

SAFETY-TREAD® CHANNEL

PRODUCT DESCRIPTION

Safety-Tread® channel is a one-piece plank grating manufactured by a cold forming process in the shape of a channel. The web of the channel is the walking surface which is covered with small perforated dimples.

FEATURES & BENEFITS

- Perforated dimples provide superior slip resistance in all directions. Quantity of dimples under foot provides exceptional adhesive friction.
- One-piece metal construction.
- Lightweight design provides high strength to weight ratio.
- Long effective life span requiring little maintenance.
- Can be easily formed in standard channel or custom shapes.
- Simple and economical installation as planks are self-framing.
- Adaptable to cost effective custom fabrication.
- Low projections and closed area provide an acceptable walking surface for industrial as well as institutional applications (i.e., women in heels can walk comfortably and safely).
- Available in four dimpled patterns (see opposite page for specifications).

MATERIAL SPECIFICATIONS

Standard Flooring Specification

Grating/Flooring to be Safety-Tread® channel (full, square, star, "V") pattern manufactured from (select one):

- ASTM-A-1011, HRP&O, 13 or 11 gauge steel.
- ASTM-A-653, G-90 (Z-275) Pre-galvanized 13 or 11 gauge steel.
- 5052-H32 Aluminum, .125" thick
- Type 316L 2B Stainless Steel 14 gauge. ("V" pattern only)
- Type 304L Stainless Steel 16 gauge. ("V" pattern only)

Drainage Flooring Specification

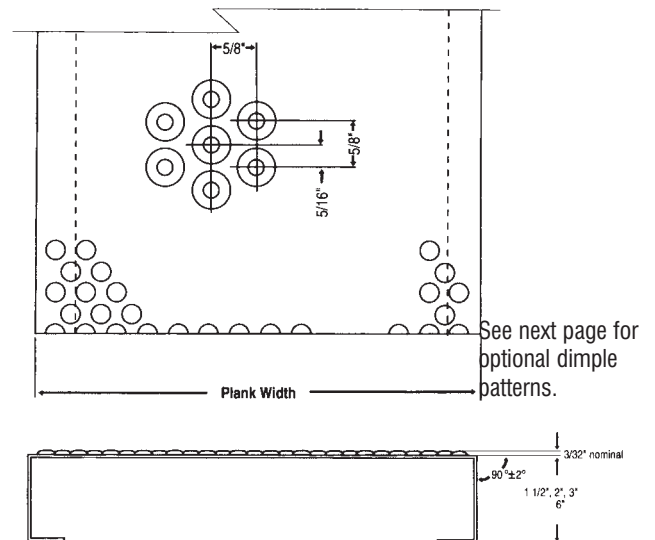
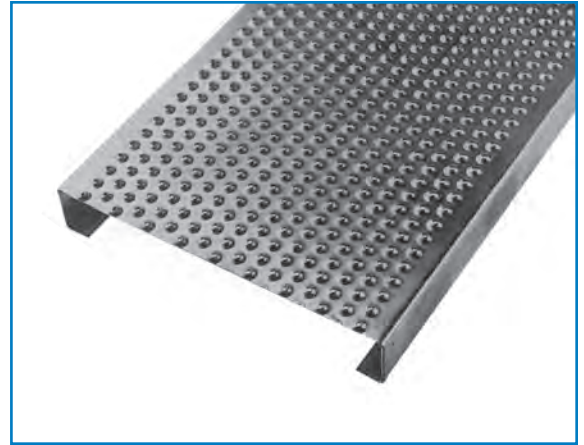
Grating/Flooring to be Safety-Tread® drainage channel (square, star) pattern manufactured from (select one):

- ASTM-A-1011, HRP&O, 13 or 11 gauge steel.
- ASTM-A-653, G-90 (Z-275) Pregalvanized 13 gauge steel.
- 5052-H32 Aluminum, .125" thick.

Safety Tread® channel and Safety-Tread® drainage channel are manufactured in nominal 10' and 12' lengths. Other combinations or gauges, channel depths, and widths are available by special request (see note on opposite page re: gauges).

