

Impact Guard: IG Series Product

Technical Data Sheet

Effective: 7/1/2022

Product Description: Impact Guard IG Series is a thermoplastic composite material comprised of continuous fiberglass reinforced polypropylene. The IG Series product line includes a broad range of layup options that are well suited for use in a wide range of industries and applications and can be custom engineered to your specific needs.

Mechanical Properties:

IG Series	IG0300	IG0600	IG0900	IG1200
Plies of Tape	3	6	9	12
Nominal Area Weight (Ibs/ft ²)	0.25	0.61	0.87	0.96
Nominal Thickness (in)	0.040	0.100	0.140	0.155
Nominal Flexural Modulus Major Direction (ASTM D790) (ksi)	880	1680	1700	1700
Nominal Flexural Modulus Minor Direction (ASTM D790) (ksi)	195	840	1050	1010
Nominal Flexural Strength Major Direction (ASTM D790) (ksi)	18	19	22	19
Nominal Flexural Strength Minor Direction (ASTM D790) (ksi)	4	14	16	15

Tolerances ^[1]:

IG Series	IG300	IG600	IG900	IG1200
Plies of Tape	3	6	9	12
Length	$\pm 1/8''$	$\pm 1/8''$	$\pm 1/8''$	$\pm 1/8''$
Width	$\pm 1/16''$	$\pm 1/16''$	$\pm 1/16''$	$\pm 1/16''$
Thickness	$\pm 1/64''$	$\pm 1/64''$	$\pm 1/64''$	$\pm 1/_{64}$ "

[1] Dimensional tolerances provided are assuming a 4'x8' sheet. The length tolerance opens to $\pm 1/4''$ for product >108"



Flammability Testing: FMVSS 302 Flammability of Interior Materials

Specimen Description	Specimen Number	Material Direction	Distance Flame Traveled (in)	Burn Time (sec)	Burn Rate (in/min)	Pass/Fail ^[2]
IG0300	3	Major	10	495	1.2	Pass
IG0300	3	Minor	9	515	1.2	Pass

[2] In order to pass, a specimen must not exhibit a burn rate greater than 4"/min

Note: A specimen is also considered to pass if it burns for less than 60 sec and the flame travels 2" or less