

Company Overview

Products and services

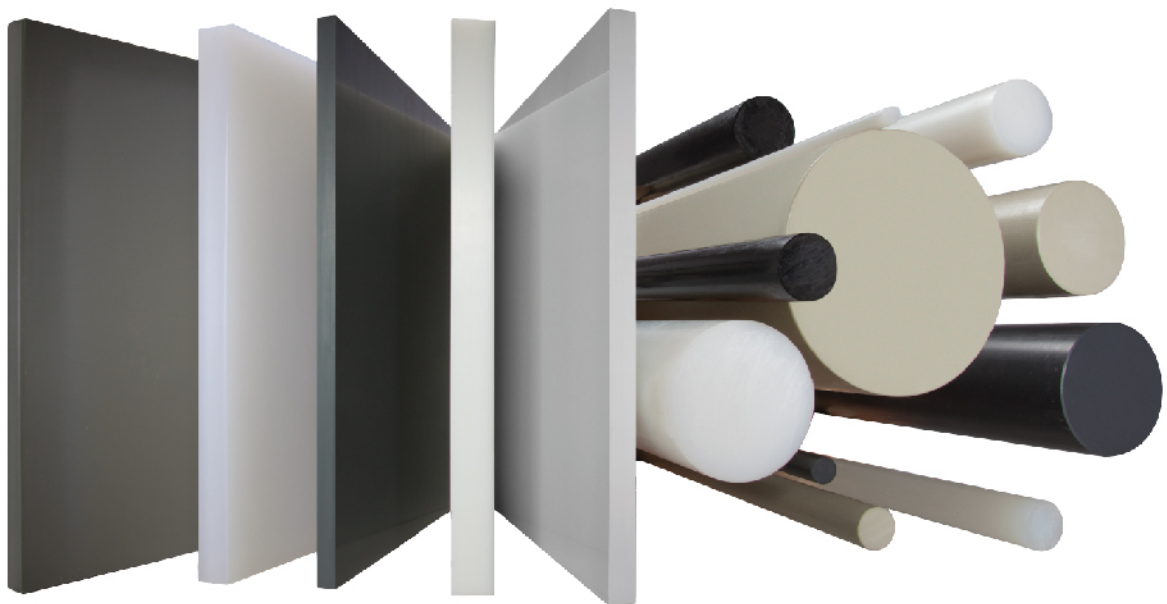
SIMONA offers an unmatched portfolio of sheet and rod products and sizes for applications in virtually all major markets served by plastics fabricators and distributors.

With a global strategy to grow through market development and acquisition, SIMONA continues to establish it's a strong presence in the US, benefitting customers through a comprehensive range of materials and services.

The SIMONA AMERICA Group consists of three independent manufacturing and sales facilities in North America including:

Learn through hands-on training

Alongside our standard training program, we provide special training courses tailored to your individual needs – either at a SIMONA AMERICA Group location or on your own premises you will have a solid knowledge of SIMONA materials with hands-on training. Topics include: **Certification in Welding of SIMONA Materials, SIMONA Boltaron General Thermoforming 101, SIMONA PMC Products and Applications.** It goes without saying that we can also create a program that includes other fields of interest. We are happy to tailor our training courses to your personal requirements!



SIMONA AMERICA INDUSTRIES

Products

- PE, PP, PVC, PVDF, ECTFE, PFA sheets
- PE, PP, PVC, PVDF, ECTFE, PFA welding rods
- PE, PP, PVC, PVDF solid rods

Production capabilities

- Extrusion
- Coextrusion



Archbald, Pennsylvania, USA



Findlay, Ohio, USA

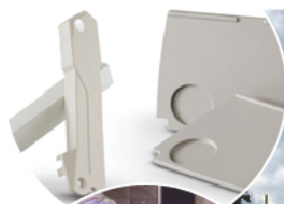


Products

- TPO, ABS, Acrylic, and Specialty sheets

Production capabilities

- Coextrusion
- In-line lamination



Products

- PVC/Acrylic sheets

Production capabilities

- Extrusion
- Calendering
- Press lamination



Newcomerstown, Ohio, USA

SIMONA AMERICA Industries offers a portfolio of plastic sheet and rod for a diverse range of major markets served by plastic fabricators and distributors in North America. Main application areas are the chemical processing and semiconductor industry, food processing, orthopedics as well as marine and outdoor living.

Serving these segments, the company offers a range of specialty materials and brands in addition to the standard SIMONA materials. Be it UV and water resistant products for playgrounds or an extensive product range of chemical and flame-resistant sheet that meets FM 4910 regulatory requirements – SIMONA AMERICA Industries is your competent partner for innovative product solutions.

Materials

- | | | |
|--------------|---------------|-------------|
| ■ PE | ■ PVC Type I | ■ PVDF |
| ■ PP-H, PP-C | ■ PVC Type II | ■ ECTFE 901 |
| ■ FRP-3 | ■ CPVC | ■ ETFE |
| ■ FRP-5 | ■ CRP-1 | ■ PFA-M |

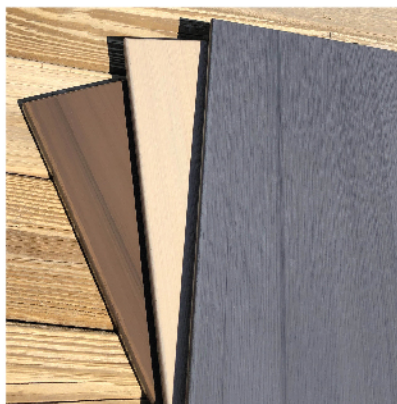
Brands^①

SIMONA® HDPE BOATBOARD®	UV and water resistant HDPE for marine and outdoor living
SIMONA® HDPE BOATBOARD® Lightweight	20% lighter foamed UV and water resistant HDPE for marine, outdoor living, and retail display
SIMONA® HDPE BOATBOARD® Anti-Slip	UV and water resistant HDPE high friction surface
SIMONA® Polygrain® Woodgrain HDPE	UV and water resistant HDPE with high-end woodgrain appearance
SIMONA® HDPE Polytone®	Single and multi-layer UV HDPE for playground, sign and display
SIMONA® PVDF®	Extruded with Kynar® PVDF 740 resin
SIMONA® PVDF® 2850	Extruded with Kynar® PVDF copolymer 2850 resin
SIMONA® PVC CRP-1	FM 4910 rated white PVC with superior chemical resistance and surface appearance
SIMONA® Clear CPVC 2000	FM 4910 rated clear CPVC

^① Specialty brands for selected target markets. Additionally, all of the above-mentioned materials are available.