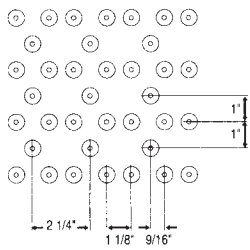
Note:

1. Tolerances on all dimensions are $\pm 1/8"$
2. Camber is an expected condition with sheet metal products. While ASTM allowance is generous, Grating Systems attempts to lessen the effects. Normal clearances should offset this phenomenon.

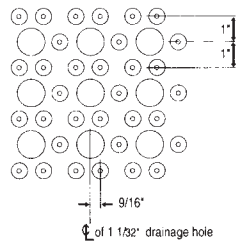


SAFETY-TREAD® CHANNEL

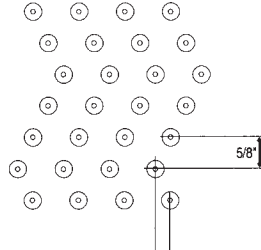
Optional Dimpled Patterns



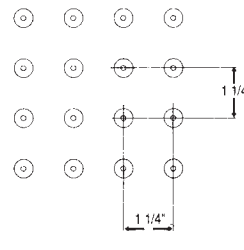
Safety-Tread® Star



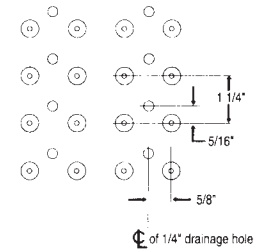
Safety-Tread® Star Drainage



Safety-Tread® "V"



Safety-Tread® Square



Safety-Tread® Square Drainage

TECHNICAL DETAILS

LOAD & DEFLECTION TABLES

Explanation of Load Type

- U = uniform load (lb/ft²)
- D = corresponding deflection (in) resulting from uniform load
- C = concentrated load (lb)
- D = corresponding deflection (in) resulting from concentrated load

Note:

- All uniform and concentrated loads include a safety factor of 1.67.
- Shaded areas, based on loads indicated, may exceed deflections of L/120.

10 Inch Wide

PRODUCT DETAILS

Type	Depth Weight	I _x IN. ⁴ S _x IN. ³	CLEAR SPAN																
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"	144"
Steel 13 GA	1-1/2"	.272	U	1070	773	476	370	267	219	171	145	119	103	87	77	67			
			D	0.05	0.09	0.12	0.17	0.21	0.27	0.33	0.41	0.48	0.56	0.65	0.75	0.85			
	4.24 lb/ft	.267	C	625	610	594	519	445	400	356	326	297	275	254	238	223			
			D	0.03	0.06	0.10	0.14	0.18	0.22	0.27	0.33	0.39	0.45	0.52	0.60	0.69			
Steel 11 GA	2"	.536	U	1500	1108	716	560	404	332	261	221	182	158	134	118	102	80	65	
			D	0.04	0.08	0.10	0.14	0.17	0.22	0.27	0.33	0.39	0.47	0.54	0.62	0.70	0.88	1.08	
	4.84 lb/ft	.404	C	625	625	625	625	625	582	539	494	449	418	387	359	332	300	274	
			D	0.02	0.03	0.05	0.09	0.13	0.18	0.22	0.27	0.32	0.38	0.44	0.50	0.56	0.72	0.91	
Steel 11 GA	1-1/2"	.343	U	1343	971	599	468	338	278	218	185	152	132	113	100	87			
			D	0.06	0.10	0.13	0.19	0.23	0.30	0.37	0.45	0.53	0.63	0.73	0.85	0.96			
	5.54 lb/ft	.369	C	861	805	749	656	564	508	453	416	380	354	328	309	290			
			D	0.04	0.08	0.11	0.15	0.19	0.24	0.29	0.36	0.43	0.51	0.59	0.68	0.77			
Steel 11 GA	2"	.689	U	1881	1366	851	676	501	410	320	271	223	194	164	145	126	99	80	
			D	0.04	0.07	0.10	0.15	0.19	0.25	0.30	0.37	0.43	0.51	0.58	0.67	0.76	0.96	1.18	
	5.95 lb/ft	.511	C	861	861	861	861	861	757	681	624	568	527	487	456	426	378	340	
			D	0.02	0.04	0.06	0.11	0.16	0.20	0.24	0.29	0.35	0.41	0.48	0.55	0.62	0.78	0.97	

