

compatto

Semi-finished elements
for light weight
sandwich panels.

Panels, cores, profile bars.

Lightweight: reduction
of weight up to 70%.

Direct screwing
without predrilling.

Unsentitive
against humidity.

Furniture edges
directly glueable.

compatto.compacfoam.com

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No liability accepted for printing errors.

- _ screwable
- _ outstanding thermal insulation
- _ stable against climate change
- _ long-term stable
- _ frost resistant
- _ isotropic
- _ ductile
- _ open to diffusion
- _ high compressive strength
- _ low weight
- _ biocide-free
- _ recyclable

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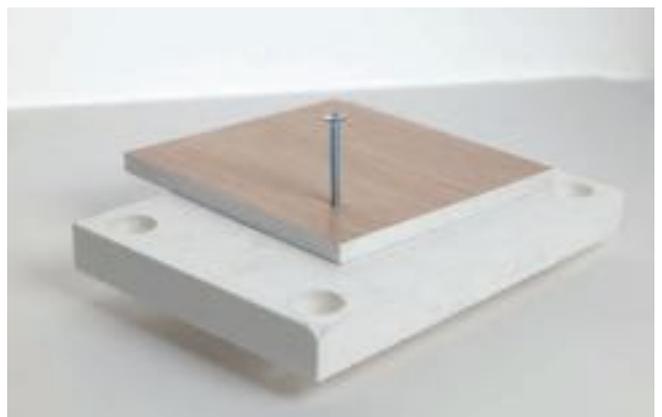
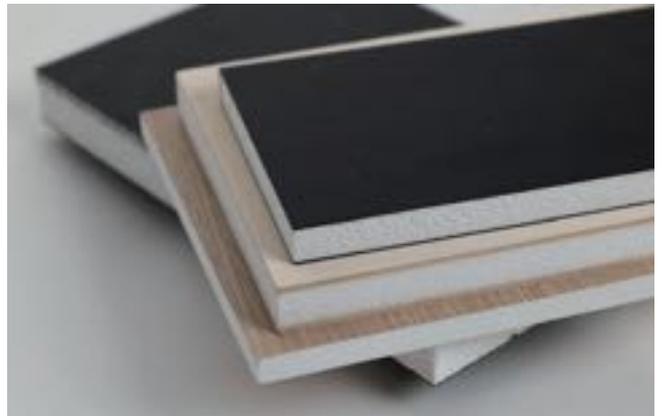
A modern material.

It combines strength with outstanding thermal insulation and a very low weight. It is both a flexibly usable construction element and a high-grade insulation material. This combination means that **compatto** is extremely versatile.

Our panels, bars, profile bars and blocks goods have a comparatively low weight. This makes handling easier. In addition, they can be screwed, drilled, sawed, planed and milled with standard woodworking machines. The ductile property enables the material to compensate for unevenness of the contact surface without any damage. COMPACFOAM is insensitive to moisture and frost, stable up to a temperature of 90°C. It does not become brittle at low temperatures and is therefore also suitable for applications in the field of refrigeration technology. There is no swelling and shrinking and the material is resistant to aging as well as non-rotting.

COMPACFOAM is available as a sandwich panel, core panel, bar or profile bar. Standard formats in all required thicknesses (see table) and custom-made special cuts according to customer requirements are generally possible. We have many options for fabricating the panels to the customer specification.

COMPACFOAM is recyclable, non-mixed and meets all the requirements for sustainable, environmentally friendly construction. COMPACFOAM opens up new approaches to solutions in modern construction as a result of its properties.



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Outstanding properties speak for themselves

Sandwich.

Available as sandwich panel with several surfaces as kraft paper, MDF, laminate and others.

compatto can be delivered as sandwich panel core with bespoke thickness and sanded surface with tolerance of +/-0.2 mm.



Lightweight.

Weights significantly less than standard wood based panels. The extreme lightness combined with the high strength allows weight reduction up to 70% and so a variety of new applications. The high strength of the material allows to apply very thin surfaces.



Furniture edges.

Furniture edges can be applied directly to the material with standard methods.



Like wood.

Semifinished surfaces like MDF, kraft paper, plywood enable easy painting and application of veneer with standard methods.



es.

Bending stiffness.

The high tensile strength of the surfaces and the rigid core result in a sandwich panel with very high bending stiffness. Because of the excellent dimensional stability of the core the panels remain plain and without torsion even with changing moisture and temperature conditions.



Climate stable.

The construction core is insensitive against moisture, temperature and freezing, but still open to diffusion and breathable. That is especially important for the contact with wood. Incoming moisture can dry out damage free. Excellent durability in moist and salty environment. No long term change of material properties.



Screwing.

Conventional wood screws are used for screwing. No pre-drilling is required.



Bonding.

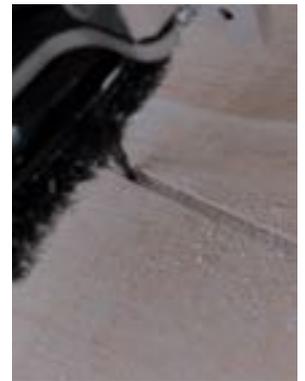
COMPACFOAM can be easily bonded to other materials with e.g. 1-component polyurethane or MS polymer adhesives.



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Processing.

compatto can be processed easily and economically with conventional woodworking machines. No carbide tools are required. The standard processes include sawing, planing, milling and drilling. **compatto** only causes very low tool wear.



Economic.

No reinforcements of the panel core are necessary at attachment points. The size of the panels adapts to the desired format, which reduces waste costs. Delivery as a fixed size and sanded on both sides possible.

Heat insulation.

Despite its high strength, COMPACFOAM is excellent thermal insulation. Even thin layers prevent thermal bridges and contribute to insulation.

