

**SIMONA  
AMERICA  
INDUSTRIES**



**polygrain<sup>®</sup>**

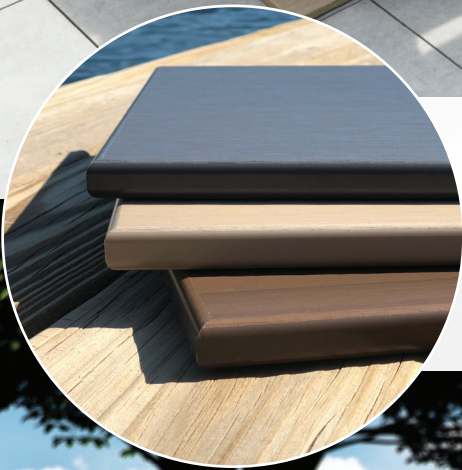
Woodgrain, weatherproof HDPE polymer sheet.  
Exceptional performance. Ingrained beauty.

GLOBAL THERMOPLASTIC SOLUTIONS

## Introducing Polygrain®

Polymer sheet with a sophisticated wood-like grain and texture. Engineered to perform outstandingly in all weather conditions. A more durable and colorfast alternative to wood with endless possibilities.





## Turn Your Outdoor Living Areas Into Oasis

Polygrain® inspires innovation for high-end and heavily used outdoor living spaces. Exceed limitations for use during all seasons and in all climates with this versatile and elegant material. Maintenance free with zero upkeep required.



polygrain®

## Exceptional performance. Ingrained beauty.

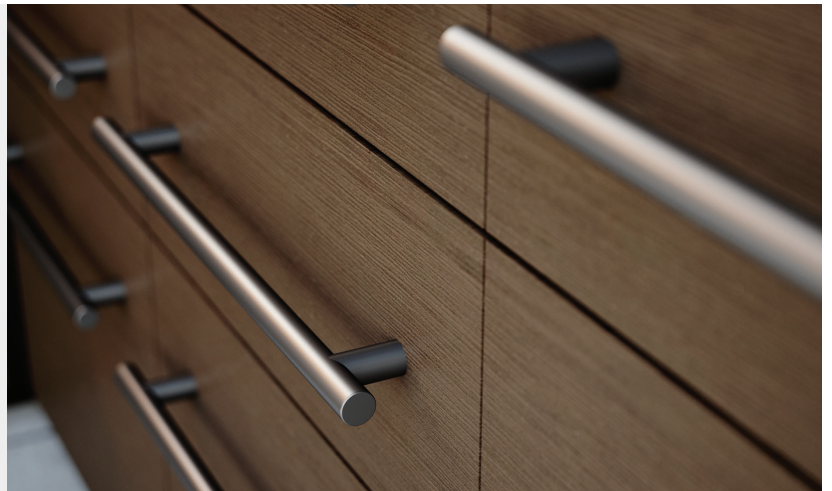
### Material solutions for outdoor products.

To create products that stand out you need a material that provides outstanding durability and unique beauty. A combination of long-term performance, high-end appearance and consistency in fabrication make Polygrain® ideal for a diverse range of residential and commercial outdoor living applications.

#### Cabinetry

Polygrain® is durable and easy to clean. It's an ideal solution for outdoor kitchen cabinetry and other components.

- Cabinet Boxes
- Cabinet Doors
- Outdoor Kitchens
- Wall Paneling
- Partitions and Dividers



#### Furniture

Polygrain® works beautifully for building outdoor furniture pieces.

- Lounge Seating
- Adirondack Chairs
- Coffee and Side Tables
- Fireplaces
- Planters
- Breakfast and Beverage Bars



#### Boats

Excellent UV and water resistance make Polygrain® perfect for use in many places on a boat.

- Doors, Hatches and Well Covers
- Tables, Trim and Cabinets
- Instrument Panels and Plates
- Swim Platforms
- Marine Architecture and Storage
- Steps and Grab Rails



## Outstanding material performance. No exceptions.

### Durability meets sophistication.

This tough UV resistant material withstands long term exposure to intense sun, salt water, and cleaning products. Made out of HDPE, a durable, impact resistant polymer, Polygrain® provides excellent protection from the effects of rigorous use and environmental exposure.



#### Long-term Color Performance

The color is integral throughout the Polygrain® sheet, meaning there is no need to sand or paint. It will maintain its color and not fade after long-term use and UV exposure.