Outdoor kitchen made of SIMONA® HDPE BOATBOARD®



Polygrain® Woodgrain HDPE



SIMONA® PVC CRP-1 FM 4910 and SIMONA® Clear PVC 2000

SIMONA PMC is an extrusion company specializing primarily in the manufacture of plastic sheet products used in caravan, agricultural, and industrial applications. Focusing on attractive niche markets for thermoforming applications, SIMONA PMC supplies high-performance plastics requiring specialist solutions and significant materials expertise. Among the key materials processed by the company are TPO, ABS, and combinations of vinyl and acrylic with ABS. SIMONA PMC is renowned for its highly flexible production capabilities and its extensive in-house expertise in the field of product development.

Materials

- | | | | |
|-------|--------------|---------------|------------|
| ■ TPO | ■ Soft-touch | ■ PC/ABS | ■ OneStep® |
| ■ ABS | ■ Acrylic | ■ PremierCap® | ■ ONTEX® |

Products and brands

PMC® Low Gloss ABS	Impact resistant ABS with a low gloss ABS cap layer
PMC® PMMA-capped ABS	ABS capped with PMMA (both low & high gloss)
PMC® High Gloss ASA/Capped ABS	High gloss ASA laminated over an ABS substrate
PMC® Softflex® ASA/ABS	Soft-touch, Low gloss ASA cap, coextruded over ABS
PMC® FR ABS	ABS with advanced fire-resistance performance
PMC® OneStep® Vinyl/ABS	Leather-like textured vinyl foam composite is laminated over ABS to create a piece that mimics hand-wrapped parts
PMC® Copolymer PP Alloys	PP-C alloys offering good wear and chemical resistance
PMC® High Melt Strength	TPO with high melt strength performance
PMC® Utility TPO	Utility grade TPO
PMC® PremierCap® High Gloss TPO	High gloss polyolefin cap layer coextruded over TPO
PMC® PremierCap® Low Gloss TPO	TPO with a low gloss finish
PMC® FR TPO	Fire resistant TPO
PMC® Exultra® 2000 Soft-touch TPO	Cap of partially cross-linked TPE coextruded over TPO
PMC® StrataGem® SMR	Acrylic film laminated over coextruded tie layer and TPO
PMC® PC/ABS	ABS and polycarbonate combined to improve heat deflection temperature, stiffness and low-temperature impact resistance. Requires cap or coating for weatherability
PMC® FR PC/ABS	Meets stringent UL regulations for fire behavior, electrical safety and resistance to chemicals
PMC® ONTEX®	Directly-bondable, directly paintable TPO



PMC® OneStep Vinyl/ABS



PMC® High Gloss TPO



John Deere tractor engine cover made with
PMC® StrataGem™

Product offering SIMONA Boltaron

SIMONA Boltaron is a world leader in custom order high-performance plastics for demanding applications, specifically for the aircraft interiors industry. Other areas that SIMONA Boltaron materials are used for include semiconductor equipment manufacturing, wall cladding, specialty and hobby, retail display and general thermoforming. SIMONA Boltaron offers a diverse range of specialized grades that offer a combination of regulatory fire ratings, enhanced durability, custom color matching, extruded and press laminated textures, and a range of material gauges from very thin to extra thick.

Materials

- PVC
- PVC Acrylic
- CPVC
- Pearls
- Metallics
- Unlimited Colors
- Textures
- Prints
- Transluents



Textured economy seat back made with Boltaron® 9815 P material



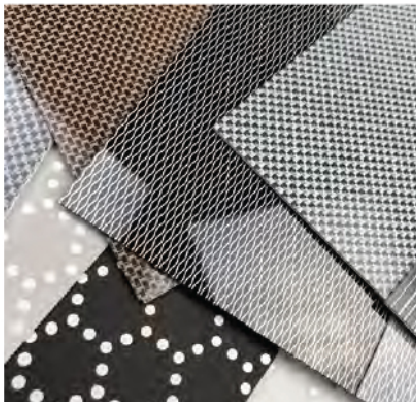
Economy seat back and tray table made with Boltaron® 9815 P material



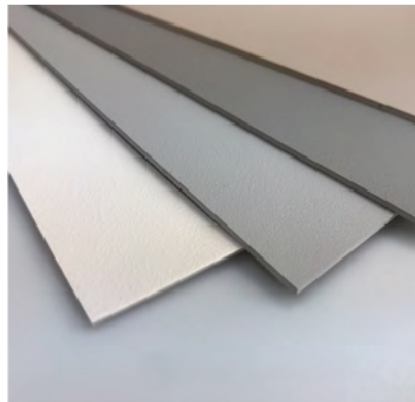
Thermoformed decorative material made with Boltaron® 9815 pearlescent sheet

