



**PROTECTOR REINFORCED POLYPROPYLENE  
36PP & 45PP**

Properties	Test Method	36PP	45PP
Guage (Nominal) mils (mm)		0.036 (0.90)	0.045 (1.14)
Plies, Reinforcing		1	1
Thickness, min Overall-mil (mm) Over Scrim-mil (mm)	ASTM D751, Optical Method	0.036 (0.90) 0.011 (0.28)	0.044 (1.12) 0.012 (0.30)
Breaking Strength-fabric Min. lbf (kN)	ASTM D751, Method A	275 (1.22)	300 (1.34)
Low Temp. Flex. °F (°C)	ASTM D2136 1/8-in Mandrel, 4 hr. pass	-65 (-54)	-65 (-54)
Puncture Resistance, min. Lbs (kN)	FTMS 101C, Method 2031	350 (1.56)	400 (1.78)
Tear Strength, min. lbf (Kn)	ASTM D5884	100 (0.45)	100 (0.45)
Dim. Stability (% chg., max.)	ASTM D1204, 180°F/82°C 1 hour	-0.5 (-0.5)	-0.5 (-0.5)
Hydrostatic resist. Min psi (Mpa)	ASTM D751, Method A Procedure 1	375 (2.58)	400 (2.75)
Ply Adhesion, min. lbs/in (kN/m)	ASTM D413 Machine method modified	30 (5.25)	30 (5.25)
Water Absorption max, % Wt. chg.	ASTM D471 30 days @70°F (21°C)	<1%	<1%
ESCR (Env. Stress Crack Resist)min. hrs w/o failure	ASTM D1693/3,000 Hours	Not affected by ESC	Not affected by ESC
UV Resistance	ASTM G26 Xenon Arc 80° C/4,000 hrs	Pass	Pass

The values listed are typical properties and are intended to be used as guidelines only, not as specification limits. No guarantee or warranty is made by Integra Plastics, Inc. as the manner of use, handling and site conditions are beyond our control. Install in accordance with accepted industry standard.