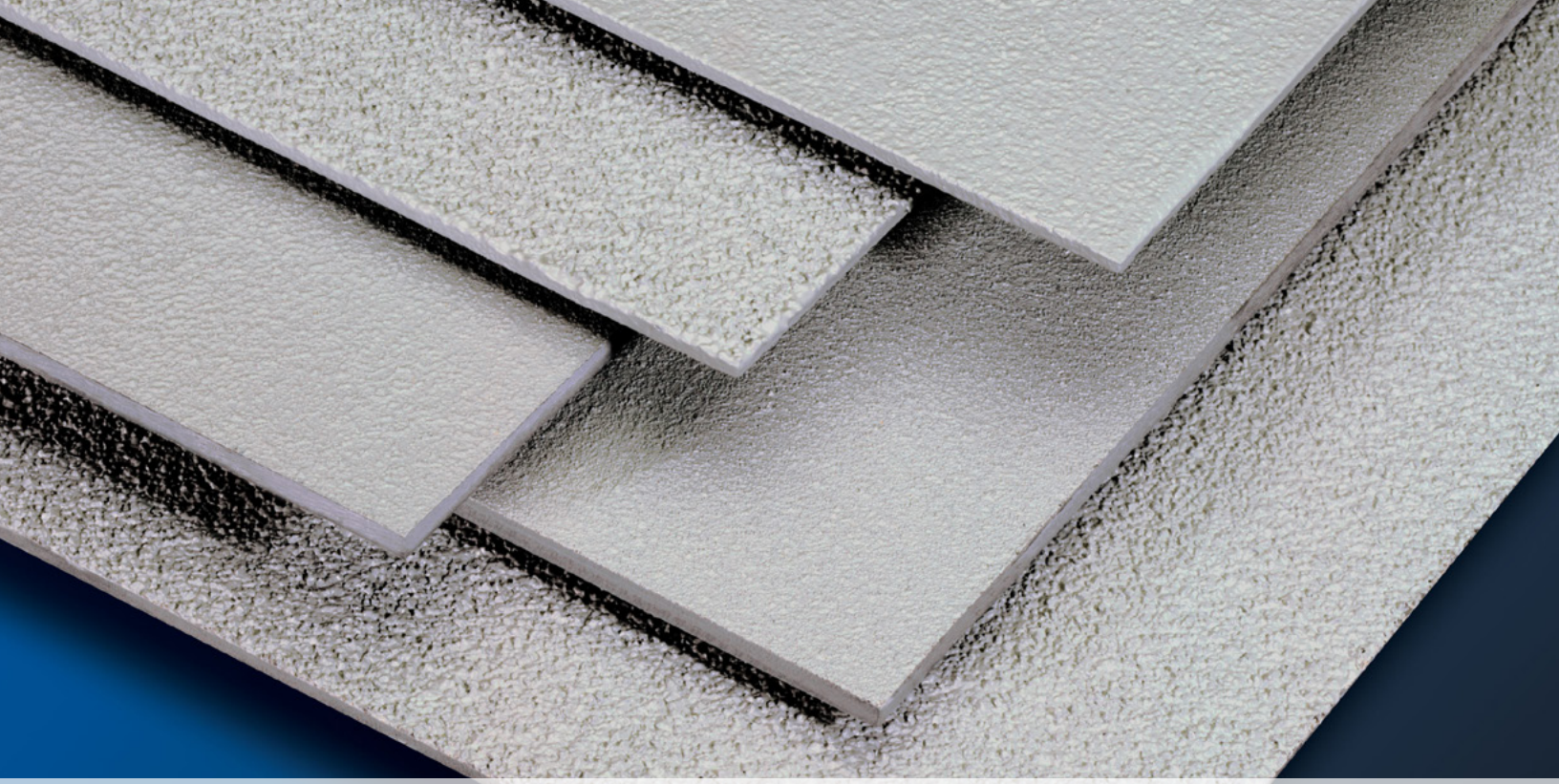


STRONGWELL®

SAFPLATE®

FIBERGLASS GRITTED PLATE

EXCLUSIVELY MADE IN THE USA

- Skid Resistant
- Lightweight
- Impact Resistant
- Corrosion Resistant
- Cost Effective
- Easy to Install
- Custom Colors & Finishes

SAFPLATE® fiberglass gritted plate is a tough, corrosion resistant floor plate. SAFPLATE®'s unique combination of pultruded fiberglass plate with an anti-skid grit surface creates a textured solid sheet flooring that is ideal for both wet and dry environments. Used in a variety of applications, such as trench covers to contain vapors and fumes or pedestrian bridge walkways for sure footing, SAFPLATE® provides a long-lasting, low maintenance alternative to steel plate for severe, corrosive environments.

