SOUNDSCAPE®

Barrier Wall

Fibergrate
Composite Structures

DESIGN • FABRICATION • DELIVERY

BUILDING THE WORLD **TO LAST®**

www.fibergrate.com

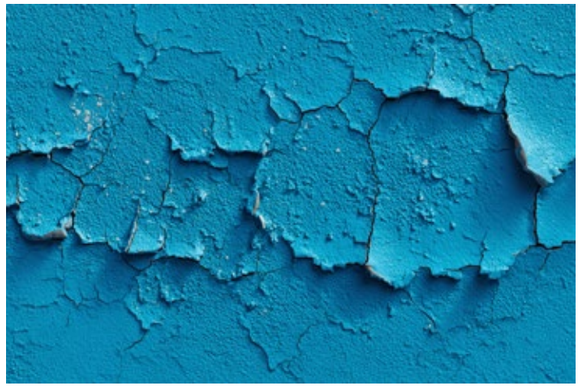
SOUNDSCAPE® *Asset Concealment & Noise Reduction*

Soundscape planks re-imagine what a barrier wall can do.

Shiplap-inspired design, vibrant color options, and advanced durability features make Soundscape a pleasing solution for both architects and engineers. If you are looking for a barrier wall and noise reduction solution with a modern aesthetic and proven performance, specify Soundscape. Designed to be used as a wall barrier for critical asset concealment, noise reduction for roadways and data centers, and seamless integration into many other contemporary and industrial environments.

FRP BENEFITS

- **High Strength to Weight Ratio**
- **Low Maintenance**
- **Non Corrosive**
- **Non Conductive**
- **Non Slip**
- **Impact Resistant**
- **Low Install Cost**
- **Fire Retardant**

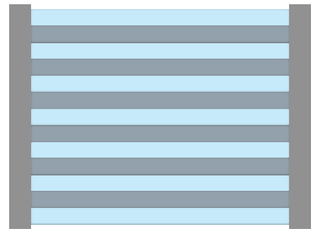


Enhanced Durability

UV finish adds resistance to corrosion, chemical abrasion, and weathering, minimizing maintenance efforts.

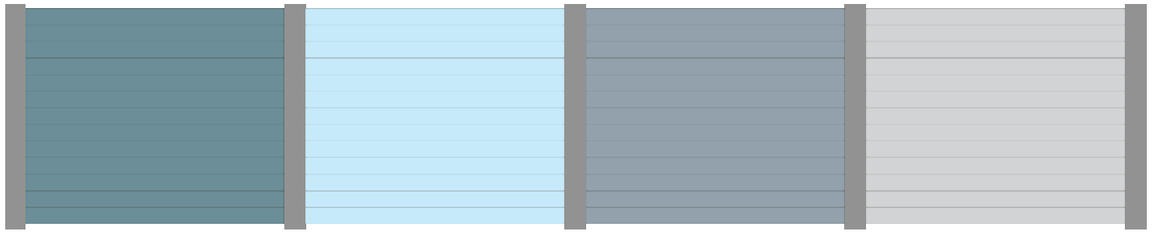
Customizable Aesthetics

Available in 8 standard colors, with Light Gray as the standard in-stock option. Mix complementary colors to create bespoke patterns or request custom colors for unique project requirements.



