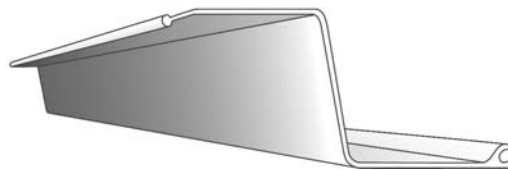


Nexgen 8.5 Composite

Setting new standards in synthetic sheet pile.



Resin System



The resin system is a high performance polyurethane composition. This combination provides the Nexgen 8.5 sheet piling with excellent elongation/impact strength, extreme temperature resistance, excellent chemical resistance, saltwater tolerance, and natural resistance to UV degradation. For additional UV resistance and strength, the system is modified with carbon pigments, UV stabilizers, and a surface veil for a resin-rich surface.

Fiber Reinforcement

Nexgen 8.5 is reinforced with biaxial stitched e-glass fabrics, continuous strand glass mat, and aligned unidirectional rovings, with carbon additives. The specially engineered combination of these materials provides the structural strength necessary to withstand the high stresses required by the sheet piling application. All fibers are sized for optimum compatibility with polyurethane and polyester based resin systems.

Material Properties

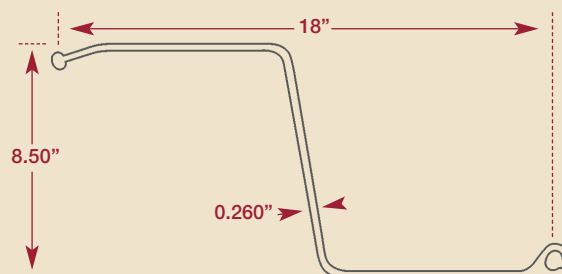
The Nexgen 8.5 includes a strong interlocking ball and socket joint that maintains alignment between sheets throughout installation.

The typical properties of the sheet pile listed below as tested by an independent third party testing laboratory. Our testing laboratories are certified ISO 9001 as well as AS 7101 of NADCAP (National Aerospace & Defense Contractor Accreditation Program) and ISO 17025 accredited by: A2LA (American Association for Laboratory Accreditation). This insures that our sheet pile has the highest level of reliability and performance.

Peak Tensile Stress (Longitudinal)	100.18 ksi	ASTM D-3039/D-638	Modulus of Elasticity (Longitudinal)	6,113,000 psi	ASTM D-3039/D-638
Peak Tensile Stress (Transverse)	15.41 ksi	ASTM D-3039/D-638	Modulus of Elasticity (Transverse)	2,124,000 psi	ASTM D-3039/D-638
Peak Flexural Stress (Longitudinal)	119 ksi	ASTM D-790	Allowable Shear Strength	5,600 lbs/ft	ASTM D2344-84
Peak Flexural Stress (Transverse)	41.22 ksi	ASTM D-790	24 hour Water Absorption	<0.15%	ASTM D-570

Section Properties

Moment of Inertia	62.8 in ⁴ /ft
Section Modulus	14.8 in ³ /ft
Ultimate Moment	131,250 ft-lb/ft (Strength Rating)
Moment with 3.5 SF	37,500 ft-lb/ft
Width	18.0 in
Depth	8.5 in
Weight	6.5 lbs/ lin/ft
Mechanical Interlock	3,300 lbs/ft (Strongest FRP interlock made)
Color – light & Dark Grey	Available in any color at no additional cost
Web Thickness	0.26 inches
Flange Thickness	0.26 inches
UV Protection	Yes – 100% UV stabilization



The Nexgen 8.5 is a synthetic product of Skyline Steel, LLC. Skyline Steel is a fully owned subsidiary of Arcelor Mittal, the world's number one steel company, with 330,000 employees in more than 60 countries. The Nexgen 8.5 sheet pile, as with our entire product lines, are fully supported to meet our customer's needs.