#### Maintains Flatness

We own flat. We're committed to producing the most consistently flat HDPE materials that fabricators and users can rely on. The sheet is guaranteed not to bow or bend.



#### UV and Weather Resistant

Polygrain® is non-absorbant, so it performs well against moisture, snow and rain. It's also engineered to handle hot and freezing temperatures.



#### Scratch Resistant

Polygrain® has a scratch-resistant surface finish and gloss level that is preferred by most fabricators and cabinet makers. It will stand up against scrapes and cuts in use.



#### Easy to Clean

Polygrain® can be frequently cleaned using standard household cleaning products.



#### Impact Tough

Polygrain® products can be beat up, moved around and carry significant weight.



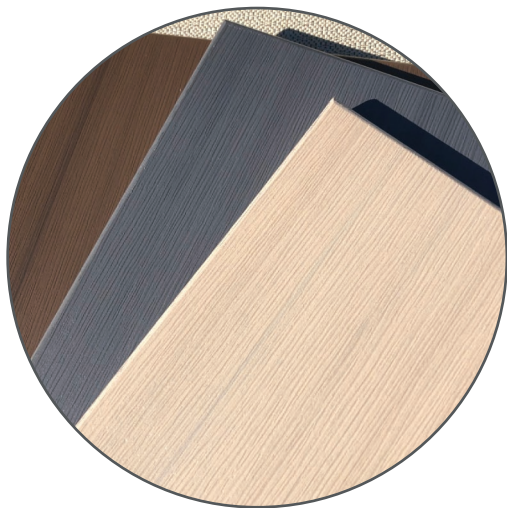
#### 100% Recyclable

Polygrain® HDPE is fully recyclable at the end of its life. In-house processes utilize recycled material put back into the sheet.



#### Easy to Fabricate

Polygrain® is easy to work with using standard tooling and woodworking equipment.



### Modern Color Palette

Polygrain® is available in five standard colors. Custom colors are possible and can be matched to any Pantone number.

### Complementary Solid Colors

We also offer a wide range of beautiful solid color BOATBOARD® HDPE sheet with a matte texture that pairs well with Polygrain®.





Susquehanna Gray



Northeastern Walnut



Olyphant Oak



Blakely Birch



Tunkhannock Teak



#### PROPERTIES SIMONA® HDPE POLYGRAIN®

PROPERTY, Units of Measure <sup>1</sup>	Test Method	TYPICAL VALUES	
		SIMONA® HDPE POLYGRAIN®	
Specific Gravity	ASTM D792	0.97 g/cc	
Water Absorption, %	ASTM D570	< 0.1	
<b>MECHANICAL</b>			
Tensile Strength @ Yield	ASTM D638	4,400 psi	30.4 MPa
Elongation @ Break, %	ASTM D638	>300%	
Flexural Modulus	ASTM D790	190,000 psi	1,311 MPa
Notched Izod Impact	ASTM D256	2.75 ft-lb/in.	146.8 J/m
Hardness, Shore D	ASTM D2240	61	
Abrasion Resistance mg/1000	Taber CS 17	—	
Coefficient of Friction (static/dynamic)	ASTM C1894	0.2 / 0.2	
Coefficient of Expansion x10 <sup>-5</sup>	ASTM D696	10	
<b>THERMAL</b>			
Continuous Service Temperature	Maximum	170° F	76.7° C
Melting Point	ASTM D3418	267° F	130.7° C
Heat Deflection Temp. @ 66 psi (0.45 MPa)	ASTM D648	167° F	75° C
Heat Deflection Temp. @ 264 psi (1.8 MPa)	ASTM D648	110° F	43.4° C

<sup>1</sup>All tests at 73°F (22.8°C) in dry conditions unless otherwise noted.

#### Technical Expertise and Innovation - Let's Work Together

SIMONA AMERICA Industries is a leading manufacturer and development partner for thermoplastic products. For hands-on fabrication support, or to schedule a material selection consultation, contact us at [www.simonapolygrain.com](http://www.simonapolygrain.com).

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#### Configurations

- Sheet sizes
  - 54 x 96 in.  
(1,372 x 2,440 mm)
- Gauges
  - 1/2; 3/4 in.  
(12.7; 19.0 mm)
- Colors
  - Olyphant Oak
  - Susquehanna Gray
  - Northeastern Walnut
  - Blakely Birch
  - Tunkhannock Teak
- Texture
  - Woodgrain on both sides
- Custom colors, sizes
  - On request

#### SIMONA AMERICA Industries

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