Products and brands

Boltaron® 9000 Series	These materials meet the requirements of FAR 25.853 (a) and (d) for flammability, smoke and heat release for use in the aircraft interior.
Materials for aircraft interiors	
Boltaron® 9815 N	High impact resistance and UV resistant
Boltaron® 9815 M	High impact with an embedded metallic effect
Boltaron® 9815 P	High impact with a pressed texture
Boltaron® 9815 D	High impact sheet with an embedded print
Boltaron® 9200	Light-blocking sheet for aircraft window shades
Boltaron® 9250	Maximum light-blocking sheet for aircraft window shades
Boltaron® 9850	Low smoke performance
Boltaron® 4000 Series	
Materials for aircraft interiors	These materials meet the flammability requirements of FAR 25.853 (a) for use in the aircraft interior.
Boltaron® 4205	High temperature resistance
Boltaron® 4385	Highest heat deflection temperature
Boltaron® 4350	Rigid, translucent
Boltaron® 4330	Highest impact sheet
Boltaron® 8830	Soft touch
Corrosion resistant FR materials	
Boltaron® 4050	PVC Type II
Boltaron® 4225	FM 4910 CPVC
Boltaron® 4300	Clear ASTM D-1784 CPVC
Boltaron® 4325	Clear FM 4910 CPVC
General thermoforming materials	
Boltaron® 1165	Recycled black
Boltaron® 4335	High impact thermoformable
Boltaron® 6540	UL 94 V-0 rated
Boltaron® 4550	High impact, weatherable
Boltaron® 4800	Docket 90-A rated
Building and interior materials	
Boltaron® 4065 MP	Thin gauge for membrane pressing
Boltaron® Rigiwall® 4323	Class 1-A rated for interior wall coverings
Boltaron® Rigiwall® 4333	Class 1-A rated for interior wall coverings



Designer prints made with Boltaron® 9815 D material



Boltaron® 9815 True Pearl swatches



Boltaron® 4065MP materials for membrane pressing

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Marine Materials

UV and water-resistant materials from
SIMONA AMERICA Industries and SIMONA PMC

With decades of experience in extrusion of exterior grade polymers, SIMONA AMERICA Industries produces multiple grades of HDPE for marine applications.



BOATBOARD® Solid Color Matte HDPE

Used for boat parts such as instrument panels, doors, hatches, well covers and other components, this tough, UV resistant sheet withstands long term exposure to intense sun, salt water and rigorous use. This also makes it ideal for outdoor patio, poolside and marina cabinetry, furniture and accessories. Its stain resistance, easy-to-clean matte surface and wide spectrum of integral colors further assure long lasting appearance and functionality.

Colors

- Polar White
- Bright White
- Dolphin Gray
- Glacier Gray
- Seafoam
- Sandshade
- Brown
- Black
- Custom colors with MOQs

Configurations

- Sheet size: 48 x 96 in. (1,372 x 2,440 mm)
- Gauges: 1/4, 3/8, 1/2, 3/4, 1.0 in. (6.4, 9.5, 12.7, 19.0, 25.4 mm)



Polygrain® Woodgrain HDPE

Polygrain® offers the beautiful appearance of wood with the performance advantages of a marine-grade HDPE. This material sets the high bar for its combination of long-term performance, durability, appearance and fabrication ease and consistency. Unlike wood, Polygrain won't delaminate, rot, swell, or splinter, and its integral colors hide scratches and marring that ruins painted surfaces. Like BOATBOARD, Polygrain works well with standard woodworking equipment and it maintains exceptional flatness and dimensional stability for high quality finished parts.

Colors

- Northeastern Walnut
- Susquehanna Gray
- Olyphant Oak
- Blakely Birch
- Custom colors with MOQs

Configurations

- Sheet size: 48 x 96 in. (1,372 x 2,440 mm)
- Gauges: 1/2, 3/4 in. (12.7, 19.0 mm)

Additional SIMONA HDPE Grades

- Polytone® single and multi-color HDPE
- BOATBOARD® Lightweight
- BOATBOARD® Anti-slip

SIMONA PMC TPO, ABS, ASA, Soft-touch



SIMONA PMC offers a wide range of products and engineered solutions that provide the weather-ability and UV resistance required for marine applications.



OneStep® Vinyl/ABS

This unique, thermoformable sheet is made up of a vinyl foam composite with a leather texture, laminated over ABS to create a piece that mimics typical hand-wrapped parts. This innovative material can drastically decrease your production time and labor by eliminating the step of hand-wrapping vinyl over a thermoformed part. It has a sophisticated look and feel while also providing the lasting durability required for a high-performance lifestyle.

Colors

- Tan, Prairie Tan
- Med. Neutral, Bone, White
- Graphite, Charcoal
- Slate Gray, Blue Gray, Med. Gray
- Black (FX), Black (MC)
- Dark Portland
- Med. Dark Pewter
- Mocha

Additional PMC Material Options

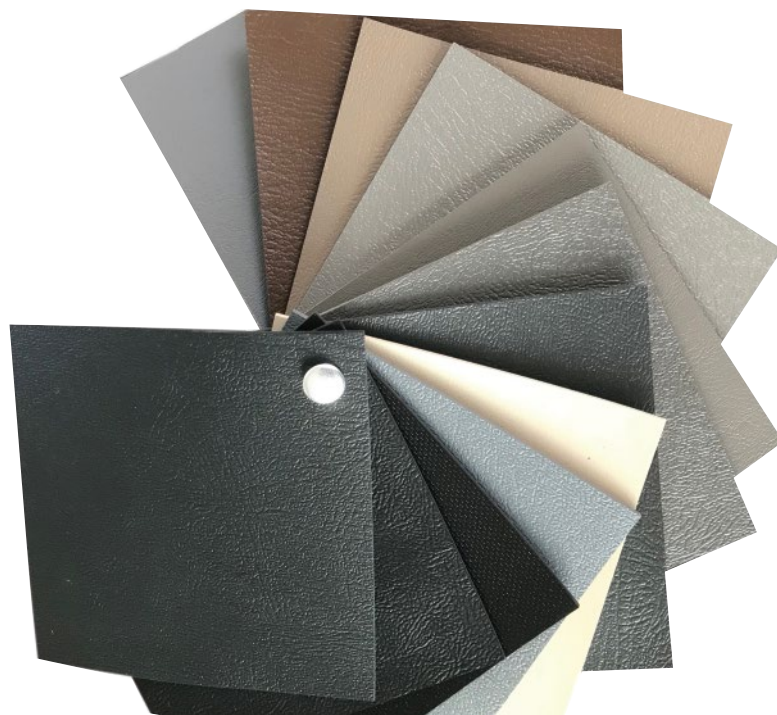
- Acrylic ABS
- Exultra® Soft-touch TPO
- PremierCap® pTPO
- High Gloss TPO
- ONTEX® TPO
- StrataGem® SMR

www.simona-pmc.com



SOFTFLEX® ASA/ABS

This material is made up of a coextruded styrenic system that offers the weather-ability and chemical resistance of ASA combined with the versatility of ABS. The high elastomer content of the ASA cap provides an ultra low gloss look and a soft-touch feel that makes it ideal for multiple interior and exterior boat applications.



