

Tough, Maintenance-Free HDPE and Polypropylene Sheet Products



**Solid polymer sheet for cabinetry
and furniture that withstands
any environment beautifully**

- ⦿ **SIMONA**® HDPE Boat Board®
- ⦿ **SIMONA**® HDPE Cabinet Grade
- ⦿ **SIMONA**® Polypropylene Copolymer
- ⦿ **SIMONA**® Polypropylene Homopolymer

**Outperforms wood
and wood-composite
products**

- ⦿ Withstands hot, cold, wet and dry conditions
- ⦿ Will not splinter, rot or delaminate
- ⦿ Durable, resists high impacts
- ⦿ Maintenance-free, never needs painting



SIMONA® HDPE and Polypropylene Sheet

Outperforms plywood, laminated wood-core products and wood composites for exterior and interior cabinetry and furniture

Performs beautifully under extreme conditions

The durable, solid polymer composition and integral color of SIMONA furniture grade sheet delivers performance benefits that plywood and laminated wood-core products cannot:

- Withstands hot, cold, wet and dry conditions
- Will not splinter, rot or delaminate
- Resists stains, chemicals and harsh cleaning agents
- Resists high impacts even at temperature extremes

Eliminates secondary edge trim

When routed and sawn, the edges of SIMONA's solid color HDPE and polypropylene sheet are uniform in appearance with the top and bottom surfaces. This eliminates the need for edge moldings, painting and other edge treatments that add cost, can create unsanitary seams and delaminate, chip, dent or separate over time.

Maintenance free

- Integral color never needs painting
- Renders scratches and gouges inconspicuous
- Resists stains—easy to clean
- Resists harsh chemicals in laboratory applications

Easy to fabricate

- Exceptional flatness affords high productivity and yields
- Dimensionally stable even in large, flat, heavy-gauge applications
- Easy to machine using conventional woodworking equipment
- Easy to join using mechanical fasteners or specialty adhesives

With solid High Density Polyethylene and Polypropylene sheet products from SIMONA, your products can last a lifetime, indoors or out, under the most demanding conditions



SIMONA®
HDPE
Boat Board®

Rigidity, durability and long-term resistance to severe weather conditions for outdoor furniture and cabinetry

SIMONA® HDPE Boat Board®'s ability to withstand sun, salt water and rigorous use, together with its wide color selection, makes it ideal for long lasting outdoor furniture and cabinetry, poolside and beach structures, as well as boat building components.

Typical applications

- Outdoor kitchen cabinetry
- Restaurant and resort furniture
- Serving carts, recycle bins
- Lifeguard, beach and marina structures
- Pool equipment and storage
- Arena and park benches
- Boatbuilding components

SIMONA®
Indoor Cabinet
Grade HDPE

Toughness, easy maintenance and a color range that enhances any indoor environment

SIMONA's Indoor Cabinet Grade HDPE is tough enough for industrial use, yet delivers exceptional aesthetics in a range of colors for indoor furniture and cabinetry that complements home, commercial, scientific, medical and laboratory settings.

Typical applications

- Medical and dental cabinetry
- Lockers, benches and partitions
- Hospitality cabinetry and furniture
- Indoor pool cabinetry, storage
- Recreational and bar cabinetry
- Workshop cabinetry, work surfaces, storage

SIMONA®
Polypropylene
Homopolymer

Exceptional rigidity, surface hardness and chemical resistance for indoor cabinetry and work surfaces

SIMONA's homopolymer polypropylene provides excellent surface hardness and structural strength superior to polypropylene copolymer and HDPE. It maintains its rigidity even at temperatures exceeding 200°F (93°C) and resists harsh laboratory and clinical chemicals and cleansers.

Typical applications

- Medical, dental office and laboratory cabinetry
- Chemical resistant work surfaces, partitions and storage lockers
- Scientific, institutional and industrial cabinetry
- Hospitality indoor cabinetry

SIMONA®
Polypropylene
Copolymer

Extreme impact resistance even at sub-zero temperatures for outdoor and indoor applications

SIMONA's copolymer polypropylene resists breakage from rough handling and hard knocks even at low temperature extremes. It is ideal for seating and partitions that must withstand impacts in cold seasonal climates, and in hockey rinks and winter sports venues. The UV stabilized grade is ideal for outdoor applications.

Typical applications

- All-season residential and resort seating, tables and accessories
- Ice hockey benches, partitions
- Winter sport venue seating, tables and storage structures
- Hospitality outdoor furniture

Wide range of color options for diverse applications

SIMONA offers a wide spectrum of standard and custom colors from subtle tones for cabinetry and boat building, to bold colors for scholastic and sports venues. All colors are integral and uniform throughout each sheet.

