Polysite™

Technical Information

landscapeforms®

Contents

PolySite™ is made from 100% high density polyethylene (HDPE), derived from recycled post-consumer packaging such as milk containers. This reclaimed HDPE is purified and ground into small pellets. Pigment and UV inhibitors are added as the HDPE is heated, then extruded to shape and cooled. The resulting finished product contains over 90% recycled content by weight.

Resistance to Environmental Stresses

Because PolySite™ is made from HDPE, it has exceptional resistance to moisture, corrosive substances, insects, and other environmental stresses. It does not absorb moisture, so it will not rot, splinter or crack. It requires no waterproofing, staining or similar maintenance.

PolySite™ has excellent weathering resistance; however, as with other polyolefins, it is possible that the material will fade slightly over the service life of the product. Accelerated weathering tests in accordance with ASTM E838, indicate that PolySite™ is very color stable, with a reflectance change of 0.91 on a scale of 0-100, after approximately 1 million Langleys of exposure (about 3 years in most of N. America). This stability is achieved with the use of pigment systems that are resistant to breakdown by radiant energy.

Polysite™ is Slow to Ignite, Melt

PolySite™ has a melt temperature of approximately 270° F and a flash point of approximately 620° F. This is a higher flash point than wood and PolySite™ must be exposed to a severe combustion source for a longer period than wood to ignite. Like wood, when exposed to a combustion source for a long enough period of time, PolySite™ will burn.

Maintenance

PolySite™ is unaffected by most corrosive substances and will not absorb moisture or promote bacterial growth. To maintain the original finish, simply clean PolySite™ with soap and water. As a rule, paint will not adhere to PolySite™, so sealing or painting is not required or recommended. Most forms of graffiti can be cleaned from the PolySite™ surface with the use of a conventional all-purpose cleaner.

Samples

To receive a PolySite™ sample, contact the Landscape Forms sales/service team at 800/521-2546.

Mechanical Properties		
Property	**Test Method**	**Typical Value**
Density (lbs/cu. in.)	ASTM D792	.025 - .028
Compressive Strength	ASTM D695	
	psi @ .2 in. def.	2540 - 2560
	psi @ .4 in. def.	3040 - 3120
	psi @ .6 in. def.	5130 - 5350
Tensile Strength (psi)	ASTM D638	2160 - 2630
Flexural Modulus (psi)	ASTM D790	97900 - 103300
Shear Strength (psi)	ASTM D732-90	1850 - 2050
Coef. of Therm. Exp. (in/in/deg F)	ASTM D696	0.00007
Accel. Weathering > 1MM lang.	ASTM E838	0.91% color change