SAFPLATE® is available as solid plate or bonded to DURAGRID® grating. Surface grits are available in urethane fine or medium (for light pedestrian applications), as well as epoxy fine, medium, coarse (#4) or extra coarse (#3). SAFPLATE® is available in 4' (1.2m) x 8' (2.4m) panels in standard EXTREN® plate thicknesses of 1/8" (3.2mm), 3/16" (4.8mm), 1/4" (6.4mm), 3/8" (9.5mm), 1/2" (12.7mm), 5/8" (15.9mm), 3/4" (19.1mm), and, 1" (25.4mm). SAFPLATE® is available in all standard EXTREN® Series. Custom colors and sizes are available upon request.

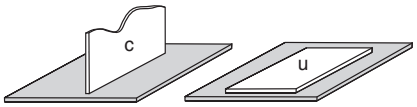
SAFPLATE® Load / Deflection Data

Maximum Deflection L/100 or t/2

Thickness	Span »	12" (305mm)	18" (458mm)	24" (610mm)	30" (762mm)	36" (915mm)	42" (1067mm)	48" (1220mm)	54" (1372mm)	60" (1524mm)
1/4" (6.4mm)	u	167 (8.00)	34 (1.63)	11 (0.53)	- -	- -	- -	- -	- -	- -
	Δu	.120 (3.05)	.125 (3.18)	.125 (3.18)	- -	- -	- -	- -	- -	- -
	c	104 (1.52)	32 (0.47)	14 (0.20)	- -	- -	- -	- -	- -	- -
	Δc	.120 (3.05)	.125 (3.18)	.125 (3.18)	- -	- -	- -	- -	- -	- -
3/8" (9.5mm)	u	562 (26.91)	167 (8.00)	55 (2.63)	23 (1.10)	11 (0.53)	- -	- -	- -	- -
	Δu	.120 (3.05)	.180 (4.57)	.188 (4.78)	.188 (4.78)	.188 (4.78)	- -	- -	- -	- -
	c	351 (5.12)	156 (2.28)	69 (1.01)	35 (0.51)	20 (0.29)	- -	- -	- -	- -
	Δc	.120 (3.05)	.180 (4.57)	.188 (4.78)	.188 (4.78)	.188 (4.78)	- -	- -	- -	- -
1/2" (12.7mm)	u	1333 (63.82)	395 (18.82)	167 (8.00)	71 (3.40)	34 (1.63)	18 (0.86)	11 (0.53)	- -	- -
	Δu	.120 (3.05)	.180 (4.57)	.240 (6.10)	.25 (6.35)	.25 (6.35)	.25 (6.35)	.25 (6.35)	- -	- -
	c	833 (12.15)	370 (5.40)	209 (3.05)	111 (1.62)	65 (0.95)	40 (0.58)	27 (0.39)	- -	- -
	Δc	.120 (3.05)	.180 (4.57)	.240 (6.10)	.25 (6.35)	.25 (6.35)	.25 (6.35)	.25 (6.35)	- -	- -
5/8" (15.9mm)	u	2600 (124.49)	768 (36.77)	326 (15.61)	167 (8.00)	84 (4.02)	45 (2.15)	27 (1.29)	17 (0.81)	11 (0.53)
	Δu	.120 (3.05)	.180 (4.57)	.240 (6.10)	.300 (7.62)	.312 (7.92)	.312 (7.92)	.312 (7.92)	.312 (7.92)	.312 (7.92)
	c	1622 (23.66)	723 (10.55)	407 (5.94)	260 (3.79)	157 (2.29)	99 (1.44)	66 (0.96)	47 (0.69)	34 (0.50)
	Δc	.120 (3.05)	.180 (4.57)	.240 (6.10)	.300 (7.62)	.312 (7.92)	.312 (7.92)	.312 (7.92)	.312 (7.92)	.312 (7.92)
3/4" (19.1mm)	u	4499 (215.41)	1333 (63.82)	563 (26.96)	288 (13.79)	167 (8.00)	94 (4.50)	55 (2.63)	34 (1.63)	22 (1.05)
	Δu	.120 (3.05)	.180 (4.57)	.240 (6.10)	.300 (7.62)	.360 (9.14)	.375 (9.53)	.375 (9.53)	.375 (9.53)	.375 (9.53)
	c	2804 (40.91)	1250 (18.24)	702 (10.24)	450 (6.57)	313 (4.57)	205 (2.99)	138 (2.01)	97 (1.42)	71 (1.04)
	Δc	.120 (3.05)	.180 (4.57)	.240 (6.10)	.300 (7.62)	.360 (9.14)	.375 (9.53)	.375 (9.53)	.375 (9.53)	.375 (9.53)
1" (25.4mm)	u	10677 (511.21)	3158 (151.21)	1333 (63.82)	682 (32.65)	396 (18.96)	248 (11.87)	167 (8.00)	108 (5.17)	71 (3.40)
	Δu	.120 (3.05)	.180 (4.57)	.240 (6.10)	.300 (7.62)	.360 (9.14)	.420 (10.67)	.480 (12.19)	.500 (12.70)	.500 (12.70)
	c	6667 (97.27)	2956 (43.13)	1667 (24.32)	1068 (15.58)	740 (10.80)	544 (7.94)	416 (6.07)	305 (4.45)	222 (3.24)
	Δc	.120 (3.05)	.180 (4.57)	.240 (6.10)	.300 (7.62)	.360 (9.14)	.420 (10.67)	.480 (12.19)	.500 (12.70)	.500 (12.70)

