WEBFORGE LOCKER

A valmont COMPANY

Safe T Perf ®

Adaptable:

Safe-T-Perf® is available in various hole sizes and patterns, to suit the particular application and can be easily custom fabricated to particular sizes or requirements. Its light weight minimises the structural supports required, while still offering excellent load bearing characteristics. It can be confidently specified in heavy traffic areas.

Internal or external installations are equally well suited, and will only influence the choice of material and/or coating.

Safety:

The 360º design ensures Safe-T-Perf® offers a highly effective non slip surface, even if foot traffic continually changes direction. This surface is part of the core product, not an additional layer that may strip off. Drain holes are large enough to prevent liquid from pooling on the surface, yet small enough to protect areas below the walkway from any heavy or sharp objects falling through.

Safe T Perf 14:

Whilst the new and improved Universal 14 maintains its high quality, inherent strength and slip resistance, it now has larger drain holes specifically designed to minimise the opportunity of blinding during the post Hot Dip Galvanising process. The improved Universal 14 will continue to be held in stock in Steel, Hot Dip Galvanised Steel and Stainless Steel sheets and can also be custom manufactured in most material types to sizes of your choice in Sheet Form, Planks, Stair Treads and Z Treads.

Availability:

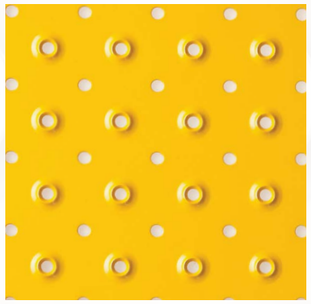
Safe-T-Perf® is an extremely versatile product, available in:

- Various hole sizes
  (Stiletto - 6, Universal – 14 & Stock Crate - 19)
- Various Materials (Mild Steel, Hot Dip Galvanised, 304 Stainless Steel, 316 Stainless Steel, Aluminium) and thicknesses (depending on the material chosen)
- Sheets, Stair Treads & Planks.
  NB: Stair Treads and Planks can be supplied with end gussets and fixing holes
- Stock Sizes and Custom Made

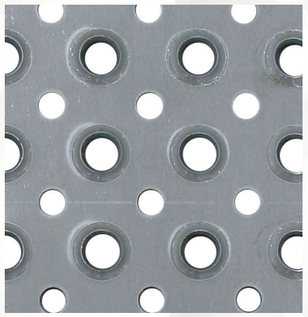
Safe-T-Perf® Z-Tread

Z-Tread is a unique product, custom made to your application. Z-Treads are pre-formed stair treads, including the going and riser, ready for installation. Z-Tread combines all of the benefits of Safe-T-Perf® with simple and fast installation. In addition, there are no gaps between stairs for objects to fall through.

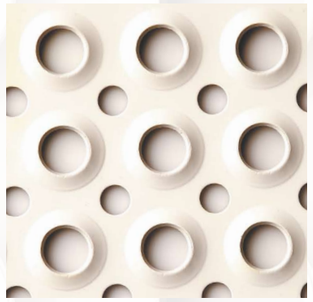
Z-Tread panels are custom made to suit the width, going and riser of the application.



STILETTO - 6



UNIVERSAL - 14



STOCK CRATE - 19

RAISED FLANGE HOLE DIA (mm)	DRAIN HOLE DIA (mm)	CENTRES (mm)	OPEN AREA %
STILETTO - 6			
6.35	6.35	37.0	4.62%
UNIVERSAL - 14			
14.0	10.0	38.1	16%
STOCK CRATE - 19			
19.05	12.70	42.0	23%

Safe-T-Perf® Plank Load vs Deflection (mm) — NOMINAL WIDTH = 305mm PLANK HEIGHT = 56mm, Material = 2.5mm Mild Steel

Uniformly Distributed Loading (kPa)	Plank Length/Span (mm) 500	750	1000	1500	2000	2500	3000
2.5	0.07	0.15	0.22	0.69	1.94	4.48	8.79
3.0	0.08	0.18	0.27	0.82	2.33	5.38	10.54
4.0	0.11	0.24	0.35	1.10	3.10	7.17	14.06
5.0	0.14	0.30	0.44	1.37	3.88	8.96	17.57
6.0	0.17	0.36	0.53	1.65	4.66	10.76	21.09
7.0	0.20	0.42	0.62	1.92	5.43	12.55	24.60
8.0	0.23	0.47	0.71	2.20	6.21	14.34	28.12
9.0	0.25	0.53	0.80	2.47	6.98	16.14	31.63
10.0	0.28	0.59	0.89	2.74	7.76	17.93	-
AS/NZS 4600:2005 UDL Design Pressure Capacity R_d (kPa)	235.6	114.3	88.5	40.8	21.5	13.8	8.9