SKY BLUE-35526 + AIRCRAFT GRAY-36300

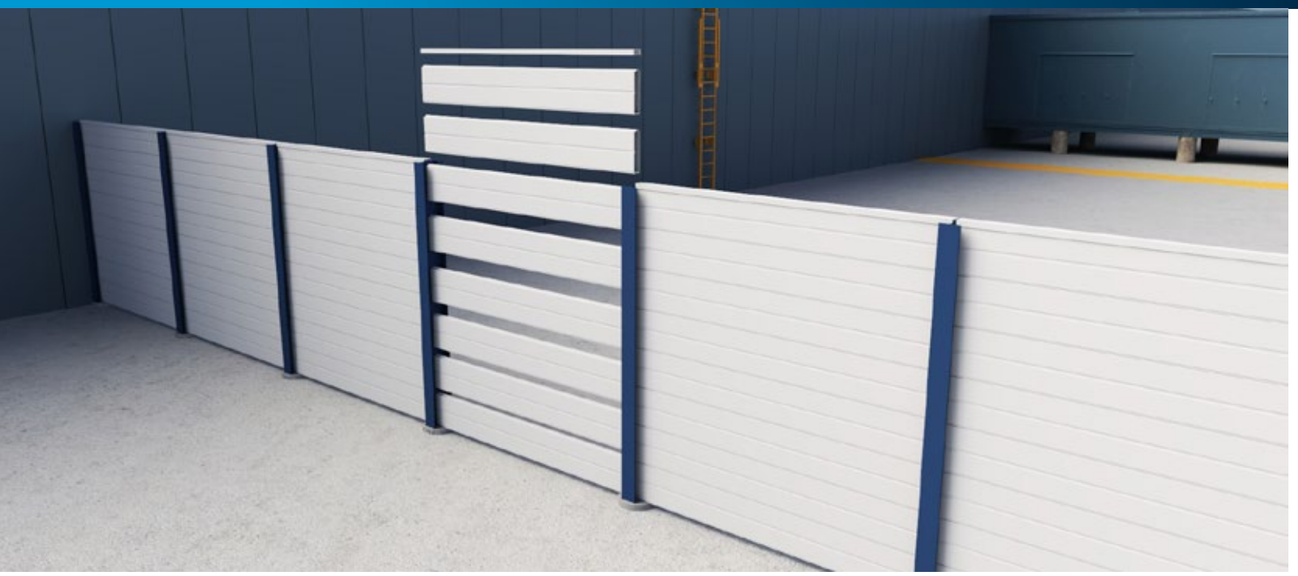
SANDSTONE-33510 | SAND-33617 | TAN GREEN-34201 | GRAY GREEN-34424



BLUE GRAY-35189 | SKY BLUE-35526 | AIRCRAFT GRAY-36300 | LIGHT GRAY-36495

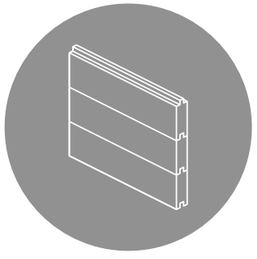
SOUNDSCAPE®

Design with Soundscape to conceal assets and reduce noise



Industries Served

- ☑ Transportation
- ☑ Utilities
- ☑ Energy and Mining
- ☑ Commercial
- ☑ Residential Developments
- ☑ Healthcare
- ☑ Industrial
- ☑ Municipal
- ☑ Data Centers

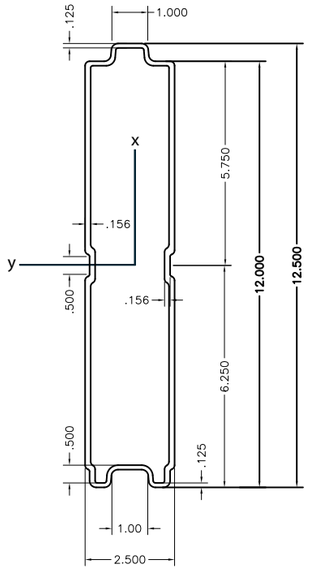


Interlocking Tongue-and-Groove System

Eliminates gaps during assembly, creating a seamless wall for noise mitigation and structural integrity

Plank Design

Span up to 14 feet between supports for typical applications. Connecting to concrete, steel, wood or FRP



Plank weighs 3.52 lbs/ft
Ixx: 5.3691 in^4

SPECIFICATIONS

Material:	Fiberglass-reinforced plastic planks
Standard Color Options:	• Light Gray (Readily available) • Sandstone • Gray Green • Aircraft Gray • Sand • Blue Gray • Tan Green • Sky Blue Custom colors available upon request.
Dimensions:	**Plank height:** 12 inches Readily available in 14 feet lengths
Weight:	Each plank weighs 3.52 lbs/ft.

Properties	Test	Units	Value
Flexural Strength (LW)	ASTM D790	psi	44,500
Flexural Modulus (LW)	ASTM D790	x10^6 psi	1.7
Tensile Strength (LW)	ASTM D638	psi	44,500
Tensile Modulus (LW)	ASTM D638	x10^6 psi	3.4
Compressive Strength (LW)	ASTM D695	psi	34,000
Barcol Hardness	ASTM D2583	n/a	50
Izod Impact Test	ASTM D256	ft-lbs/in	25
Sound Transmission Class (STC)	ASTM E90, ASTM E413	STC Rating	30/31*
Surface Burning	ASTM E84	Flame Spread Index	≤ 25
Noise Reduction Coefficient	ASTM C423	NRC Rating	1.0**

