

IMPACT GUARD

IG SERIES

IG 300 | IG 600 | IG 1000 | IG 1800

IMPACT RESISTANT HIGH MODULUS PANELS

- Construction • Trucking/Recreational Vehicles • Agriculture/Livestock Containment
- Armoring/Ballistic Protection • Medical Devices • Signage

Impact Guard manufactures a broad range of rugged, yet easily workable thermoplastic composite panels for use in a wide range of demanding applications. Our high-strength panels are constructed utilizing unidirectional plies of continuous fiberglass reinforced polypropylene, stacked in layers oriented 90 degrees to each other.

By varying the number and direction of the individual plies, Impact Guard can manufacture variable modulus materials featuring differing stiffness in both primary directions.

KEY ADVANTAGES OF IMPACT GUARD PANELING

- ▾ **LIGHTWEIGHT** | Better strength-to-weight ratio than steel, aluminum or plywood
- ▾ **DURABLE** | Doesn't absorb moisture like wood. High impact resistance
- ▾ **CONVENIENT** | Available in both cut sheet or rolled formats
- ▾ **WORKABLE** | Can be drilled, cut or shaped with hand or power tools
- ▾ **CUSTOMIZABLE** | Can be engineered to meet your specific requirements
- ▾ **FEWER SEAMS** | Widths up to 108"
- ▾ **SAFE** | Chemically inert (non-reactive)
- ▾ **SANITARY** | Easy to clean
- ▾ **RESPONSIBLE** | No VOCs produced in production; recyclable

PHYSICAL PROPERTIES

SERIES	IG300	IG600	IG1000	IG1800
Plies of Tape	3	6	10	18
Nominal Areal Weight	0.24 lbs/sq ft	0.47 lbs/sq ft	0.79 lbs/sq ft	1.41 lbs/sq ft
	1.15 kg/sq m	2.30 kg/sq m	3.84 kg/sq m	6.91 kg/sq m
Nominal Thickness (in)	0.030 in	0.060 in	0.100 in	0.180 in
	0.762 mm	1.524 mm	2.540 mm	4.572 mm
Nominal Flexural Modulus Major Direction	880 ksi	1250 ksi	1900 ksi	2000 ksi
	6067 mpa	8618 mpa	13099 mpa	13788 mpa
Nominal Flexural Modulus Minor Direction	195 ksi	740 ksi	1300 ksi	1600 ksi
	1344 mpa	5102 mpa	8962 mpa	11030 mpa
Nominal Flexural Strength Major Direction	18 ksi	21 ksi	34 ksi	30 ksi
	124 mpa	145 mpa	234 mpa	207 mpa
Nominal Flexural Strength Minor Direction	4 ksi	19 ksi	23 ksi	27 ksi
	26 mpa	131 mpa	159 mpa	186 mpa

