# SPAN TRAK FRP GRATING

# Archatrak 'SpanTrak' FRP Grating

Molded fiberglass grating panels manufactured with interwoven high-strength glass rovings embedded in a thermosetting resin matrix. These structural panels exhibit excellent bi-directional strength and one of the highest strength-to-weight ratios of any material. SpanTrak grating panels are manufactured with selected FRP resins, fillers and additives to provide maximum outdoor durability and fire resistance.

- Class A fire rating for flame spread and smoke-developed index per ASTM E84.
- High strength tension, compression and bending strength similar to steel.
- Excellent slip-resistance with bonded grit surface for superior traction.
- High impact resistance springs back to original shape when deflected.
- Lightweight only 1/4 the weight of steel and 2/3 the weight of aluminum.
- Smooth, even surface for wheeled trolleys, wheelchairs and shoe heels.
- Unaffected by salt spray and prolonged exposure to wet conditions.
- Permits safe, all year-round use, all weather conditions.
- Long life span typically in excess of 25 years.
- Highly resistant to mold, mildew, and moss.
- Highly resistant to corrosive chemicals.



## **Specifications**

Resin	Type-I isophthalic polyester, industrial grade
	UV stabilized, fire retardant
Filler	Aluminum hydroxide
Glass fiber content	Approx. 35%
Color	Traffic grey (RAL 7043) - std. Other colors on special order at volume.
Surface finish	Anti-slip bonded quartz grit.
Fire resistance	ASTM E84-2018 Smoke Developed Index 200 (Class A)
	ASTM E84-2016 Flame Spread Index 8 (Class A)
Slip Resistance	Wet 71 / Dry 76

# SpanTrak Sizes

Panel dimensions may vary by up to 1/8". Allowances should be made for this manufacturing tolerance when constructing frames to contain panels.







PROPERTY	MACROMESH	MIDIMESH	MINIMESH
Primary grid bars	1 1/2" x 1 1/2" (on center)	1 1/2" x 1 1/2" (on center)	1 1/2" x 1 1/2" (on center)
Secondary grid bars		3/4" x 3/4" (on center)	1/2" x 1/2" (on center)
Aperture	1 1/4" x 1 1/4"	1/2" x 1/2"	1/4" × 1/4"
Load bar thickness	1/4"	1/4" (primary), 1/4" (secondary)	1/4" (primary), 3/16" (secondary)
Panel thickness	1 3/16"	1 3/16"	1 3/16"
Open space	68%	42%	30%
Panel size	4' x 8'	4' x 8'	4' x 8'
Weight	2.5 lb / sq.ft.	3.5 lb / sq.ft.	4.5 lb / sq. ft.

### Installation Guide

### **SPANTRAK / FRP GRATING PANELS**

Concentrated							I	MACRO	OMESH	I						
Line Load	SPAN mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	MAX. REC.
(KG/MTR)	400	1.0	1.5	2.4	4.2	4.9	6.3	9.6	12.8	5500	5000	0000	1000	0000	5000	900
	600	2.2	3.5	5.8	7.9	4.0	0.0	0.0	12.0							620
Equal	800	7.1						MUDU								450
SPAN (nm) Equal	SPAN							WIDI	MESH							MAX.
· · ·	mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	REC.
	400	0.9	1.6	2.6	3.3	4.3	4	6.7	8.4	13.3	17.1					945
	600	2	3	5.6	7.1	9.3	.910.7	14.2	17.7	27.5						651
	800	6.7	11.5	18.4	22.9	29.8										473
	1000	10.7	17.3	27.3												340

Uniform								MACRO	OMESH	I						
Distributed	SPAN															MAX.
Load	mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	REC.
(KG/SQ.MT)	400	0.2	0.4	0.8	1.0	1.3	1.9	2.2	2.9	5.9	6.9	8.5	9.5	9.5	10.9	6500
(Ru/3Q.WT)	600	1.0	1.5	4.8	2.8	3.6	4.3	6.3	7.4							4300
	800	3.9	7.1	8.9												1900
	1000	5.5														1100
								MIDI	MESH							
SPAN (rum)	SPAN															MAX.
· · (mm)	mm	300	500	800	1000	1300	1500	2000	2500	3900	5000	6000	7000	8000	9000	REC.
	400	0.4	0.6	0.7	0.9	1.3	1.5	2.0	2.5	3.7	4.7	5.7	6.7	7.7	8.7	6695
	600	0.7	1.2	2.3	2.7	3.6	4.1	5.5	6.9	10.5	13.4	16.0	18.7	21.3	23.9	4429
	800	3.8	6.4	10.4	12.8	16.9	19.5									1957
	1000	7.1	11.6	19.0	23.2											1133

Point Load	SPAN	MACROMESH									
(KG)	mm	100	225	350	450	700	900				
	450	0.3	0.5	0.9	1.0	2.7	3.5				
	600	0.9	1.1	2.5	2.7	8.1	9.2				
	750	1.1	2.2	5.2	8.9						
4	900	2.6	4.9	8.5	13.8						
	1050	4.1	7.5								
and the second	1150	6.5									
FULL PANEL D SPAN	SPAN	MIDIMESH									
	mm	100	225	350	450	700	900				
	450	0.3	0.6	0.9	1.2	1.8	2.4				
	600	0.7	1.8	2.7	3.7	5.8	7.6				
	750	1.7	3.7	5.5	7.0	10.7	14.3				
	900	2.3	5.2	7.9	10.4	15.5	20.7				
	1050										

### **Load Guidelines**

- It is advised not to exceed the maximum recommended load at any given span.
- Maximum recommended load represents a 5:1 factor of safety on ultimate capacity.
- Ultimate capacity represents a complete and total failure of the grating.
- Walking loads, typically 250-300 kg/m2 maximum are recommended for pedestrian traffic.
- The allowable loads in this table are for static load conditions at ambient temperatures only.
- All gratings were tested in accordance with the proposed standard of the Fiberglass Grating Manufacturers Council of the American Composites Manufacturers Association.









For attaching



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