surface free of burrs, bridging, welds and other irregularities. (Note: When using Butterfly Anchor Clips "H-BC-10" it is advisable to provide a minimum of 3" for bearing per support per grating).

5. Random-, diagonal- and circular-cut exposed edges should be reinforced with a bar of grating thickness (min. ¼-in.) and width equal to overall grating depth, welded at contact points of the designer's discretion.

6. Bolted connections, except stair/ladder tread attachment to stringers, may be replaced by welded connections of equal or greater strength.

1.1 scope

The contractor shall furnish and install GRIP STRUT® Grating and Stair Treads, as specified, in all areas where shown on the drawings.

1.2 qualifications

All GRIP STRUT® Grating, Stair Treads and accessories, unless otherwise indicated, shall be manufactured by GS Metals Corp., and shall be installed in accordance with its current recommendations.

1.3 submittals

The contractor shall furnish shop drawings of grating layout, framing and supports, unit dimensions and sections, fastener and weld types and locations.

1.4 storage and handling

All materials shall be stored and handled to avoid damage. Damaged or deteriorated materials shall be removed from the premises.

Part 2: products

2.1 gratings

a. **Type:** Heavy-Duty GRIP STRUT® Safety Grating (Plank) (Walkway).

b. **Metal:** (carbon steel) (5052-H32 alloy aluminum).

c. **Finish:** mill-galvanized before fabrication, per ASTM A525; black, unpainted and oiled (carbon steel); mill finish (aluminum).

d. **Metal thickness:** 11-ga., 10-ga., 9-ga. (ASG, steel); .150" (aluminum).

e. **Section width:** 9¼", 13¾", 23¼", 27¾", 36" (plank); 24", 30", 36" (walkway).

f. **Side channel height:** 2", 2½", 3", 4" (plank); 5" (walkway).

g. **Standard length:** 10', 12', 24' (walkway), 10', 12', special order (plank).

h. **Opening diamond:** "H" series, 37/8" long x 1¼" wide (grating surface-projected dimensions).

i. **Open area:** 52%.

j. **Reticulated pattern:** 15/16" high, minimum 500 teeth/ft².

k. **Slip resistance:** complies with Federal Spec. RR-G-1602A standards.

2.2 stair treads

a. **Type:** Heavy-Duty GRIP STRUT® Stair Tread, standard nosing.

b. **Metal:** (same as 2.1b).

c. **Finish:** (same as 2.1c).

d. **Metal thickness:** 10 ga. (ASG, steel); .150" (aluminum).

e. **Section width:** 9¼".

f. **Side channel heights:** 2".

g. **Standard lengths:** 2', 2½', 3', 4' (nominal and actual), ± 1/8".

h. **Opening diamond:** (same as 2.1h).

i. **Open area:** (same as 2.1i).

j. **Reticulated pattern:** (same as 2.1j).

k. **Slip resistance:** (same as 2.1k).

2.3 accessories

Heavy-Duty GRIP STRUT® Hold-Down Clip, stainless steel, Cat. No. H-BC-10. (Use with 3/8" square-shank carriage bolts, nuts and washers obtained locally).

Handrail Bracket, plain steel finish. Hardware to attach bracket to walkway is supplied. Optional hot dipped galv. after fabrication is available per request.

Heavy-Duty GRIP STRUT® Splice Plate (P-H-Sp-U), 30", 9-ga. mill-galvanized steel splice plate with bolts, hex nuts, washers.

Part 3: execution

3.1 bearing surfaces

Prior to grating installation, inspect supports for correct size, layout and alignment, and verify that bearing surfaces are smooth and free of debris. Report in writing to the engineer or owner's agent any defects so they can be corrected before grating is installed.

3.2 grating installation

Install grating in accordance with manufacturer's recommendations and shop drawings. Position grating sections flat and square with ends bearing min. 1½" on supporting structure; for sections over 12' long, and when Heavy-Duty GRIP STRUT® Hold-Down Clips are used, 3" min. bearing surface is required. Bearing surface must be smooth, level, free of burrs, bridging, welds and other irregularities. Space grating sections a min. of ¼" from vertical steel sections, ½" from concrete walls. Allow max. clearance between sections at joints, of ¼" at side channels, 3/8" at ends.

Band random-cut ends and diagonal- or circular-cut exposed edges with a bar of grating thickness (min. ¼") and width equal to overall grating depth, welded at contact points of the designer's discretion.

3.3 grating attachment

Attach grating to supports without warp or deflection as follows:

a. **Single plank application** — Secure plank ends to supporting members at every point of contact. At each end, use Heavy-Duty GRIP STRUT® Hold-Down Clips with 3/8" square-shank carriage bolts and nuts, or secure each side channel to support by 1/8x1" long fillet welds.

b. **Multiple plank application** — Secure perimeter plank to supporting members with 1/8x1" long fillet welds at every point of contact, intermediate grating sections min. one attachment each end on alternate sides. When span exceeds 6'0", attach side channels of adjacent planks together at mid-point of span for added rigidity. To join adjacent planks together, weld them at 24" o.c. staggered top and bottom.

3.4 Stair tread installation

Fasten GRIP STRUT® Stair Treads shown on the drawings, or as herein specified, to stair stringers with 3/8x1" machine bolts and nuts.

