

TECHNICAL DATASHEET

VITRODECK, ECOLOGIC WPC

Vitrodeck is a material designed for ecological WPC flooring, made with recycled plastics, which can also be reinforced with fibers. Vitrodeck is produced with the recycling of plastic materials from industrial and urban waste, used as raw materials, mainly polypropylene and high and low density polyethylene. With the mixture of these materials a robust and stable plastic matrix is generated.

Vitrodeck is an affordable, eco-friendly material with good performance in a wide variety of commercial applications. It has excellent resistance to chemical corrosion, acids, oils and fuels, microorganisms ... By not absorbing moisture, it does not rot, swells, cracks or splinters. Vitrodeck products have excellent resistance to environmental agents; however, as they are polyolefins, they can become discolored. There may be slight variations between the shades, due to the heterogeneity of the raw material (mixed plastic waste). Thus, we recommend that they be distributed, combining the different shades, to obtain a look that is as balanced as possible. The material does not require waterproofing, painting or other protective or maintenance treatments when used in outdoor applications.

ADVANTAGES VITRODECK

- Combining the low cost of installation, with the absence of maintenance, the Vitrodeck, 100% recycled plastic, offers in proportion a lower cost and a life cycle greater than that of steel or wood.
- Resistant to corrosion and vandalism, it does not rot and is unalterable.
- Lighter than steel, approximately 1/3 of its weight.
- Insulating.
- Unalterable against water, moisture, and chemical agents.
- Strong.
- Maintenance free, easy to wash and disinfect.
- Anti-slip.
- Resistant to parasites and fungi.
- Resistant to shock, breakage and abrasion.
- Low installation cost
- Low ratio of initial investment.
- It can be sawn, brushed, machined, nailed, screwed and painted.

TYPES AND FORMATS

In addition to Vitrodeck platforms, in Polimer Tecnic we have different types of profiles: circular, rectangular, quadrangular and triangular in brown, black, blue and green.

APPLICATION AREAS

- Walkways and other applications exposed to water.
- Perimeter surface of swimming pools, terraces, non-slip entrances.
- Paving of: swimming pools, gardens, terraces, balconies, platforms, walkways, spas, etc.
- Finishing of facades, railings, ceilings.
- Applications in gardening terraces: pergolas, planters, panels ...
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TECHNICAL SPECIFICATIONS – VITRODECK, ECOLOGIC WPC

Properties	Value	Unit	Standard
Physical properties			
Density (method A)	0.89-0.97	g/cm ³	ASTM D 6111
Water absorption 24 hours	0.23-0.54	%	ASTM D 570
Water absorption 9 weeks	0.91-4.09	%	ASTM D 570
Mechanical properties			
Flexural strength	798-1002	MPa	ASTM D 6109
Compressive strength	10.3-12.2	MPa	ASTM D 6108
Compression module	376-531	MPa	ASTM D 6108
Cut strength	5.40-6.58	MPa	ASTM D 143
Nail removal	0.56-0.71	kN	ASTM D 6117
Screw removal	1.70-2.53	kN	ASTM D 6117
Thermal properties			
Thermal expansion coefficient	4.8 -35.2	µm/m°C	ASTM D 6341
Thermal deflection temperature	43.5-57.2	°C, 1.8 mpA	ASTM D 648
Vicat temperature	88.1-122.8	50°c/h-1	ASTM D 1525
Fire properties			
Flame spread speed	21	mm.min-1	NF P 92-506
Ignition time	41	s	ASTM E1354
Loss of mass	87	%	
Heat release rate	436	kW.m-2	
Combustion heat	43	MJ.kg-1	
Smoke opacity	541	m ² kg-1	
Total heat released	2266	kJ	

The properties described here are typical values of the material. Polimer Tecnic is not responsible for the materials of a specific consignment to exactly match the given values, being able to carry out tests of that heading. The above information is based on our experience and is given in good faith. Due to some installation and processing factors that are beyond our knowledge and control, no guarantee is given regarding such information.