ATLASFOAM® Atlas F

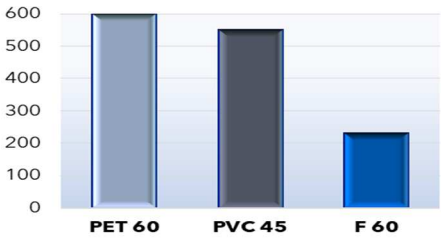
Beyond the state of the art: innovative formulation expressing excellent mechanical, chemical, thermal and technological properties, Atlas F is an engineered core material optimized to best satisfy industrial processing needs, applications requirements, environmental impact target for sandwich composite structures.

In addition to lightweight and mechanical performance, Atlas F offers:

PERFECT ADHESION-COHESION SKIN-CORE WITHOUT RESIN EXCESS

Resin uptake g/m² foam (side), plain sheet

- Resin saving 60% vs PETs & PVCs
- Lower sandwich final weight, 30% vs PETs, 20% vs PVCs
- Improved sandwich ultimate properties



CERTIFIED DATA FOR LCA STUDIES AND ENVIRONMENTAL PRODUCT DECLARATIONS

Atlas F 60, together with Atlas HPE 120 and 220, is the first foam to be granted with an EPD in the context of panels or sheets in composite system, for structural application.

EPD®

Certified
Environmental Product Declaration
EPD n. S-P-11758
from NMG Europe

In use since 2004 as structural core by tens of customers spanning from leading international corporates to small companies in many industries for different applications.

More than 25.000 nacelles around the globe attests Atlas F quality

Lightweight structural board for walls and partition elements, architectural moulds

Yacht interiors

Lightweight structural board in furniture elements

Insulating wall panels, lining & interior wall material for RVs, campers & caravans

Cladding/structural panels for trade show stands, movie/performance sets, theme parks

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For more info please visit:
www.nmgeurope.com

Atlas F - THE ENGINEERED FLEXIBLE FOAM

Atlas F is a closed cell rigid structural foam based on a high cross-linking degree interpenetrated polymer network (IPN), engineered on a polymeric blend polyether polyester with excellent toughness and resistance in relation to weight, outstanding resistance to static and dynamic loads and superior fatigue strength with an intrinsic capacity of energy adsorption, and deformation.

TECHNICAL PROPERTIES DATA - CUSTOMIZATION POSSIBLE UPON REQUEST

Atlas F is an isotropic material and mechanical properties, including shear strength and modulus, are independent from sheet direction.
Constancy of mechanical properties are guaranteed by our innovative process and proved by routine testing at single production batch level; test data reported represent average production figures referring to over 10 years of product manufacturing and testing.

Property	Standard	Unit	F 50	F 60	F 70	F 80	F 100
Density	ASTM D 1622	kg/m^3	52	62	70	80	100
			48-56	58-65	68-76	78-87	94-107
Compressive strength	ASTM D 1621	MPa	0.4	0.55	0.65	0.8	1.1
Compressive modulus	ASTM D 1621-73B	MPa	20	25	30	35	60
Tensile strength	ASTM D 1623	MPa	0.45	0.6	0.8	0.8	1.1
Tensile modulus	ASTM D 1623	MPa	23	30	35	40	65
Shear strength	ASTM C 273	MPa	0.35	0.48	0.55	0.6	0.7
Shear modulus	ASTM C 273	MPa	5.5	7	10	12.5	15
Thermal conductivity	ASTM C 518	W/mK	0.024	0.024	0.024	0.025	0.025
Service Temperature		°C	-180 +95	-180 +95	-180 +95	-180 +105	-180 +90
(*) Process Temperature		°C	120	120	120	120	120

(*) maximum 1 hour

STANDARD DIMENSIONS - CUSTOMIZATION POSSIBLE UPON REQUEST

Property	Unit	F 50	F 60	F 70	F 80	F 100
Length	mm	2500	2500	2500	2400	2400
Width	mm	1200	1200	1200	1200	1200
Thickness	mm	5 - 500	5 - 500	5 - 500	5 - 400	5 - 300

Contact us for further information, test data report, comparative studies, references: sales@nmgonline.it

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