SIMONA AMERICA Group

The Marine Polymer Partnership

Gain access to more marine plastic solutions from one group of experts. Specializing in an extensive range of Vinyl/ABS, solid color and woodgrain HDPE for dash panels, bait stations, cabinetry, platforms, hatches and so much more.



- Instrument panels
- Control base plates
- Deck components
- Seat components
- Trim

- Doors
- Hatch covers
- Well covers
- Tables
- Cabinets

- Storage compartments
- Dock boxes
- Tackle bins
- Cup holders
- Rod holders

- Steps
- Grab rails
- Dashboards
- Planters
- Bait cutting boards

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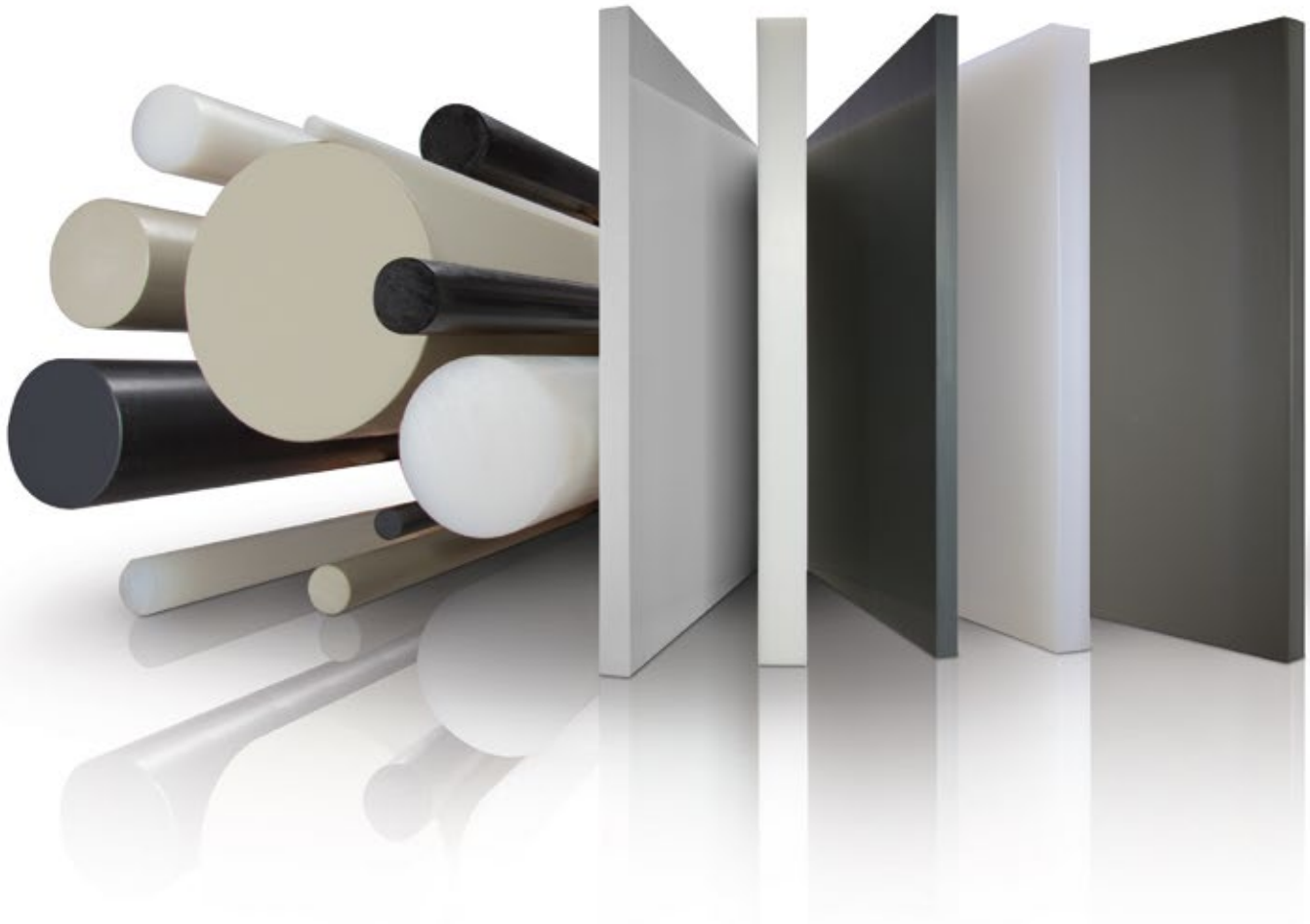


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SIMONA[®] **Stock Product Range**

- | | |
|-----------------|----------------------------------|
| ■ Polyethylene | ■ ECTFE |
| ■ Polypropylene | ■ PFA |
| ■ PVC & CPVC | ■ Semicon FM 4910 listed sheet |
| ■ PVDF | ■ Orthotics & Prosthetics grades |

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- HDPE – High Density PE
- PE 100 Pipe Grade
- Cutting Board Grade
- Boat Board & Outdoor Furniture Grade
- Polytone Playground & Sign Grade

Polypropylene Page 5

- PP-Homopolymer
- PP-Copolymer
- Flame Retardant Grades

PVC & CPVC Page 6

- PVC Type I & Type II Opaque, Clear
- CPVC Opaque, Clear
- FM 4910 Listed Grades

Fluoropolymers Page 7

- PVDF
- ECTFE
- PFA-M

INDUSTRY SPECIFIC PRODUCT GROUPS

Semiconductor Equipment Page 8

- FM 4910 Listed Products
 - FR Polypropylene
 - PVC Type I: CRP-1, VS-1
 - CPVC White, Clear
 - Fluoropolymers: PVDF, ECTFE, PFA-M

Orthotics & Prosthetics Page 9

- O&P Quality Certified Grades
 - Polypropylene: PP-Homopolymer, PP-Copolymer
 - Polyethylene: LDPE, HDPE
 - EVA: Flex, Superflex
 - PETG

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SIMONA AMERICA Industries



ABOUT THIS GUIDE

This guide defines the wide range of sheet and rod products available in stock from SIMONA America Inc. and its network of plastics distributors in North America. It also includes products, sizes and colors available made to order.