- Sheet spanning in lengthwise direction.
- For allowable loads when sheet is spanning in crosswise direction, multiply table values by 0.4 for 1/4" (6.4mm) and 3/8" (9.5mm) and 0.65 for all other thicknesses.

NOTE: All table values are typical.



u UNIFORM LOAD LBS/FT² (KN/m²)
Δu DEFLECTION INCHES (mm) UNDER UNIFORM LOAD
c CONCENTRATED LOAD LBS/FT OF WIDTH (KN/m of width)
Δc DEFLECTION INCHES (mm) UNDER CONCENTRATED LOAD
L SIMPLE SPAN
t THICKNESS

SAFPLATE® Properties[1]

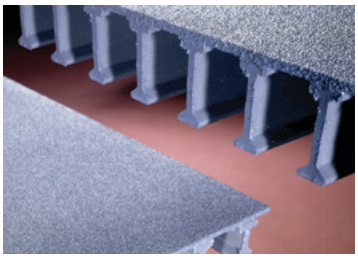
Mechanical Properties (coupons)	Test Method	Longitudinal Direction (psi)	(N/mm²)	Transverse[2] Direction (psi)	(N/mm²)
Ultimate Tensile Stress	D638	20,000	138	7,500-10,000	51.7-68.9
Ultimate Compressive Stress	D695	24,000	165	15,500-20,000	107-138
Ultimate Flexural Stress	D790	24,000	165	10,000-17,000	89.6-124
Tensile Modulus	D638	1.8×10^6	12.4×10^3	$0.7\text{-}1.0 \times 10^6$	$4.83\text{-}6.89 \times 10^3$
Compressive Modulus	D695	1.8×10^6	12.4×10^3	$0.7\text{-}1.0 \times 10^6$	$4.83\text{-}6.89 \times 10^3$
Flexural Modulus	D790	$1.1\text{-}1.4 \times 10^6$	$7.58\text{-}9.65 \times 10^3$	$0.8\text{-}1.3 \times 10^6$	$5.51\text{-}8.96 \times 10^3$
Ultimate Bearing Stress	D953	32,000	221.0	--	--

All values are minimum ultimate properties

[1] SAFPLATE® using EXTREN® Series 525 plate. See the Strongwell *Design Manual* for properties with other resin systems.

[2] Value range from 1/8" (3.2mm) - 1" (25.4mm) plate thickness.

NOTE: Regardless of grit selection, SAFPLATE® has a Static Coefficient of Friction (per ASTM D-2047) which exceeds the OSHA and ADA requirements for skid resistance.



SAFPLATE® Bonded to DURAGRID® Load / Deflection Data

Uniform Load (lbs/ft²) (KN/m²) Producing 1/4" (6.4mm) Deflection

Series	Span »	24" (610mm)	30" (762mm)	36" (915mm)	42" (1067mm)	48" (1220mm)	54" (1372mm)	60" (1524mm)	66" (1677mm)	72" (1829mm)
I-6000 1" (25.4mm) w/ 1/8" (3.2mm) Plate		1358 (65.0)	576 (27.6)	288 (13.8)	156 (7.5)	93 (4.5)	59 (2.8)	- -	- -	- -
I-6000 1-1/2" (38.1mm) w/ 1/8" (3.2mm) Plate		3485 (166.9)	1471 (70.4)	722 (34.6)	396 (19.0)	235 (11.3)	148 (7.1)	98 (4.7)	67 (3.2)	- -
T-5000 2" (50.8mm) w/ 1/8" (3.2mm) Plate		6082 (291.2)	2537 (121.5)	1243 (59.5)	680 (32.6)	405 (19.4)	256 (12.3)	170 (8.1)	117 (5.6)	84 (4.0)

NOTE: All table values are typical. See DURAGRID® literature for available widths.

STRONGWELL®

MADE IN THE USA

ISO 9001 Quality Certified Manufacturing Plants

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