12 Inch Wide

PRODUCT DETAILS

Type	Depth Weight	I _x IN. ⁴ S _x IN. ³	CLEAR SPAN																
			24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	108"	120"	132"	144"
Steel 13 GA	1-1/2"	.320	U	991	716	442	346	250	205	161	137	113	97	82	72	63			
			D	0.05	0.09	0.12	0.17	0.21	0.27	0.33	0.41	0.48	0.57	0.65	0.75	0.85			
	4.83 lb/ft	.302	C	866	764	663	581	500	451	403	370	338	312	287	269	251			
			D	0.04	0.07	0.10	0.14	0.18	0.23	0.28	0.34	0.40	0.47	0.55	0.63	0.72			
Steel 13 GA	2"	.630	U	1457	1053	649	508	367	301	236	200	165	143	122	108	94	75	60	
			D	0.04	0.08	0.10	0.14	0.17	0.23	0.27	0.33	0.39	0.47	0.54	0.63	0.71	0.90	1.04	
	5.13 lb/ft	.453	C	866	866	866	800	733	661	590	542	494	460	427	401	376	335	300	
			D	0.02	0.04	0.07	0.11	0.14	0.18	0.22	0.27	0.32	0.38	0.44	0.51	0.58	0.73	0.90	
Steel 11 GA	1-1/2"	.406	U	1118	808	499	390	282	232	182	154	127	110	94	83	72			
			D	0.06	0.10	0.12	0.18	0.22	0.29	0.35	0.43	0.50	0.60	0.69	0.81	0.93			
	6.33 lb/ft	.376	C	1118	933	748	656	564	509	454	418	381	355	329	310	291			
			D	0.05	0.08	0.11	0.15	0.19	0.25	0.30	0.37	0.44	0.52	0.60	0.69	0.79			
Steel 11 GA	2"	.792	U	1875	1201	835	614	471	373	303	251	211	180	156	136	120	96	78	
			D	0.06	0.09	0.13	0.18	0.24	0.31	0.39	0.46	0.55	0.64	0.75	0.86	0.99	1.27	1.57	
	6.79 lb/ft	.571	C	1362	1362	1253	1075	942	839	752	690	634	586	546	511	481	431	391	
			D	0.03	0.07	0.11	0.15	0.20	0.25	0.31	0.38	0.45	0.53	0.62	0.71	0.82	1.04	1.297	

Note: Due to the low profile of the walking surface, 11 gauge material is recommended to help reduce strut deflection.

SAFETY-TREAD® FLOORING

PRODUCT DESCRIPTION

Safety-Tread® is a metal flooring product which is covered with small perforated dimples manufactured by a cold forming process.

OPTIONAL FEATURE:

Safety-Tread® flooring is available in two drainage patterns which incorporate embossed holes (staggered) between raised dimples.

FEATURES & BENEFITS

- Perforated dimples provide superior slip resistance in all directions and in all weather conditions. The quantity of dimples under foot provides exceptional adhesive friction.
- Long life span requiring little maintenance.
- Can be easily formed into custom shapes.
- Adaptable to wide range of applications.
- Easily adaptable to cost effective, custom fabrication.
- Low projections and closed area provide an acceptable walking surface for industrial as well as institutional and commercial application (i.e., women in heels can walk comfortably and safely).
- Available in four dimpled patterns
- Optional drainage flooring features smaller unembossed holes (location and size variable with dimple pattern) providing drainage for liquid which may pool on walking surface in wet environments.