Unmatched performance and size range

SIMONA AMERICA customers can now satisfy application performance requirements from sub-zero temperatures up to 425 °F in virtually any chemical environment, indoors and out, with a product portfolio that includes:

- The industry's largest rod diameters – up to 31 inches in selected materials
- Heavy gauge sheet for machining including PVC up to 4 inches thick
- The semiconductor industry's most comprehensive line of FM 4910 rated sheet
- Polypropylene copolymer, homopolymer and flame retardant grades
- The most complete range of sheet products for orthotics and prosthetics
- Fluoropolymers that resist all chemical groups up to 425 °F
- UV stabilized HDPE for boat building, cabinetry and other outdoor structures
- A full complement of clear and opaque PVC and CPVC products

Industry-specific product groups

For easy reference, this guide also lists SIMONA's complete product families developed for Orthotics & Prosthetics and Semiconductor Process Equipment.

Boltaron PVC products

SIMONA Boltaron Inc. - A SIMONA Company offers its PVC sheet products including PVC Type I up to 4 inches thick through SIMONA America customer service.

For more information:

**SIMONA
AMERICA
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High Density Polyethylene (HDPE)

Consistent flatness and stability in fabrication

STOCK PRODUCT RANGE

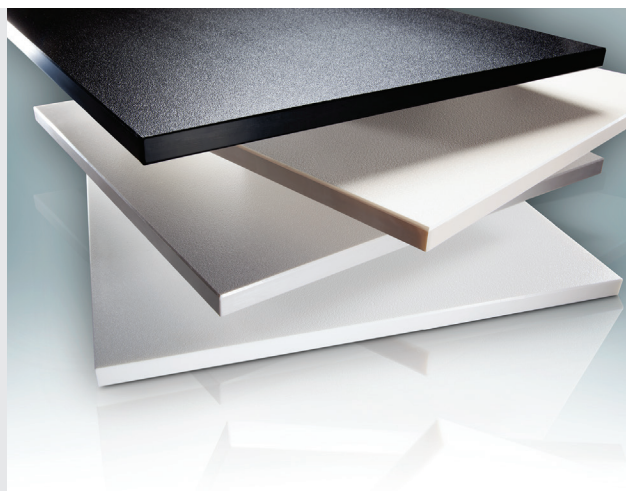
	HDPE general industry products					HDPE sheet in industry-specific colors		
	SIMONA® HDPE		SIMONA® PE 100 Pipe Grade	SIMONA® Cutting Board NSF 51 Listed	Utility Grade <i>Special Order Only</i>	SIMONA® Boat Board UV stabilized; textured	SIMONA® Polytone Playground & Sign Grade UV stabilized; textured	
Colors	natural	black	black	natural	black	Colors and color combinations		
						Solid Colors <ul style="list-style-type: none">• polar white• bright white• dolphin gray• glacier gray• seafoam• sandshade• brown• black	Solid Colors <ul style="list-style-type: none">• red• yellow• play blue• forest green• tan	Multi-layer Colors <ul style="list-style-type: none">• tan/red/tan• black/white/black• red/white/red• green/white/green• green/tan/green• play blue/yellow/play blue• play blue/white/play blue• yellow/red/yellow• red/yellow/red
Extruded Sheet (size / thickness)								
48 x 96"	1/8 - 1-1/2"	1/8 -1"	1/2 - 2"	1/2; 3/4; 1"	1/4 - 1"			1/2"
48 x 120"	1/4 - 1"			1/2; 3/4; 1"			1/2; 3/4"	3/4"
60 x 120"	1/4 - 1-1/2"		1/2 - 2"	1/2; 3/4; 1"				
54 x 96"						1/4 - 1"		
Welding Rod								
Diameter - inches			0.157"					
Solid Rod (length / diameter)								
96"	3/8 - 2"							
72"	2-1/4 - 5"							
48"	6 - 14"							
2000 mm (78")		10 mm - 120 mm (0.39 - 4.7")						

Other sizes & thicknesses: All products available in other sizes, thicknesses and colors made to order with minimums.

Sheet widths: 1/2" thickness up to 96" wide; 3/4" up to 92" wide; 1.5" up to 60" wide. Rod diameter of 31" (1000 mm) available on request.

Textures: Non-skid, diamond pattern available. Additives: Anti-microbial and rubber additives available.

SIMONA® Product	Description	Typical Applications
HDPE	Standard high density PE	General consumer and industrial
PE 100 Pipe Grade	UV stabilized, black, high ductility	Fluid handling
Cutting Board	NSF 51 listed, FDA compliant	Food preparation and processing
Boat Board	UV stabilized; textured; solid colors	Marine; outdoor furniture and cabinetry
Polytone Playground & Sign Grade	UV stabilized; textured; solid and multi-layer colors	Playground structures and signs
SIMOLIFE HDPE, LDPE	Orthotics & Prosthetics grades	O&P products - see page 9



Polypropylene (PP)

Full range of products includes flame retardant, O&P and semicon grades

STOCK PRODUCT RANGE

	SIMONA® PP-Homopolymer				SIMONA® PP-Copolymer			SIMONA® Flame Retardant PP	
								FR-PP (UL V-0)	FRP-3 (FM 4910)
Colors	natural	white	black	eurogrey	natural	eurogrey, white*	black	natural	white

Extruded Sheet (size / thickness)

