

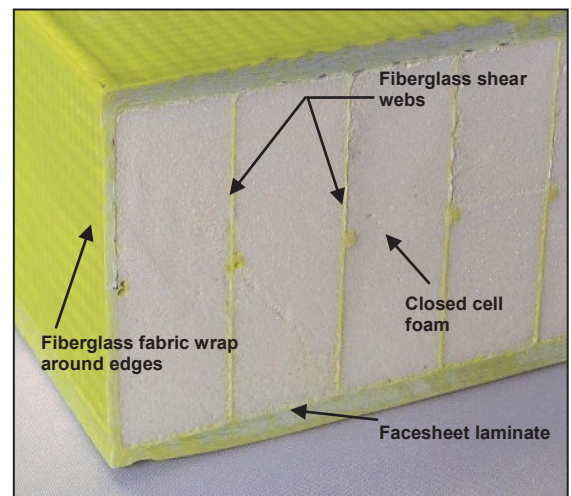
## FRP Decking for Pedestrian Bridges — Properties for Standard Decks —

FiberSPAN™ decking is a prefabricated bridge element that is molded as a complete panel section for ease of installation. FiberSPAN’s sandwich panel construction consists of fiberglass facesheets on top and bottom with redundant fiberglass shear webs. A key component of FiberSPAN is the fiberglass reinforced core. The fibers in the webs are oriented at ± 45° angles for optimal shear properties.

The closely spaced webs provide good crush resistance to concentrated loads.

Closed cell foam is used inside the panel to prevent water from building up in internal cavities. Deck panel edges have continuous fiberglass reinforcement with the facesheets.

The deck depth and facesheet thickness are designed to meet loading and span requirements.



### FiberSPAN-P Deck Properties

This table provides properties for standard deck depths. Uniform load is 90 psf per AASHTO Design Specification for Pedestrian Bridges. Since requirements may include maintenance or emergency vehicles, a concentrated wheel load is included for some cases. The Span Limit is the maximum distance between superstructure supports under the deck to meet the L/D deflection criteria.

Deck Depth (inch)	Uniform Load (psf)	Conc. Load (pound)	L/D Limit	Span Limit (inch)	EI×10 <sup>6</sup> (in <sup>2</sup> lb/in)	Weight (psf)
3	90	0	500	76	1.96	5.1
3	90	0	1000	58	1.74	5.1
3	90	4000	500	58	2.82	7.9
3.5	90	0	500	86	2.88	6
3.5	90	0	1000	66	2.57	6.2
3.5	90	4000	500	66	3.17	7.1
4	90	0	500	96	3.56	6.7
4	90	0	1000	74	3.22	6.7
4	90	4000	500	74	3.22	6.7
5	90	0	500	124	10.03	9.3
5	90	0	1000	100	9.04	9.3
5	90	4000	500	124	10.03	9.3

Properties are in the primary loading direction as the deck transfers the loads to the superstructure. FiberSPAN decking can be designed for other loadings, criteria and bridge geometry.