

SIMONA



SIMONA[®] Twin-Wall Sheets

The efficient solution for strong,
lightweight construction

GLOBAL THERMOPLASTIC SOLUTIONS

SIMONA® Twin-Wall Sheets – High stability, low weight

Our R&D team is committed to the continuous development of our product range. Thanks to innovative technical adjustments, we have managed to further improve the efficiency and stability of our length-ways-ribbed twin-wall sheets. The result: a new cross-ribbed twin-wall sheet with reduced wall thicknesses. Both designs within the SIMONA® Twin-Wall Sheet range offer the advantages of high rigidity, low specific weight, and good thermal insulation. What is more, they combine the benefits of simple handling and processing.

Design-specific advantages

- High rigidity and strength
- High break resistance
- Rectangular tanks possible without steel reinforcement
- Lighter weight than solid material due to cavities
- Excellent sound insulation (DIN EN ISO 140-3 certificates available on request)
- Low heat transfer coefficients (k-value/U-value) based on ISO 8301, EN 1946-3

Plastic-specific advantages

- High thermal insulation
- Good electrical insulation
- Good slip properties
- High wear resistance
- High chemical resistance
- Low water absorption
- Resistant to microorganisms

Excellent processability

SIMONA® Twin-Wall Sheets can be processed by the same methods as those used for solid materials.



Sawing



Drilling



Milling



Screw
fixing



Welding

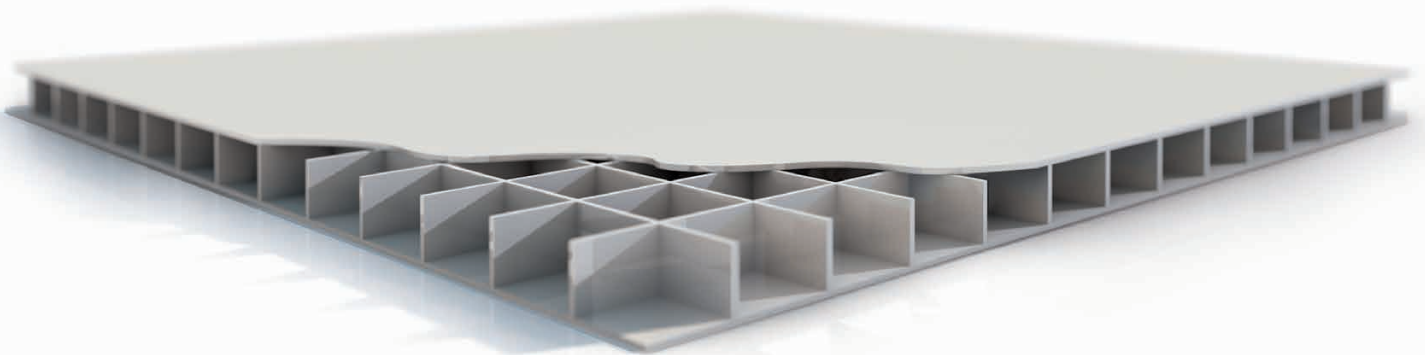


i For further information, please refer to our tech.info “SIMONA® Twin-Wall Sheets”.



Cross-ribbed SIMONA® Twin-Wall Sheet

- Isotropic core structure
- 50 mm web spacing, 5 mm web thickness
- Easier to process (due to reduction in thickness to 30 or 40 mm)
- Easy handling (size: 2,000 x 1,000 mm)
- Excellent long-term properties
- Good weldability



i Our Technical Service Center team looks forward to assisting you:
Phone +49 (0) 67 52 14-587
Fax +49 (0) 67 52 14-302
tsc@simona.de

SIMONA® Twin-Wall Sheets – An unlimited number of potential applications

Apparatus, equipment, machines

- Rectangular tanks without steel reinforcement
- Tanks with thermal insulation functionality (e.g. covers for electroplating baths)
- Boat construction
- Floating pontoons for pipelines and supply lines at sea
- Storm-water retention basins
- Cooling water tanks
- Sound booths
- Spray booths
- Weather booths
- Safety tanks
- Water supply tanks
- Covers for rectangular tanks and circular tanks with large diameters (wrapped tube tanks)

Construction industry

- Walk-over swimming pool floors
- Lightweight shaft bottoms or concrete-lined for floats
- Shafts
- Protective ducts for pipelines and supply lines
- Sound barriers
- Ventilation ducts
- Banner elements for leisure and sports facilities

Agriculture

- Linings for transport stalls
- Medicinal baths for horses
- Partitions
- Air scrubbers

Environment

- Biofilters
- Wastewater engineering
- Sewage sludge treatment
- Flood protection structures
- Safety drip pans

Miscellaneous

- Alternative product to aluminium twin-wall profiles





Swimming pool construction



Overflow tanks



Outdoor whirlpool



Storage tanks / transport containers



Air scrubbers



Agriculture

SIMONA® Twin-Wall Sheets – Product range



Cross-ribbed SIMONA® Twin-Wall Sheets

Total thickness	Thickness outer skins	Web spacing	Weight	Order number
mm	mm	mm	kg/piece	2,000 x 1,000 mm

