

# PMI FOAM (RS)

PMI foam RS has been specially developed to meet the requirements of vacuum assisted injection and resin transfer molding processes. The mechanical properties and heat mechanical properties of PMI foam RS is equivalent to PMI foam WH. The design of smaller pore diameter makes it have a lower resin absorption capacity which is lower 30% by PMI foam WH. While reducing the adhesive absorption weight, the adhesive force between the foam core material and the skin material can reach the best balance.

PMI foam RS can be applied to parts manufactured by resin injection process in aviation, aerospace and sports equipment, which can effectively reduce the weight of parts. The optimized cell structure makes PMI foam RS is particularly suitable for RTM or VARI processes.

Type	Units	30RS	50RS	75RS	110RS	200RS	Test Method
Density	kg/m <sup>3</sup>	28-34	45-55	70-85	105-125	200±20	ISO 845
Compressive Strength	MPa	0.4	0.85	1.7	3.6	9.5	ISO 844
Tensile Strength	MPa	0.8	1.68	2.3	3.7	7	ASTM D638
Elastic Modulus	MPa	38	83	108	197	380	ASTM D638
Elongation At break	%	2.4	2.6	2.8	2.8	2.8	ASTM D638
Flexural Strength	MPa	0.8	1.6	2.9	5.2	13	ASTM D790
Shear Strength	MPa	0.4	0.85	1.25	2.38	5	ASTM C273
Shear Modulus	MPa	15	30	48	80	160	ASTM C273
Compressive Creep	%	≤2.0				/	GB/T 15048
Heat Deflection Temperature	°C	≥200°C					DIN 53424

\*Compression creep test conditions for different density products:

30RS,130°C/0.1Mpa/2h

50RS,130°C/0.3Mpa/2h

75RS,150°C/0.3Mpa/2h

110RS, 180°C/0.3Mpa/2h

Note: Technical data of our products are typical values for the nominal density.

## Bubble standard size

RS	Size (mm)	Sheet thicknesses are available
30RS	2500*1250	1-60
50RS	2500*1250	1-120
75RS	2500*1250	1-100
110RS	2160*1100	1-90
200RS	1900*900	1-30

\*Thickness tolerance+/- 0.2 mm, other tolerances available on request