MATERIAL SPECIFICATIONS

Standard Flooring Specification

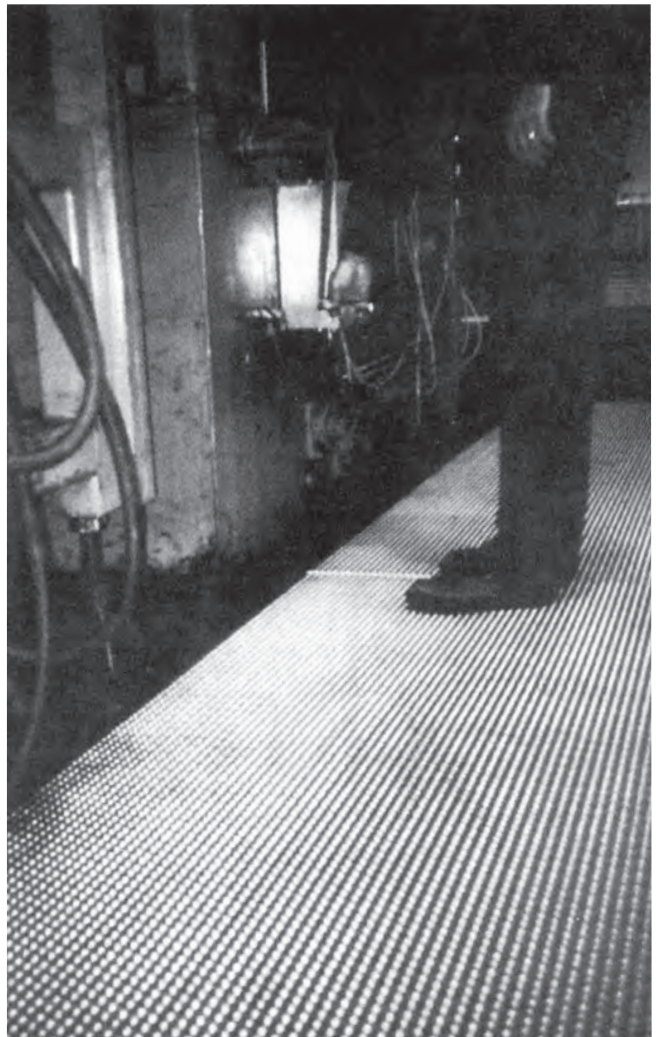
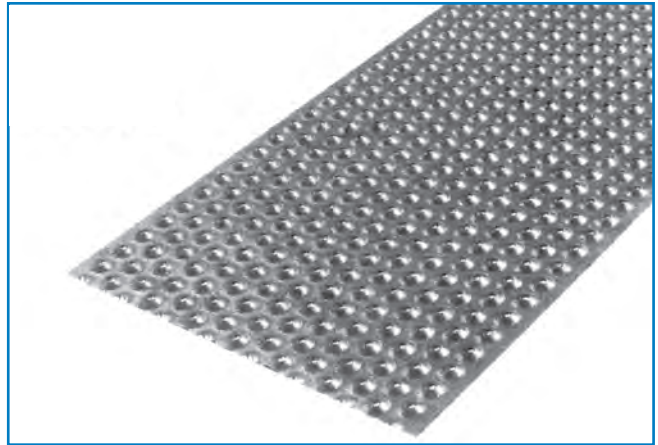
Grating shall be "Safety-Tread® flooring," (full, square, star, "V") pattern manufactured from (select one):

- ASTM-A-1011, HRP&O, 16, 13 or 11 gauge steel.
- ASTM-A-653, G-90 (Z-275) Pre-galvanized 13 gauge steel.
- 5052H32 Aluminum, .125" thick.
- Type 316L, Stainless Steel 14 gauge ("V" pattern only)
- Type 304L, Stainless Steel 16 gauge ("V" pattern only)

Drainage Flooring Specification

Flooring shall be Safety-Tread® drainage flooring (square, star) pattern manufactured from (select one):

- ASTM-A-1011, HRP&O, 11 gauge steel.
- ASTM-A-653, G-90 (Z-275) Pre-galvanized 13 gauge square pattern or 11 gauge star pattern.
- 5052H32 Aluminum, .125" thick.