48 x 96"	1/16 - 1-1/2"	1/16 - 1-1/4"	3/16" - 3/4"	1/4 - 1"	1/8 - 1-1/2"		1/4 - 1-1/2"	1/4 - 1"	1/8 - 1"
48 x 120"	1/4 - 1"	1/4 - 3/4"			3/16 - 1"		1/2 - 1"		
60 x 120"	1/4 - 1"	1/4 - 1"		3/4 - 1-1/2"	1/4 - 1-1/2"	3/8 - 1-1/2"	1/4 - 1-1/2"		1/2 - 3/4"

Welding Rod

Diameter - inches	0.118; 0.157; 0.197"*	0.118"		0.118; 0.157; 0.197"*		0.118; 0.157"			0.118, 0.157"
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Solid Rod (length / diameter)

96"	1/4 - 2"								
72"	2-1/4 - 5"								
48"	6 - 14"								
2000 mm (78")				10 - 100 mm (0.39 - 3.94")					
1000 mm (39")				110 - 350 mm (4.3 - 13.8")					
1000 mm (39")	400 - 500 mm (15.75 - 19.69")								

*Available on request.

Other sizes & thicknesses: All products available in other sizes, thicknesses and colors made to order with minimums.

Sheet widths: 1/2" thickness up to 96" wide; 3/4" up to 92" wide; 1.5" up to 60" wide. Rod diameter of 31" (1000 mm) available on request.

Textures: Matte and smooth finishes available. Additives: Anti-microbial additives available.

SIMONA® Product	Description	Typical Applications
PP-Homopolymer	Higher rigidity PP	Chemical processing and storage
PP-Copolymer	Higher impact resistant PP	
FR-PP	Flame retardant UL 94 V-0	Electrical enclosures and components
FRP-3	FM 4910 listed	Semiconductor processing equipment
SIMOLIFE PP	Orthotics & Prosthetics grades	O&P products - see page 9



PVC & CPVC

Standard and specialized FR grades for chemical processing, semicon and electrical equipment

STOCK PRODUCT RANGE

	PVC Type I					PVC Type II	CPVC
	SIMONA® PVC Type I		Clear	FM 4910 Listed		SIMONA® PVC Type II	FM 4910 Listed
			SIMONA® PVC- GLAS	SIMONA® PVC VS-1	SIMONA® PVC CRP-1		SIMONA® CPVC 2000
Colors	dark grey	white	blue tint	white	white	light grey	clear blue tint

Extruded Sheet (size / thickness)

48 x 96"	1/16 - 1-1/2"	1/8 - 1"	1/8 - 1/2"	1/4 - 3/4"	1/4 - 1"	1/8 - 1/2"	3, 6, 10, 12 mm
39 x 78"	1-1/2"; 2"						

Compression Molded Sheet

48 x 96"	1-3/4"; 4"				
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Welding Rod

Diameter - inches	0.118; 0.157; 0.197"*				0.118; 0.157"
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Solid Rod (length / diameter)

120"	3/8 - 2"				
60"	2-1/4 - 8"				

*Available on request.

Other sizes & thicknesses: Products available in other sizes, thicknesses and colors with minimums.

SIMONA® Products	Description	Typical Applications
PVC Type I	Normal impact	Acid etch tanks, linings; fume hoods, ducts, scrubbers. Clear: windows, splash shields
PVC Type II	Higher impact strength	
VS-1	FM 4910 $\geq 1/4"$	Semiconductor process cabinetry, access doors, panels
CRP-1	FM 4910 $\geq 1/4"$ High impact strength	
CPVC 2000	Clear; FM 4910 listed	View windows



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.

Fluoropolymers

Broad chemical resistance for service conditions from sub-zero to 425 °F

FM 4910 grades listed

STOCK PRODUCT RANGE

	SIMONA® PVDF 740	SIMONA® PVDF 2850	SIMONA® ECTFE 901	SIMONA® ECTFE 902	SIMONA® PFA-M
	Homopolymer	Copolymer			
Colors	natural (off white)	natural (off white)	natural (off white)	natural (off white)	natural (translucent)

Extruded Sheet (size / thickness)

48 x 96"	1/8 - 2"	1/8 - 2"	3/32 - 1"		1/8 - 3/4"
48 x 48"	1-1/4 - 2" *	1/4"; 3/8" *	1" *	1.25 - 2"	1/4 - 1/2"
24 x 48"	1-1/4 - 2" *	1-1/4 - 2" *	1" *	1.25 - 2"	1/4 - 3/4"

Compression Molded Sheet (size / thickness)

24 x 24"					1 - 3"
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Welding Rod

Diameter - inches	0.125" 0.156"	0.125" 0.156" 0.197"	0.080" 0.125" 0.140" 0.157"	0.080" 0.125" 0.140" 0.157"	0.090" 0.125" 0.138" 0.156"
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Solid Rod (length / diameter) SIMONA® PVDF 1000**

78"	0.394 - 3.94"				
38"	4.33 - 19.69"				

*Available on request.

**SIMONA® PVDF 1000 rod sizes shown and sheet 1 m x 2 m, in thicknesses 1-15 mm available on request.

Note - PVDF solid and welding rod: Certain diameters require special order.

Other sizes & thicknesses: All products available in other sizes and thicknesses made to order with minimums.

SIMONA® Product	Description	Typical Applications
PVDF 740	Homopolymer; 250 °F service	Semiconductor and chemical processing tanks, components, ducting and handling systems
PVDF 2850*	Copolymer; high ductility “flex” grade	
E-CTFE 901	300 °F service	
E-CTFE 902*	300 °F service	
PFA-M	425 °F service	

*FM 4910 - limited use



Semiconductor Clean Room and Wet Bench Products

FM 4910 listed sheet for process temperatures from 120°F – 425°F

STOCK PRODUCT RANGE

	Fluoropolymers				PVC & CPVC				FR Polypropylene
	SIMONA® PVDF 740	SIMONA® E-CTFE 901	SIMONA® E-CTFE 902	SIMONA® PFA-M	SIMONA® Type I PVC Grades		CPVC		SIMONA® FRP-3
	Homopolymer				SIMONA® PVC VS-1	SIMONA® PVC CRP-1	SIMONA® CPVC 2000	SIMONA® CPVC 4225	
Colors	natural (off white)	natural (off white)	natural (off white)	natural (translucent)	white	white	clear blue tint	white	white

