

PVCCell™ G-Foam

Structural Foam Core

- Suitable for all sandwich composites applications
- Superior strength and stiffness to weight ratio
- Self extinguishing
- Outstanding chemical resistance
- Ideal for resin infusion, contact molding, RTM
- GL-approved (G45 - G100)
- DNV-approved
- RINA-approved
- ABS-approved

Introduction

PVCCell G-Foam is a closed cell, cross-linked PVC foam. It provides superior strength to weight ratio for all composite applications.

Other key features of PVCCell G-Foam include outstanding chemical resistance, negligible water absorption, and excellent thermal insulation capabilities. It is compatible with most common resin systems including epoxy, polyester and vinylester.

PVCCell G-Foam is available in a wide range of formats with all standard cut patterns and finishes possible.

PVCCell G-Foam is approved by Det Norske Veritas (DNV), American Bureau of Shipping (ABS), Registro Italiano Navale (RINA) and Germanischer Lloyd (GL) (G45-G100).

Type	Test Method	Units	G45	G60	G80	G100	G130	G200
Nominal Density		kg/m ³	48	60	80	100	130	200
		lb/ft ³	3	3.7	5	6.2	8.1	12.5
Compressive Strength	ASTM D1621	MPa	0.6	0.9	1.3	1.9	2.9	4.8
		psi	87	130	189	276	421	696
Compressive Modulus	ASTM D1621 (1973b)	MPa	40	65	90	125	180	300
		psi	5802	9425	13053	18130	26107	43511
Shear Strength	ASTM C-273	MPa	0.55	0.78	1.1	1.5	2.0	3.5
		psi	80	113	160	218	290	508
Shear Modulus	ASTM C-273	MPa	15	21	32	40	55	80
		psi	2176	3045	4641	5802	7977	11603
Shear Elongation	ASTM C-273	%	16	20	20	25	25	40
Tensile Strength	ASTM C-297	MPa	1.2	1.8	2.3	3.1	4.2	6.4
		psi	174	261	334	450	609	928
Tensile Modulus	ASTM C-297	MPa	52	72	100	135	200	300
		psi	7542	10440	14504	19580	29007	43511

PVCell G series foam can be processed at up to +90°C with minor dimensional changes. Maximum processing temperature is dependent on time, pressure and process conditions. Continuous operating temperature is -200°C to +70°C. Users are advised to contact Gurit to confirm that PVCell is compatible with their particular processing parameters.

PVCell G-Foam (G45 - G100) is GL-approved. Copies of the certificate available on request.

PVCell G-Foam (G45 - G200) is DNV-approved. Copies of the certificate available on request.

PVCell G-Foam (G45 - G200) is ABS-approved. Copies of the certificate available on request.

PVCell G-Foam (G45 - G200) is RINA-approved. Copies of the certificate available on request.

Please Note:

Data quoted is average data at each product s nominal density, and is derived from our regular testing of production materials.

Statistically derived minimum value data, satisfying the design requirements of various classification societies, is available on request.

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The Company strongly recommends that Customers make test panels and conduct appropriate testing of any goods or materials supplied by the Company to ensure that they are suitable for the Customer's planned application. Such testing should include testing under conditions as close as possible to those to which the final component may be subjected. The Company specifically excludes any warranty of fitness for purpose of the goods other than as set out in writing by the Company. The Company reserves the right to change specifications and prices without notice and Customers should satisfy themselves that information relied on by the Customer is that which is currently published by the Company on its website. Any queries may be addressed to the Technical Services Department.

Gurit are continuously reviewing and updating literature. Please ensure that you have the current version, by contacting Gurit Marketing Communications or your sales contact and quoting the revision number in the bottom right-hand corner of this page.