SIMONA® PE 100, black

30	5	50 x 50	28.0	010028672
40	6	50 x 50	38.3	010028671

SIMONA® PP-C, grey

30	5	50 x 50	27.0	010028674
40	6	50 x 50	36.3	010028673



Lengthways-ribbed SIMONA® Twin-Wall Sheets

Total thickness	Thickness outer skins	Web spacing	Weight	Order number
mm	mm	mm	kg/piece	3,000 x 1,000 mm

SIMONA® PE 100, black

54	6	108	42.4	010011108
54	6	54	49.6	010011109
58	8	54	61.0	010011110

SIMONA® PP-H AlphaPlus®, grey

54	6	108	40.7	010011104
54	6	54	47.6	010011106
58	8	54	58.6	010011107

SIMONA® PPs, grey

54	6	108	41.7	010013859
54	6	54	51.0	010019358
58	8	54	61.0	010019359

SIMONA® PP-C-UV-HKP, blue (top)/grey (bottom) and SIMONA® PE FOAM-HKP, white – available on request.

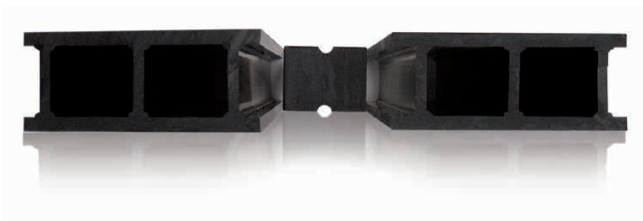
SIMONA® Flat Connections

In order to simplify the extrusion welding of twin-wall sheets we offer connection profiles (flat connections).

Length	Width	Thickness	Order number
mm	mm	mm	

SIMONA® PE 100 Flat Connections, black

2,000	50	39	010015428
-------	----	----	-----------



Stock availability of products:

bold type = available immediately; light-faced type = available on request

Cross-ribbed SIMONA® Corner Elements

Length	Leg length	Total thickness	Thickness outer skins	Web spacing	Order number
mm	mm	mm	mm	mm	

SIMONA® PE 100 Corner Elements, 90°, black

2,000	490	40	6	50 x 50	010030599
-------	-----	----	---	---------	------------------

SIMONA® PP-C Corner Elements, 90°, grey

2,000	490	40	6	50 x 50	010030600
-------	-----	----	---	---------	------------------

Lengthways-ribbed SIMONA® Corner Elements

Length	Leg length	Total thickness	Thickness outer skins	Web spacing	Order number
mm	mm	mm	mm	mm	

SIMONA® PE 100 Corner Elements, 45°, black

1,500	318	54	6	108	010014259
1,500	318	54	6	54	010014263
1,500	318	58	8	54	010014267
3,000	318	54	6	108	010014261
3,000	318	54	6	54	010014265
3,000	318	58	8	54	010014269

SIMONA® PP-H AlphaPlus® Corner Elements, 45°, grey

1,500	318	54	6	108	010014283
1,500	318	54	6	54	010014287
1,500	318	58	8	54	010014291
3,000	318	54	6	108	010014285
3,000	318	54	6	54	010014289
3,000	318	58	8	54	010014293

Length	Leg length	Total thickness	Thickness outer skins	Web spacing	Order number
mm	mm	mm	mm	mm	

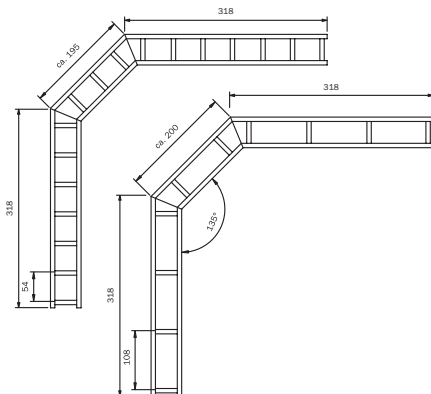
SIMONA® PE 100 Corner Elements, 90°, black

1,500	490	54	6	108	010014271
1,500	490	54	6	54	010014275
1,500	490	58	8	54	010014279
3,000	490	54	6	108	010014273
3,000	490	54	6	54	010014277
3,000	490	58	8	54	010014281

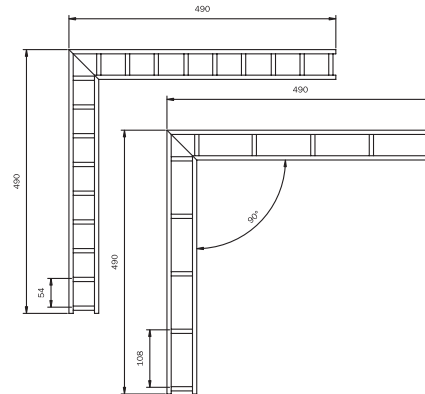
SIMONA® PP-H AlphaPlus® Corner Elements, 90°, grey