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Applications.

Developed from the requirements of modern yacht, vehicle and furniture construction. It combines the advantages of well-known wood-based materials with the lightness and moisture resistance of a unique and revolutionary material that has been successfully used in the construction industry for years.



Applications in the area of yacht construction include: partition walls, furniture parts also made of veneered wood, sanitary components



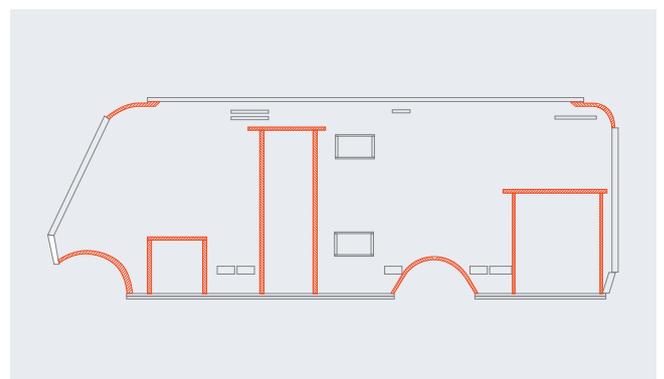
In furniture construction: 3D panels, lightweight panels, waterproof outdoor furniture



In the construction industry: window and door installations, thermal breaks in facades and much more

Health.

COMPACTOAM is pure and does not release any physiologically relevant amounts of chemical substances. No harmful dusts or vapors are produced during processing.



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A modern material which consists of pure EPS.

It combines strength with outstanding thermal insulation and a very low weight. It is both a flexibly usable construction element and a high-grade insulation material. This combination means that COMPACFOAM is extremely versatile.



Available also recycled.

We can recycle 100 percent of COMPACFOAM waste by means of a newly developed process called particle technology. CF_{eco}, the result of this process, offers the same excellent properties as COMPACFOAM: high strength with outstanding thermal insulation.

Customers can return non-mixed waste to the manufacturer. This makes COMPACFOAM **eco** an extremely sustainable product. In addition, the customer incurs none of the usual disposal costs.

CFeco



Available in different material classes.

The CF material classes differ mainly in terms of compressive strength, thermal conductivity and screw retention. Please use the following table to determine the optimum material class for your application. We are happy to advise you personally.



Sintered highly compressed EPS	CF 100	CF 125	CF 150	CF 200	CF 300	CF 400	CF eco	Standard	
Compressive strength (N/mm ²) with 10 % compression	1,4	1,65	1,9	3,5	6,4	9,7	1,75	EN 826	
with 2 % compression	0,8	1,1	1,32	1,48	3,24	4,0	0,95	based on above	
Permissible stress (N/mm ²) at 2% long-term deform. under constant load	0,56	0,78	0,83	1,01	2,39***	4,18***	0,58	internal	
					*** 3% long-term deformation				
E-Module (N/mm ²)	40	55	66	74	162	200	46	internal	
Screw pull out									
Screw pull out* Ø 4,5 mm (N)	505	565	747	979	1.729	2.829	-	internal	
Screw pull out* Ø 7,5 mm (N)	837	919	1.179	1.875	2.677	4.047	825	internal	
Screw shear									
Screw shear** Ø 4,5 mm (N)	103	112	150	214	319	500	-	internal	
Screw shear** Ø 7,5 mm (N)	296	394	493	542	1.012	1.333	-	internal	
Thermal conductivity									
Rated value (W/mK)	0,0387	0,0377	0,0423	0,0459	0,0531	0,0650	0,045	EN 12667	
Density (kg/m ³), +/- 10 kg/m ³	110	135	160	210	310	410	200	internal	
Water vapor diffusion resistance factor								~25	EN 12086-1
Fire behaviour								E (B1) flame-retardant	EN 13501-1 DIN 4102-1
Maximum water absorption 28 days								~5%	EN 12087

* at 40 mm anchorage length / ** at 1.5 mm max. head deformation, 40 mm anchoring length, 30 mm edge distance

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Forms of delivery.

compatto is available in panel, bar, profiled bar or block ware. Standard formats in all the required thicknesses (see table) and precision-fit special cuts to customer specifications are generally possible. We have a large number of options for preparing the panels to your requirements.

Panels



Sandwich panels cores are available in standard sizes or customized formats.
Maximum size 1400x4600mm, thicknesses between 6 and 100mm.
Maximum size of composite panels 1200x3000mm.

Profile formats



Milled profiles according to customer specifications with a tolerance of $\pm 0.3\text{mm}$. Small quantities and large series. Possible coatings on individual sides.
Minimum size 10x20mm.
Maximum size 300x200mm.

Milled parts



3D milling - pieces milled with the highest accuracy on modern CNC systems. Economical production due to state-of-the-art machinery.

Standard formats

Material classes	Length in mm	Width in mm
CF 100	2350	780
CF 125	2250	760
CF 150	2150	680
CF 200	1980	660
CF 300	1700	600
CF 400	1600	450
CF eco	2350	1160

Formats of sandwich panels with MDF or kraft paper: 2400x1200mm



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We are engineers.

COMPACFOAM is a vigorously growing medium-sized company with a production area of 13,000m² and an export ratio of more than 95 percent. We develop and produce exclusively at our location in Wolkersdorf, Austria.

Our in-house laboratories and testing facilities enable us to provide our customers with prompt and non-bureaucratic support in the use of COMPACFOAM, even in new and difficult applications. We attach great importance to quality assurance and product safety in this respect.

COMPACFOAM GmbH defines itself as a resourceful partner from product development to implementation in the application. Our team of qualified engineers will be pleased to support you in the assessment and mechanical analysis of possible areas of application.



Research and development.



Our doors are open to
you for questions and
further information.

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