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# RPI PRODUCT DATA SHEET

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## Description

RPI Lumber products are produced from high-density polyethylene (HDPE), colorants (pigments) and UV inhibitors.

- It is manufactured to exacting specifications.
- It is resistant to corrosive substances, oil and fuels, insects, fungi, salt spray, and other environmental stresses.
- It does not absorb moisture.
- It will not rot, splinter, or crack.

## Maintenance

To maintain the original finish, clean the lumber with soap and water. No sealing or painting is required; as a general rule, paint will not adhere to RPI Lumber products.

## Limitations

It is not recommended for use as a structural member. It is also recommended that an engineering study be performed prior to the use of RPI Lumber products if the application involves any structural requirements.

When utilizing RPI Lumber products for decking or flooring, careful attention must be paid to joist spacing. Supports should be placed 12 inches on center for 1x profiles. Profiles greater than 1x may be utilized at 16 inches on center. For heavy load bearing applications additional support may be considered.

## Basic Uses

RPI Lumber products can be used as replacements for wood lumber applications. For exterior applications where weathering resistance and low maintenance are required, RPI Lumber should be your choice.

Used in both residential and commercial applications, RPI Lumber products will exceed the performance of conventional lumber in the worst environmental conditions.

Mechanical Properties @ 70° F	Test Method	Average Value
Density	ASTM D6111	.0237 - .0249 lbs/cu in
Modulus of elasticity (@ 1% strain)	ASTM D6109	111,700 - 113,950 psi
Ultimate flexural stress (@ 3% strain)	ASTM D6109	2,250 - 2,325 psi
Allowable flexural stress	ASTM D6109	1200 psi
Endwise compressive stress (@ 3% strain)	ASTM D6109	1200 psi
Screw withdrawal, #10, 1 1/2"	ASTM D6177	325 lbs
Water absorption, 11 weeks	ASTM D570	.01% 24 hrs
Coefficient of thermal expansion	ASTM D6341	.00007 in/in/°F

## Flammability

The materials utilized in recycled plastic lumber are flammable but not combustible. HDPE is difficult to ignite and the flame will normally self extinguish.

Accepted extinguishing method: DRY CHEMICAL, CO<sub>2</sub>, WATER FOG/SPRAY, and FOAM. Emissions from combustion are carbon dioxide, carbon monoxide, H<sub>2</sub>O, nitrogen and organic vapors.

Flash Point: 330°C (700°F) (ASTM E138)

BTU's/lb: 19,900

Melt Temperature: 104° - 108°C (220° - 230°F)

Notice to Reader.

ALL THE INFORMATION CONTAINED IN THIS DOCUMENT IS PRESENTED IN GOOD FAITH. THIS INFORMATION IS BELIEVED TO BE RELIABLE AT THE TIME OF PREPARATION OF THIS DOCUMENT.