Cabinet and furniture grade colors include:

- Polar white, bright white
- Dolphin gray, glacier gray
- Seafoam, sandshade, tan
- Brown, black
- Additional standard and custom colors available in every material family



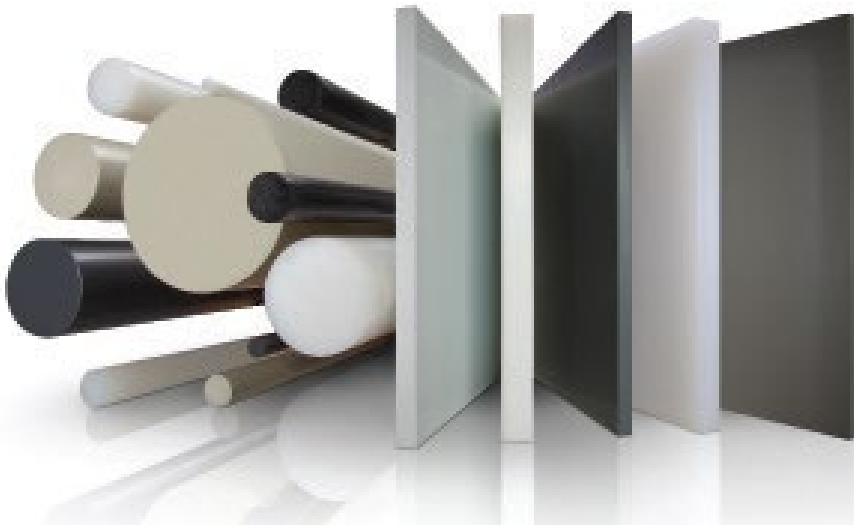
ESSENTIAL DIFFERENCES

3 = BEST 2 = BETTER 1 = GOOD	RIGIDITY	IMPACT STRENGTH		SURFACE HARDNESS	UV STABILIZED	CHEMICAL RESISTANCE	EAST OF FABRICATION
		73 °F (22.8 °C)	0 °F (-17.8 °C)				
SIMONA® HDPE Boat Board®	2	2	2	1	Yes	2	3
SIMONA® HDPE Cabinet Grade	2	2	2	1	No	2	3
SIMONA® Polypropylene Copolymer	1	3	3	2	Available	2	2
SIMONA® Polypropylene Homopolymer	3	1	1	3	No	3	1

TYPICAL PROPERTIES: HDPE and POLYPROPYLENE GRADES

PROPERTY, units of measure*	TEST METHOD	SIMONA® HDPE Boat Board®	SIMONA® Polypropylene Copolymer	SIMONA® Polypropylene Homopolymer
Specific Gravity	ASTM D792	0.97	0.905	0.905
Water Absorption, %	ASTM D570	<0.01	<0.01	<0.01
MECHANICAL				
Tensile Strength @ yield psi (MPa)	ASTM D638	4,400 (30.4)	3,600 (24.8)	4,800 (33.1)
Elongation @ break, %	ASTM D638	>300	>500	>100
Flexural Modulus psi (MPa)	ASTM D790	240,000 (1,655)	155,000 (1,069.5)	195,000 (1,345.5)
Notched Izod Impact ft-lb/in., (J/m)	ASTM D256	2.75 (146.85)	No break	0.9 (48.06)
Hardness, Shore D	ASTM D2240	68	70	70
Abrasion Resistance mg/1000	Taber CS 17	—	—	—
THERMAL				
Continuous Service Temperature °F (C°)	Maximum	170°F (76.7°C)	180°F (82.3°C)	212°F (100°C)
Melting Point °F (C°)	ASTM D3418	267°F (130.7°C)	327°F (164°C)	320-329°F (160-165°C)
Coeff. of Expansion x10 ⁻⁵ in./in., °F (mm/mm, C°)	ASTM D696	10 (18)	8.88 (15.8)	8.88 (15.8)
Heat Deflection Temp. @ 66 psi (0.45 MPa)	ASTM D648	167°F (75°C)	180°F (82.3°C)	—
Heat Deflection Temp. @ 264 psi (1.8 MPa)	ASTM D648	110°F (43.4°C)	133°F (56.2°C)	—
FLAMMABILITY				
	UL 94	—	HB	—

*All tests at 73° F (23°C) in dry conditions unless otherwise noted.



SIMONA offers the widest product range of PVC sheet and rod – FM 4910 rated sheet – chemical resistant materials from PVC, PP and PE to fluoropolymers – orthotics and prosthetics sheet – Boltaron aircraft sheet – plus proven products for boat building, outdoor furniture and many other industries.

DISCLAIMER AND LIMITATION OF WARRANTY:
 All information contained herein is believed by SIMONA AMERICA Industries to be reliable. Typical properties are based on laboratory tests conducted on material samples in accordance with standard test methodology. SIMONA AMERICA Industries makes no express or implied warranty that its products will perform in accordance with the data in all conditions and circumstances. To determine suitability for use, users must test applications under actual operating conditions. As a result, ALL EXPRESS OR IMPLIED WARRANTIES IN CONNECTION WITH SIMONA AMERICA Industries and SIMONA Boltaron Inc. PRODUCTS INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY DISCLAIMED.

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