Extruded Sheet (size / thickness)

48 x 96"	1/8 - 2"	3/32 - 1"		1/8 - 3/4"	1/4 - 3/4"	1/8 - 1"	3, 6, 10, 12 mm	1/4 - 1"	1/8 - 1"
48 x 48"	1-1/4 - 2" *	1" *	1.25 - 2"	1/4 - 1/2"					
24" x 48"	1-1/4 - 2" *	1" *	1.25 - 2"	1/4 - 3/4"					

Compression Molded Sheet (size / thickness)

24 x 24"				1 - 3"					
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Welding Rod

Diameter - inches	0.125"	0.080"	0.080"	0.090"		0.118;			0.118;
	0.156"	0.125"	0.125"	0.125"		0.157"			0.157"
		0.140"	0.140"	0.138"					
		0.157"	0.157"	0.156"					

Solid Rod (length / diameter) SIMONA® PVDF 1000**

78"	0.394 - 3.94"								
38"	4.33 - 19.69"								

*Available on request.

**SIMONA® PVDF 1000 rod sizes shown and sheet 1 m x 2 m, in thicknesses 1-15 mm available on request.

Note - PVDF solid and welding rod: Certain diameters require special order.

Other sizes & thicknesses: All products available in other sizes and thicknesses made to order with minimums.

SIMONA® Product	Description	Typical Applications
PVDF 740	Homopolymer; 250 °F service	Semiconductor and chemical processing tanks, components, ducting and handling systems
PVDF 2850*	Copolymer; high ductility "flex" grade	
E-CTFE 901	300 °F service	
E-CTFE 902*	300 °F service	
PFA-M	425 °F service	
FRP-3	FM 4910 listed PP	Cabinetry, enclosures, rinse modules
CRP-1	FM 4910 ≥ 1/4" High impact strength	
VS-1	FM 4910 ≥ 1/4"	
CPVC 2000	Clear, tinted CPVC	Windows, access doors
CPVC 4225	White; FM 4910 listed	Cabinetry

*FM 4910 - limited use



SIMOLIFE Orthotic & Prosthetic Products

Resin formulation and process controls ensure consistent shrinkage in fabrication

STOCK PRODUCT RANGE

	SIMOLIFE Polypropylene		SIMOLIFE Polyethylene			SIMOLIFE EVA		SIMOLIFE PETG
	PP Homopolymer	PP Copolymer	LDPE Low Density PE	Modified LDPE	HDPE High Density PE	EVA Flex	EVA Superflex	O&P Grade
Colors	natural, black	natural, black	natural	natural	natural, black	natural	natural	transparent

Extruded Sheet (size / thickness)

48 x 96"	0.063 - 0.250"	0.063 - 0.250"	0.063" - 0.250"	0.063" - 0.500"	0.063" - 0.500"			0.47"; 0.59"; 0.787" (Sheet size 49x97")
33 x 49"						10; 12; 15 mm (0.39"; 0.47"; 0.59")*	10; 12; 15 mm (0.39"; 0.47"; 0.59")	
16 x 16"						10; 12; 15 mm (0.39"; 0.47"; 0.59")*	10; 12; 15 mm (0.39"; 0.47"; 0.59")	12; 15; 20 mm (0.47"; 0.59"; 0.787")

Antibacterial properties (available on request)	■			■	■	■		■
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*Available on request.

Other sizes & thicknesses: All products available in other sizes, thicknesses and colors made to order with minimums.

SIMOLIFE sheets are highly stress-relieved for excellent dimensional stability and consistent, repeatable formability. Manufactured under rigidly controlled process conditions using certified orthotic grade raw materials, these premium-quality products meet the highest standards applicable for O&P applications.

SIMOLIFE Product	Description	Relative Stiffness ASTM D-638 (psi)
PETG	Clear, available >1/2" thick	275,000
HDPE	High density polyethylene	230,000
PP-Homopolymer	Higher rigidity PP	210,000
PP-Copolymer	Less rigid, more impact resistant PP	195,000
LDPE	Low density polyethylene	36,000
Modified LDPE	Higher rigidity LDPE	
EVA Flex	Flexible EVA	10,900
EVA Superflex	High flexibility EVA	2,800



Typical Properties Comparison

POLYETHYLENE, POLYPROPYLENE, PVC & CPVC PRODUCTS

PROPERTY units of measure ¹	TEST METHOD	HDPE - High Density PE		LDPE - Low Density PE		POLYPROPYLENE		FR POLYPROPYLENE	
		SIMONA® HDPE	SIMONA® PE 100	SIMONA® LDPE	SIMONA® Modified LDPE	SIMONA® PP-Homopolymer	SIMONA® PP-Copolymer	SIMONA® FR-PP (UL 94 V-0)	SIMONA® FRP-3 (FM 4910)
Specific gravity, g/cc	ASTM D792	0.96	0.95	0.91	0.91	0.905	0.905	1.01	1.36
Water Absorption, %	ASTM D570	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1
MECHANICAL									
Tensile Strength @ yield, psi	ASTM D638	4,400	3,600	1,450	1,750	4,800	3,600	3,900	2,600
Elongation @ break, %	ASTM D638	>300	>600	>200	>200	>100	>500	>100	—
Tensile Modulus, psi	ASTM D638	—	—	—	—	—	—	—	—
Flexural Modulus, psi	ASTM D790	190,000	165,000	—	—	195,000	155,000	160,000	400,000
Notched Izod Impact (ft-lb/in.)	ASTM D256	2.75	12.0	No break	No break	0.9	No break	7.0	12.0
Hardness, Shore D	ASTM D2240	65	65	55	55	70	70	67	68
THERMAL									
Continuous Service Temperature	Maximum	170 °F	163 °F	—	—	212 °F	180 °F	180 °F	200 °F
Melting Point	ASTM D3418	267 °F	267 °F	—	—	320 - 329 °F	320 - 329 °F	320 - 334 °F	—
Coeff. of Expansion in./in., °F	ASTM D696	10 x 10 ⁻⁵	10 x 10 ⁻⁵	—	—	8.9 x 10 ⁻⁵	8.9 x 10 ⁻⁵	—	—
Heat Deflection Temp. @ 66 psi	ASTM D648	167 °F	163 °F	—	—	—	180 °F	180 °F	240 °F
Heat Deflection Temp. @ 264 psi	ASTM D648	110 °F	118 °F	—	—	—	133 °F	—	—
FLAMMABILITY	UL 94	—	—	—	—	—	HB	V-0	V-0
	FM 4910	—	—	—	—	—	—	—	Yes
	ASTM E84	—	—	—	—	—	—	—	Class A
FOOD CONTACT - FDA	FDA Reg. 21 Chapter 1 part 177.2510	Yes	—	—	—	Yes	Yes	—	—