*Absorptive 30, Reflective 31. **Absorptive Only

Reflective Planks *Reflect Soundwaves*

Soundscape (Reflective) Uniform Load Table - Max Span In Inches										
Limit State	10 (psf)	20 (psf)	30 (psf)	40 (psf)	50 (psf)	60 (psf)	70 (psf)	80 (psf)	90 (psf)	100 (psf)
F_b	213	151	123	106	95	87	80	75	71	67
F_u /2.5	278	197	161	139	125	114	105	98	93	88
L/120	221	175	153	139	129	121	115	110	106	102
L/180	193	153	134	121	113	106	101	96	93	89
L/240	175	139	121	110	102	96	91	88	84	81
L/360	153	121	106	96	89	84	80	76	74	71
Max Rec.[a]	213	151	123	106	95	87	80	75	71	67

a Max recommended span is based on the more restrictive of the following:
1. Span at which local buckling occurs (F_b)
2. Span at which the ultimate flexural stress (F_u) divided by a Factor of Safety of 2.5
3. Span at which deflection of L/120 is reached

b Average apparent full section modulus. Properties may vary with span due to shear deformations
c Plot line represents data for Max Recommended span.

I_{xx} = 5.369 in^4
S_{xx} = 4.295 in^3
E_{app} = 2,600,000 psi [b]
F_u = 4,700 psi
F_b = 1,100 psi

Span vs Uniform Load

Specify to block noise from a single, distant source, with no reflective surfaces nearby.

Absorptive Planks *Absorb Soundwaves*

Soundscape (Absorptive) Uniform Load Table - Max Span In Inches										
Limit State	10 (psf)	20 (psf)	30 (psf)	40 (psf)	50 (psf)	60 (psf)	70 (psf)	80 (psf)	90 (psf)	100 (psf)
F_b	203	144	117	102	91	83	77	72	68	64
F_u /2.5	257	182	148	128	115	105	97	91	86	81
L/120	209	166	145	131	122	115	109	104	100	97
L/180	182	145	126	115	107	100	95	91	88	85
L/240	166	131	115	104	97	91	87	83	80	77
L/360	145	115	100	91	85	80	76	72	70	67
Max Rec.[a]	203	144	117	102	91	83	77	72	68	64

a Max recommended span is based on the more restrictive of the following:
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3. Span at which deflection of L/120 is reached

b Average apparent full section modulus. Properties may vary with span due to shear deformations
c Plot line represents data for Max Recommended span

I_{xx} = 5.369 in^4
S_{xx} = 4.295 in^3
E_{app} = 2,200,000 psi [b]
F_u = 4,000 psi
F_b = 1,000

Span vs Uniform Load

Highly effective for noise pollution reduction and preferred choice for modern noise-abatement projects, where noise can bounce off multiple buildings.

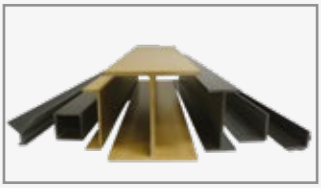
Fibergrate
Composite Structures

Fibergrate® Molded Grating

Fibergrate® molded gratings are designed to provide the ultimate in reliable performance, even in the most demanding conditions. Fibergrate offers the widest selection in the market with multiple resins and more than twenty grating configurations available in many panel sizes and surfaces.

Safe-T-Span® Pultruded Industrial & Pedestrian Gratings

Combining corrosion resistance, long-life and low maintenance, Safe-T-Span® provides unidirectional strength for industrial and pedestrian pultruded grating applications.

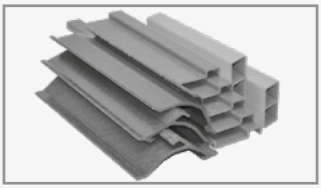


Dynaform® Structural Shapes

Fibergrate offers a wide range of standard Dynaform® pultruded structural profiles for industrial and commercial use, including I-beams, wide flange beams, round and square tubes, bars, rods, channels, leg angles and plate.

Dynarail® & DynaRound® Guardrail, Handrail & Ladder

Easily assembled from durable components or engineered and prefabricated to your specifications, Dynarail square tube and DynaRound round tube railing systems and Dynarail safety ladder systems meet or exceed OSHA and strict building code requirements for safety and design.



Custom Composite Solutions

Combining Fibergrate's design, manufacturing and fabrication services allows Fibergrate to offer custom composite solutions to meet our client's specific requirements. Either through unique pultruded profiles or custom open molding, Fibergrate can help bring your vision to reality.

Design & Fabrication Services

Combining engineering expertise with an understanding of fiberglass applications, Fibergrate provides turnkey design and fabrication of fiberglass structures, including platforms, catwalks, stairways, railings and equipment support structures.

Worldwide Sales & Distribution Network

Whether a customer requires a platform in a mine in South Africa to grating on an oil rig in the North Sea, or walkways in a Wisconsin cheese plant to railings at a water treatment facility in Brazil; Fibergrate has sales and service locations throughout the world to meet the needs and exceed the expectations of any customer.

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