Heavy-Duty GRIP STRUT® Walkways, Planks & Stair Treads—

GENERAL LOAD INFORMATION

planks in five. Begin sizing, for maximum economy, with widest practical grating for the job (shallowest siderails and thinnest gauge); if this does not meet required load capacity, first consider deeper siderails, then heavier gauge, and finally narrower grating width, if necessary.

Flexural load tables have been calculated according to design load limiting criteria, and if not illustrated in this catalog they can be obtained from GS Metals Corporate Technical Services.

"Strut Load Tables" show flexural strength and deflection of individual grating surface struts relative to siderails. Since these are maximum values in the elastic range, lesser loads/deflections can be proportioned from them.

Design load assumptions differ according to load type: (1) uniform, (2) concentrated (see Figs. 1, 2 and 3 below for explanation of load application). *Concentrated load* capacities generally vary with span, siderail height and material thickness, irrespective of grating width, although large differences in grating width cause concentrated loads to be distributed somewhat differently into siderails.

Siderail strength usually controls, but with *shorter spans*, deeper siderails, and/or *wider grating surfaces*, *flexural strength* of individual struts may control. In sizing walkways/planks with strength as a design criterion, be sure to check Heavy-Duty Grip Strut® Grating for both: (1) *strength* of walkway/plank siderails, (2) *strength* of individual struts in grating surface. With *deflection* as a design criterion, loads may be limited by either: *strength* of individual surface struts, or *total deflection* of one siderail at midspan plus a surface strut at midwidth of walkway/plank (sum of siderail deflection plus strut deflection).

All load tables show maximum loads, based upon *actual load tests* at its GSM testing facility in the Pinckneyville (IL) plant, and determined in accordance with AISI "Specification for the Design of Cold-Formed Steel Structural Members", 1980 edition, using minimum yield strength of 33 ksi for steel, 23 ksi for aluminum. Loads are designated:

- (U) for uniform, in lb/ft²,
- (C) for concentrated, in lb,
- (D) for corresponding deflections, in inches.

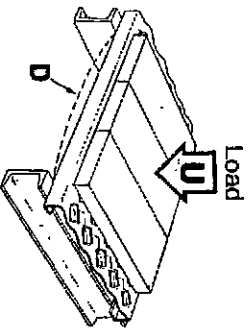


Fig. 1
UNIFORM LOAD (U)
application to all walkways/
planks: Maximum load (lb/ft²)

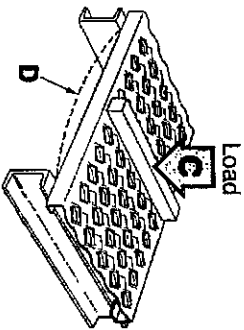


Fig. 2
CONCENTRATED LOAD (C)
application to all walkways/
planks: Maximum load (lb)

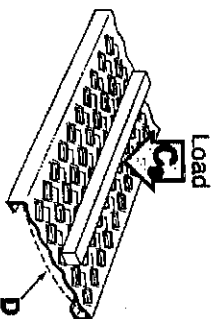


Fig. 3
CONCENTRATED LOAD (C)
application to grating surface
struts of all walkways/planks:



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Item Specifications

Item Number	BARCD00000000107483
Product Line	Accessories
Product Type	Clips, Anchors, Etc
Weight	0.15 #/EA
Minor Material	Type 304
Accessory Alias 1	H-BC-10
Accessory Alias 2	Hold Down Clip
Major Material	Stainless Steel
SKU Type	Each
Trade Name	McNICHOLS
Class	GRIP STRUT_R Fastener
Holeserve Item Number	20HBC-1099

Item Accessories

Hardware	The miscellaneous nuts, bolts, washers, etc, that are used to attach accessories to primary materials.
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Product URL

<http://www.mcnichols.com/product/20HBC-1099?navCode=cc:fastners>



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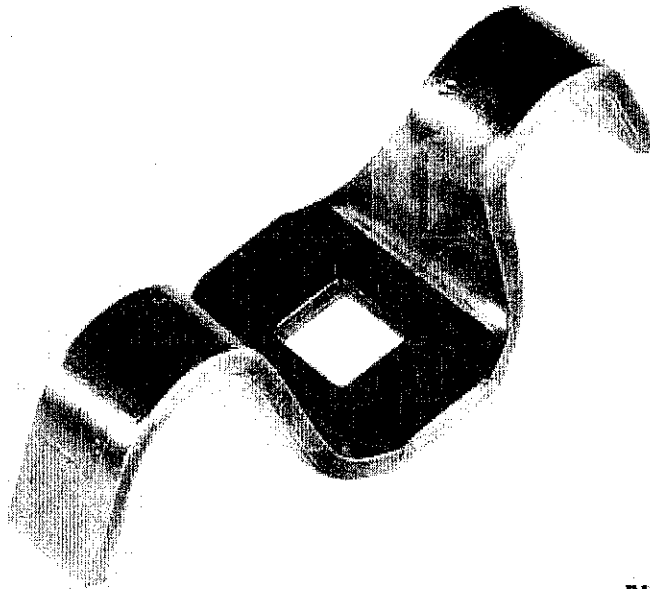


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