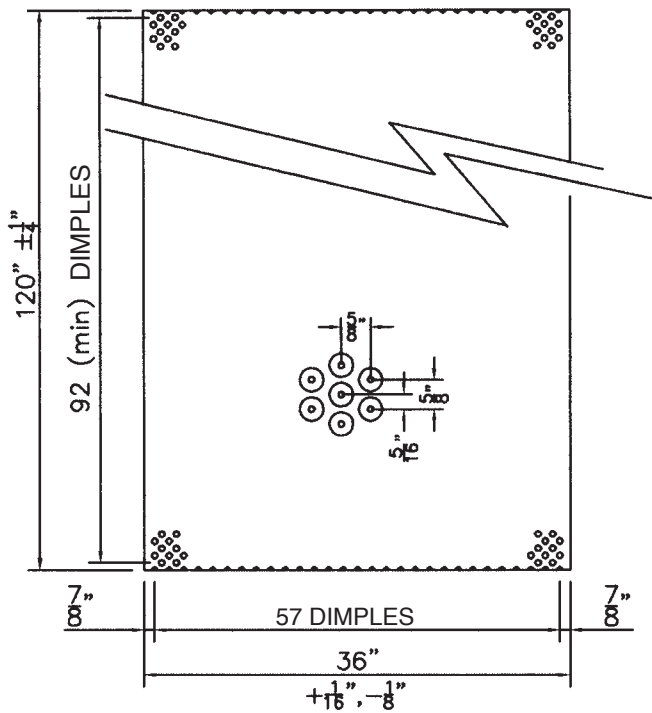
SQUARE DRAINAGE



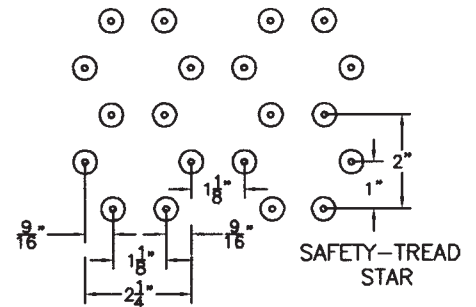
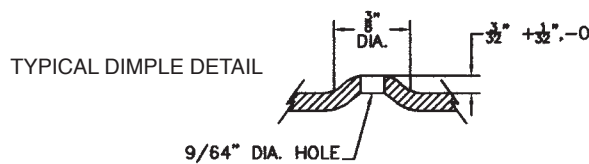
STAR DRAINAGE

SAFETY-TREAD® FLOORING

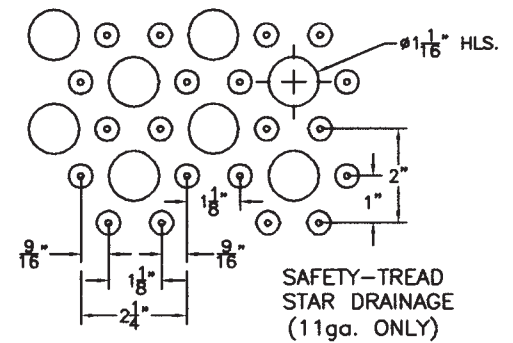
TECHNICAL DETAILS



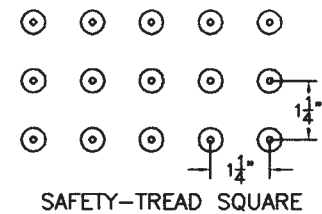
SAFETY-TREAD® FULL PATTERN (STANDARD)



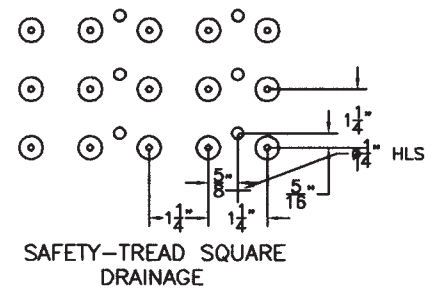
SAFETY-TREAD STAR



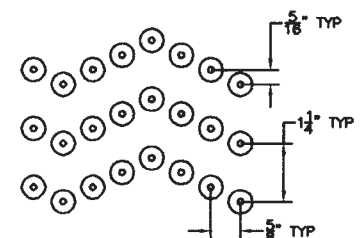
SAFETY-TREAD STAR DRAINAGE (11ga. ONLY)



SAFETY-TREAD SQUARE



SAFETY-TREAD SQUARE DRAINAGE



SAFETY-TREAD "V"

Safety-Tread® Flooring

Gauge	Material	Wt/Sq Ft
11 GA	HRP&O	5.0 lb
13 GA	HRP&O	3.8 lb
16 GA	HRP&O	2.5 lb
13 GA	Galvanized	1.7 lb
.125"	Aluminum	1.6 lb
14 GA	316 L	3.28 lb
16 GA	304 L	2.4 lb

Drainage Flooring

Gauge	Material	Wt/Sq Ft
11 GA	HRP&O	4.7 lb
13 GA	HRP&O	3.5 lb
16 GA	HRP&O	2.3 lb
.125"	Aluminum	1.6 lb