Concentrated Loading (kN)	Plank Length/Span (mm) 500	750	1000	1500	2000	2500	3000
0.5	0.10	0.19	0.31	0.62	1.15	2.07	3.52
1.0	0.20	0.38	0.61	1.24	2.30	4.14	7.03
1.5	0.30	0.57	0.92	1.86	3.45	6.21	10.55
2.0	0.39	0.75	1.22	2.48	4.59	8.27	14.07
2.5	0.49	0.94	1.53	3.10	5.74	10.34	17.59
3.0	0.59	1.13	1.83	3.73	6.89	12.41	21.10
3.5	0.69	1.32	2.14	4.35	8.04	14.48	24.62
4.0	0.79	1.51	2.44	4.97	9.19	16.55	28.14
4.5	0.89	1.70	2.75	5.59	10.34	18.62	-
5.0	0.98	1.89	3.05	6.21	11.48	-	-
5.5	1.08	2.08	3.36	6.83	12.63	-	-
6.0	1.18	2.26	3.66	7.45	13.78	-	-
6.5	1.28	2.45	3.97	8.07	-	-	-
7.0	1.38	2.64	4.27	8.69	-	-	-
7.5	1.48	2.83	4.58	9.31	-	-	-
AS/NZS 4600:2005 Concentrated Design Load Capacity R_d (kN)	24.8	16.6	13.0	8.1	6.0	4.8	4.0
Deflection Limit/Span on 300	1.67	2.50	3.33	5.00	6.67	8.33	10.00

Safe-T-Perf® Stair Tread Load vs Deflection (mm) — WIDTH = 250mm TREAD DEPTH = 38mm, Material = 2.5mm Mild Steel

Uniformly Distributed Loading (kPa)	Tread Length/Span (mm) 610	1000
2.5	0.12	0.39
3.0	0.15	0.47
4.0	0.20	0.62
5.0	0.24	0.78
6.0	0.29	0.93
7.0	0.34	1.09
8.0	0.39	1.24
9.0	0.44	1.40
10.0	0.49	1.55
AS/NZS 4600:2005 UDL Design Pressure Capacity R_d (kPa)	66.7	46.3

Concentrated Loading (kN)	Tread Length/Span (mm) 610	1000
0.5	0.24	0.54
1.0	0.48	1.07
1.5	0.73	1.61
2.0	0.97	2.14
2.5	1.21	2.68
3.0	1.45	3.22
3.5	1.70	3.75
4.0	1.94	4.29
4.5	2.18	4.83
5.0	2.42	5.36
5.5	2.66	-
6.0	2.91	-
6.5	3.15	-
7.0	3.39	-
7.5	3.63	-
AS/NZS 4600:2005 Concentrated Design Load Capacity R_d (kN)	8.9	5.1
Deflection Limit/Span on 300	2.03	3.33

Flat Sheets — 2.5mm Mild Steel, Flanged hole 14.0mm dia, Deflection under 1kN concentrated load @ midspan

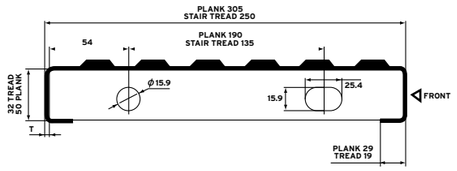
One-Way Spanning (Two Edges Supported)

Span (mm)	500	600	700	800	900
Deflection (mm)	4.01	4.72	5.74	7.41	8.31

Two-Way Spanning (Four Edges Supported)

Span (mm)	500 x 1000	600 x 1200	700 x 1400	800 x 1600	900 x 1800	1000 x 2000	1100 x 2200	1220 x 2440*
Deflection (mm)	4.63	4.71	4.95	6.64	8.26	7.54	9.23	13.81

* Stock Sizes



All testing was carried out in accordance with AS/NZS 4600:2005 COLD-FORMED STEEL STRUCTURES where three (3) repeat tests were conducted on each plank/loading/span configuration. Materials tested for the determination of the steels tensile properties were conducted in accordance with AS 1391-2007 METALLIC MATERIAL TENSILE TESTING AT AMBIENT TEMPERATURE. All tests conducted at a NATA accredited laboratory.

For results of the latest slip resistance tests, visit our website. Technical Data Sheet LIF-105 Walkway Slip Resistance.