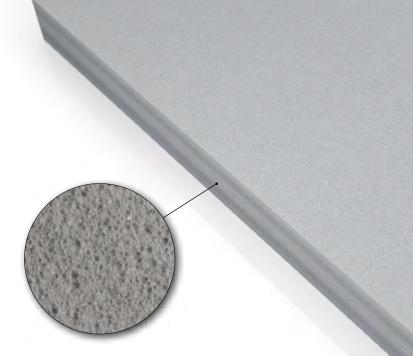


SIMOPOR CONSTRUCT – Reducing costs with a lightweight all-rounder

Our PVC free-foam sheet SIMOPOR CONSTRUCT comes with a compelling value proposition in the form of low weight, high stability and excellent processing capability. By using recycled materials, we have applied a full-circle approach to the material cycle – delivering a sustainable and cost-effective alternative to traditional solutions featuring wood or metal. SIMOPOR CONSTRUCT offers advantages typical of plastic, such as resistance to moisture and chemical media, protection against corrosion and decay, and thermoformability – a combination of properties that paves the way for new design solutions in many fields of application.

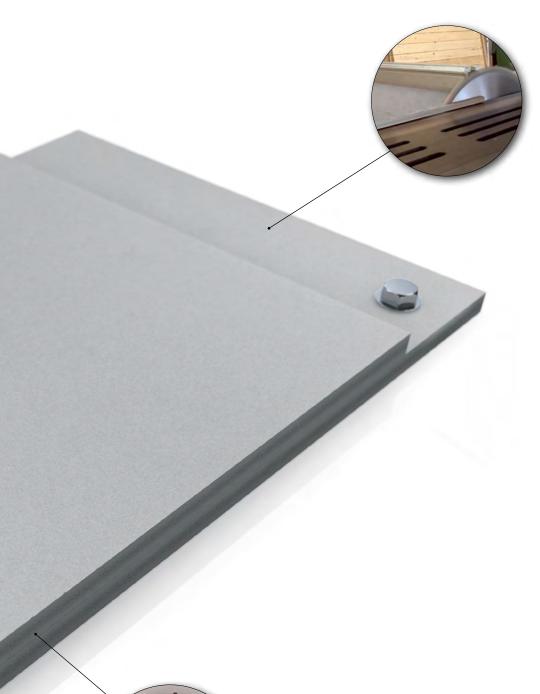
Excellent properties

- Low weight
- Water- and moisture-resistant
- Good chemical resistance
- Corrosion-free
- Good insulation properties
- Vibration- and sound-absorbent
- Good processing capability
- Thermoformable
- Homogeneous surfaces
- Dimensionally stable
- Mite-repellent
- Economical
- Durable
- Sustainable
- Hygienic
- Glueable
- Low-emission
- REACH-compliant
- RoHS-compliant



Lightweight and cost-effective solutions

SIMOPOR CONSTRUCT sheets combine low weight with dimensional stability. This simplifies handling during processing and significantly reduces material input and costs.



Processing with conventional woodworking methods

SIMOPOR CONSTRUCT can be machined like wood and possesses good mechanical properties (e.g. screw withdrawal strength, etc.). The sheets also provide the option of thermal processing by means of thermoforming.

Q	Sawing
	Bolting
	Drilling
	Milling
	Backing, laminating
	Water-jet cutting
800	Glueing
	Warm bending
A	Printing
	Spray painting



Owing to its free-foam structure, SIMOPOR CONSTRUCT has a very low level of thermal conductivity. As a result, SIMOPOR CONSTRUCT sheets are also suitable for applications such as thermal partition elements. Thermal conductivity comparison

Material	Thermal conductivity W/(m·K)
PUR rigid foam boards	0.024 - 0.035
Expanded polystyrene (EPS) boards	0.035 - 0.045
Calcium silicate boards	0.053 - 0.070
SIMOPOR CONSTRUCT	0.065
Wood composite boards	0.13
Steel	15 - 60
Aluminium	200

SIMOPOR CONSTRUCT – Structural applications

On account of its low weight, excellent weather resistance, good insulation properties and recycled content, SIMOPOR CONSTRUCT is the perfect choice for particularly cost-effective applications. SIMOPOR CONSTRUCT sheets are a useful alternative to conventional building boards made of wood, wood composite, calcium silicate or metal.