1,500	490	54	6	108	010014295
1,500	490	54	6	54	010014299
1,500	490	58	8	54	010014303
3,000	490	54	6	108	010014297
3,000	490	54	6	54	010014301
3,000	490	58	8	54	010014305

Standard Corner Element, 45°



Standard Corner Element, 90°



SIMONA® Twin-Wall Sheets – Material specifications

Material specifications

		SIMONA® PE 100	SIMONA® PP-H AlphaPlus®	SIMONA® PP-C	SIMONA® PPs
Density, g/cm ³ , DIN EN ISO 1183		0.96	0.91	0.91	0.95
Impact strength, kJ/m ² , DIN EN ISO 179		no break	no break	no break	no break
Fire behaviour, DIN 4102		normal flammability B2 (Self-assessment without test certificate)	normal flammability B2 (Self-assessment without test certificate)	normal flammability B2 (Self-assessment without test certificate)	Low flammability B1 (Test certificate available)
Temperature range, °C		-50 to +80	0 to +100	-20 to +80	0 to +100
Chemical resistance		very good in contact with many acids, alkalis and solvents			
Physiologically safe	BfR	✓	✓	✓	-
Food conformity	EU	✓	✓	-	-
	FDA	-	✓	✓	-

All specifications are deemed to be approximate values in respect of the specific material and may vary depending on the processing methods used. In general, data specified applies to average values measured on extruded sheets with a thickness of 4 mm. In the case of sheets manufactured by means of pressing, testing is generally performed on sheets with a thickness of 20 mm. Deviations from the values specified are possible if the sheets in this thickness are not available. In the case of backed sheets, all technical specifications relate to the non-backed base sheets. Information presented herein is not necessarily applicable to other products (e.g. pipes, solid rods) of the same material or products that have undergone downstream processing. Suitability of materials for a specific field of application must be assessed by the party responsible for processing or the end-user. All technical specifications presented herein are designed merely to provide assistance in terms of project planning. They do not constitute a guarantee of specific properties or qualities.

SIMONA AG

**Teichweg 16
55606 Kirn
Germany**
Phone +49 (0) 67 52 14-0
Fax +49 (0) 67 52 14-211
mail@simona.de
www.simona.de

PRODUCTION SITES

Plant I

Teichweg 16
55606 Kirn
Germany

Plant II

Sulzbacher Straße 77
55606 Kirn
Germany

Plant III

Gewerbestraße 1-2
77975 Ringsheim
Germany

SIMONA Plast-Technik s.r.o.

U Autodílen č.p. 23
43603 Litvinov-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 INC.

101 Power Boulevard
Archbald, PA 18403
USA

Boltaron Inc.

A SIMONA Company
1 General Street
Newcomerstown, OH 43832
USA

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

Telford Drive
Brookmead Industrial Park
Stafford ST16 3ST
Great Britain
Phone +44 (0) 1785 2224 44
Fax +44 (0) 1785 2220 80
mail@simona-uk.com
www.simona-uk.com

SIMONA AG SWITZERLAND

Industriezone
Bäumlimattstrasse 16
4313 Möhlin
Switzerland
Phone +41 (0) 61 8 55 90 70
Fax +41 (0) 61 8 55 90 75
mail@simona-ch.com
www.simona-ch.com

SIMONA S.r.l. SOCIETÀ UNIPERSONALE

Via Volontari del Sangue 54a
20093 Cologno Monzese (MI)
Italy
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
Spain
Phone +34 93 635 41 03
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. Wroclawska 36
Wojkowice k / Wrocławia
55-020 Żórawina
Poland
Phone +48 (0) 71 3 52 80 20
Fax +48 (0) 71 3 52 81 40
mail@simona-pl.com
www.simona-pl.com

OOO "SIMONA RUS"

Projektiruemy proezd No. 4062,
d. 6, str. 16
BC PORTPLAZA
115432 Moscow
Russian Federation
Phone +7 (499) 683 00 41
Fax +7 (499) 683 00 42
mail@simona-ru.com
www.simona-ru.com

SIMONA FAR EAST LIMITED

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

Kaledonia, Unit No. 1B, A Wing
5th Floor, Sahar Road
Off Western Express Highway
Andheri East
Mumbai 400069
India
Phone +91 (0) 2262 154 053
sales@simona-in.com

SIMONA AMERICA INC.

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

Boltaron Inc.

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

Upon publication of a new edition all previous editions shall become void. The authoritative version of this publication can be found on our website at www.simona.de. All information furnished in this publication reflects our current scope of knowledge on the date of publication and is designed to provide details of our products and potential fields of application (errors and omissions excepted, including typographical mistakes). Any reproduction of this publication or any unconnected use of specific content taken from this publication are strictly prohibited; legal action will be taken in the event of an infringement. Exceptions hereto will require our prior approval in writing.