¹Data based on independent laboratory testing at 73 °F (22.8 °C) in dry conditions unless otherwise noted.

FLUOROPOLYMER PRODUCTS

PROPERTY units of measure *	TEST METHOD	SIMONA® PVDF 740	SIMONA® PVDF 2850	SIMONA® ECTFE 901	SIMONA® ECTFE 902	SIMONA® PFA-M
Specific gravity, g/cc	ASTM D792	1.78	1.78	1.68	1.71	2.15
Water Absorption, %	ASTM D570	<0.03	<0.05	<0.01	<0.01	—
MECHANICAL						
Tensile Strength @ yield, psi	ASTM D638	6,000	5,000	4,500	4,500	2,300
Elongation @ break, %	ASTM D638	65	110	255	255	300
Flexural Modulus, psi	ASTM D790	195,000	170,000	245,000	245,000	72,000
Notched Izod Impact (ft-lb/in.)	ASTM D256	1.0	3.0	No break	No break	No break
Hardness, Shore D	ASTM D2240	78	72	73	73	57
Abrasion Resistance mg/1000	Taber CS 17	7.5	7.0	5.0	5.0	—
Coefficient of Friction (static / dynamic)	ASTM C1894	0.20 / 0.14	0.26 / 0.19	0.1 / 0.2	0.1 / 0.2	—
THERMAL						
Continuous Service Temperature	Maximum	261 °F	253 °F	302 °F	302 °F	425 °F
Melting Point	ASTM D3418	338 °F	316 °F	468 °F	434 °F	518 °F
Coeff. of Expansion in./in., °F	ASTM D696	7.2 x 10 ⁻⁵	8.5 x 10 ⁻⁵	5.0 x 10 ⁻⁵	5.0 x 10 ⁻⁵	9.0 x 10 ⁻⁵
Heat Deflection Temp. @ 66 psi	ASTM D648	284 °F	255 °F	195 °F	195 °F	—
Heat Deflection Temp. @ 264 psi	ASTM D648	244 °F	120 °F	160 °F	160 °F	—
FLAMMABILITY	UL 94	V-0	V-0	V-0	V-0	V-0
	FM 4910	Yes	—	Yes	Limited**	Yes***

*Data based on independent laboratory testing at 73 °F (22.8 °C) in dry conditions unless otherwise noted.

**Approved for limited use in thick section machined parts and deep-draw thermoformed parts.

***Accepted by FM as fully fluorinated material meeting 4910: no listing required.

PVC Type I			FM 4910 PVC Type I		PVC Type II			FM 4910 CPVC		CPVC
SIMONA® PVC Type I	Boltaron® 1050	SIMONA® PVC-GLAS	SIMONA® PVC VS-1	SIMONA® PVC CRP-1	SIMONA® PVC Type II	Boltaron® 4050	Boltaron® 4300	SIMONA® CPVC 2000	SIMONA® CPVC 4225	SIMONA® CPVC 4125
1.41	1.37	1.37	1.415	1.415	1.38	1.35	1.3	1.55	1.46	1.51
<0.2	0.032	—	—	<0.01	—	0.056	0.05	<0.02	0.07	0.035
9,000	7,400	10,600	7,500	7,500	7,400	5,600	6,000	8,700	7,360	7,600
—	—	—	—	—	—	—	—	—	—	—
486,000	—	479,000	493,000	—	435,000	—	—	—	—	—
—	420,000	—	—	485,000	—	300,000	350,000	435,000	380,000	350,000
0.8	1-3	0.52	1.06	3.0	14	10-15	10-15	1.4	>2.0	1-2
84	82	86	84	84	82	82	80	96	82	82
32 - 140°F	—	32 - 140°F	32 - 140°F	162°F	-4 - 140°F	—	—	195°F	—	—
—	—	—	—	—	—	—	—	—	—	—
4.4 x 10 ⁻⁵	2.9 x 10 ⁻⁵	4.4 x 10 ⁻⁵	3.3 x 10 ⁻⁵	3.2 x 10 ⁻⁵	4.4 x 10 ⁻⁵	3.2 x 10 ⁻⁵	4.5 x 10 ⁻⁵	—	3.5 x 10 ⁻⁵	4.4 x 10 ⁻⁵
—	—	—	—	—	—	—	—	—	—	—
154°F	165°F	—	154°F	162°F	154°F	160°F	150°F	180°F	205°F	212°F
V-0, 5V	V-0*	V-0	—	V-0	V-0	V-0*	V-0*	V-0	V-0	V-0*
—	—	—	Yes	Yes	—	—	—	Yes	Yes	—
—	—	—	Class A	—	—	—	—	Class A	Class A	—
—	—	—	—	—	—	—	—	—	—	—

*Based on 0.032" minimum thicknesses.

Notes & Disclaimers

- Service temperature ranges based on dry, non-chemical usage.
- Data based on standard natural (non-pigmented) material. Exception: PE 100 black (standard). Color pigments and additives may affect physical properties.
- Data reflects ASTM averages typically as reported by resin supplier for specific resin grades.
- Data intended as general relative comparison only. Users must test materials to determine suitability for use in specific applications.

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