Sandwich construction and thermal partition elements

- Facade elements
- Roof edges/flat roof fascia trims
- Components such as doors and window panels
- Wall linings
- Milled and coated profiles



Vehicle interior fittings

- Partitions
- Lightweight furniture
- Shelf units
- Shelves



Commercial and industrial construction

- Lightweight partitions
- Hygienic wall and ceiling linings
- Livestock housing construction
 - · Individual calf stalls
 - · Poultry nests
 - Stall partitions



SIMOPOR CONSTRUCT – Product range and material specifications

SIMOPOR CONSTRUCT sheets have a homogeneous, grey surface and a closed-cell foam structure. They are available from stock in the format 2,440 mm x 1,220 mm as standard. Other formats, thicknesses and colours are available on request.

SIMOPOR CONSTRUCT product range, extruded sheets (2,440 x 1,220 mm)

	Thickness in mm	Product number	Colours
\Diamond	10.0	10030546	grey
	12.0	10030547	grey
	15.0	10030548	grey
	19.0	10030549	grey

Bold type = ready for dispatch (goods in stock); light-faced type = available on request Other formats, thicknesses and colours or sheets with a B1 low-flammability rating are available on request. For further information, please contact our Sales Department: **sales@simona.de**.

SIMOPOR CONSTRUCT material specifications

Density, g/cm³, DIN	EN ISO 1183	0.50
Tensile modulus of e DIN EN ISO 527	lasticity, MPa,	500
Yield stress, MPa, DI	N EN ISO 527	8
Flexural modulus of 6 DIN EN ISO 178	elasticity, MPa,	670
Flexural strength, MF	Pa, DIN EN ISO 178	15
Shore hardness D (1	5 s), DIN EN ISO 868	30
Mean coefficient of II ISO 11359-2	inear thermal expansion, K ⁻¹ ,	0.7 · 10-4
Fire behaviour	DIN 4102	B2 normal flammability*
	UL 94	V-0*
Thermal conductivity	, W/(m·K), DIN EN 12667	0.065
Temperature range,°	С	0 to +60

^{*} Self-assessment without test certificate

The figures are approximate, relate to the particular material and may vary depending on the fabrication process and how test specimens are made. They are usually averages of measurements on extruded sheets 4 mm thick. In the case of sheets solely manufactured by means of pressing they are usually measurements on sheets with a thickness of 20 mm. There may be discrepancies if sheets are not available in those thicknesses. In the case of backed sheets the specifications relate to unbacked basic sheets. The figures cannot necessarily be applied to other product types (e.g. pipes, solid rods) made of the same material or to products that have been subjected to further processing. The processing company or user shall be responsible for checking whether materials are suitable for a specific application. The specifications are merely to be regarded as a planning aid. In particular, they do not constitute guaranteed properties. You can obtain further information from our Technical Service Centre at: tsc@simona.de.





Discover also our SIMOPOR PVC free-foam sheets for signs and graphics, exhibition stands, and display design: simopor.simona.de/en

Welcome to SIMONA – The home of expertise and innovation



SIMONA is one of the leading manufacturers and development partners for thermoplastic products. Applying our exceptional skills in process engineering, we produce sheets, finished parts, profiles, welding rods, rods, pipes, fittings and valves to meet the highest demands.

Our Technology Centre consolidates the fields of research and development at a single location. It enables us to implement more customer-specific developments with new materials and material combinations for the purpose of reducing time to market. Our principal focus: meeting tomorrow's requirements today.

SIMONA AG

Teichweg 16 55606 Kirn

Phone +49 (0) 67 52 14-0 Fax +49 (0) 67 52 14-211 mail@simona.de www.simona.de

PRODUCTION SITES

SIMONA Produktion Kirn GmbH & Co. KG

Plant I

Teichweg 16 55606 Kirn Germany

Plant II

Sulzbacher Straße 77 55606 Kirn Germany

SIMONA Produktion Ringsheim GmbH & Co. KG

Gewerbestraße 1–2 77975 Ringsheim Germany

SIMONA Plast-Technik s.r.o.

