



PermaTech Innovation

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Fiberon® Horizon® Decking with PermaTech® Innovation

Report

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Description

Horizon with PermaTech Innovation is a highly engineered, wood polymer composite deck product. Manufactured using the unique Fiberon hardwood/polyethylene substructure, Horizon is fusion bonded to a proprietary, patent-pending, durable layer, we call PermaTech Innovation.

The PermaTech surface is formulated from a class of polymers called ionomers. The ionomers are engineered properties for bond strength. For a deck surface, these properties add toughness, tensile strength, relative impact and weatherability. PermaTech provides many of the durability features found in items such as golf ball covers.

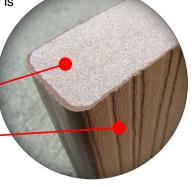
How PermaTech is Made

Horizon with PermaTech Innovation is made using a co-rotating extrusion process that very efficiently blends all the performance enhancing ingredients with our selected wood and polyethylene polymers to yield a solid dense core that can withstand the rigors of outdoor deck performance. Over this core, we co-extrude a specially engineered cap stock that substantially enhances the overall durability of Horizon. Our proprietary cap stock is applied to all four sides of Horizon enabling different grain patterns on each side. Designed to resist many outdoor problems that plague regular wood plastic composites (WPC), PermaTech is weatherable and provides stain and fade resistance.

Fiberon Horizon with patent pending PermaTech is backed by a 25-year limited warranty. Requiring only an occasional cleaning with soap and water, it is engineered to provide a faderesistant, stain-resistant, superior finish that will look beautiful and last for years to come.

Horizon's decking core for strength and rigidity

The patent-pending non-organic surface encases — the composite decking core offering exceptional stain, and fade resistance.



Why PermaTech

Composite decking has been in the market for many years. We know from history that initial WPC products can fade and stain over time. If the proper amount of UV inhibitors and anti-oxidants are not in the formulation, photochemical degradation starts and progresses to the point of poor appearance retention plus the loss of mechanical properties.

Fiberon's WPC core structure is, and has traditionally been, a superior product and by bonding the PermaTech cap system to the solid core structure, we create a long term durable product that stands up to more than just the weather.





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Managing Expansion and Contraction

Composite structures will expand and contract with temperature changes. Horizon uses high grade hardwood flour to provide reinforcing fillers to the Horizon board. In addition since Fiberon uses a co-rotating extrusion process the ability to get good mixing between the wood and the polymer is enhanced. Fiberon also takes advantage of various process additive packages to ensure this mixture is thorough and uniform. Wood used with Horizon has the additional benefit of not being exposed to the elements since the core is protected by the PermaTech surface. These factors along with the selection of proper fasteners including screws through the surface as well as clips for grooved boards provide a secure fastening system for Horizon. Managing lateral expansion forces is a major benefit of using the Fiberon Phantom® Hidden Fastener system.

Additional Product Information

- Ultra low maintenance with superior stain and fade resistance
- Patent pending PermaTech surface outperforms traditional composite decking
- Reversible boards save on cut and waste
- Board Size: 5.4 in. x .935 in.
- Grooved decking available in 12, 16 & 20 ft. Square edge decking available in 20 ft.