U Autodílen č.p. 23 43603 Litvínov-Chudeřín Czech Republic

SIMONA ENGINEERING PLASTICS

(Guangdong) Co. Ltd.

No. 368 Jinou Road High & New Technology Industrial Development Zone Jiangmen, Guangdong China 529000

SIMONA AMERICA Industries LLC.

101 Power Boulevard Archbald, PA 18403

SIMONA Boltaron Inc.

1 General Street Newcomerstown, OH 43832

SIMONA PMC LLC.

2040 Industrial Dr. Findlay, OH 45840

SALES OFFICES

SIMONA S.A.S. FRANCE 43, avenue de l'Europe

95330 Domont France Phone +33 (0) 1 39 35 49 49 Fax +33 (0) 1 39 91 05 58 mail@simona-fr.com www.simona-fr.com

SIMONA UK LIMITED

www.simona-uk.com

Telford Drive
Brookmead Industrial Park
Stafford ST16 3ST
Great Britain
Phone +44(0)1785 222444
Fax +44(0)1785 222080
mail@simona-uk.com

SIMONA AG SWITZERLAND

Industriezone

Băumlimattstrasse 16 4313 Möhlin Switzerland Phone +41(0) 61 855 9070 Fax +41(0) 61 855 9075 mail@simona-ch.com

www.simona-ch.com SIMONA S.r.I. SOCIETÀ

UNIPERSONALE

Via Volontari del Sangue 54a 20093 Cologno Monzese (MI) Italy Phone +39 02 250851

Phone +39 02 250851 Fax +39 02 2508520 commerciale@simona-it.com www.simona-it.com

SIMONA IBERICA SEMIELABORADOS S.L.

Doctor Josep Castells, 26-30 Polígono Industrial Fonollar 08830 Sant Boi de Llobregat

Phone +34 93 635 4103
Fax +34 93 630 88 90
mail@simona-es.com
www.simona-es.com

SIMONA Plast-Technik s.r.o.

Paříkova 910/11a 19000 Praha 9 - Vysočany Czech Republic Phone +420 236 160 701 Fax +420 476 767 313 mail@simona-cz.com

www.simona-cz.com

SIMONA POLSKA Sp. z o. o.

ul. Wrocławska 36 Wojkowice k / Wrocławia 55-020 Żórawina Poland

Phone +48(0)71 3528020 Fax +48(0)71 3528140 mail@simona-pl.com www.simona-pl.com

000 "SIMONA RUS"

Projektiruemy proezd No. 4062, d. 6, str. 16 BC PORTPLAZA 115432 Moscow Russian Federation Phone +7 (499) 683 0041 Fax +7 (499) 683 0042 mail@simona-ru.com

SIMONA FAR EAST LIMITED

Room 501, 5/F CCT Telecom Building 11 Wo Shing Street Fo Tan, Hong Kong China

www.simona-ru.com

Phone +852 29 47 01 93 Fax +852 29 47 01 98 sales@simona-hk.com www.simona-cn.com

SIMONA ENGINEERING PLASTICS

TRADING (Shanghai) Co. Ltd.
Unit 1905, Tower B, The Place
No. 100 Zunyi Road
Changning District
Shanghai
China 200051
Phone +86 21 6267 0881
Fax +86 21 6267 0885

shanghai@simona-cn.com

www.simona-cn.com

SIMONA INDIA PRIVATE LIMITED

Simuna India Private Limit Kaledonia, Unit No. 18, A Wing 5th Floor, Sahar Road Off Western Express Highway Andheri East Mumbai 400069 India Phone +91(0)2262 154 053

SIMONA AMERICA Industries LLC.

101 Power Boulevard Archbald, PA 18403 USA Phone +1 866 501 2992 Fax +1 800 522 4857 mail@simona-america.com www.simona-america.com

sales@simona-in.com

SIMONA Boltaron Inc.

1 General Street Newcomerstown, OH 43832 USA Phone +1 800 342 7444 Fax +1 740 498 5448 info@boltaron.com

www.boltaron.com

2040 Industrial Dr. Findlay, OH 45840 USA

Phone +1 877 289 7626 Fax +1 419 425 0501 info@simona-pmc.com www.simona-pmc.com

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