

Product Description

RUFECO® PP30 and PP40 are exceptionally flexible geomembranes achieved by incorporating high levels of ethylene propylene rubber into polypropylene. Rufco® polypropylene membranes contain no plasticizers that can leach out and hinder long-term flexibility and performance. RUFECO® PP Series provides outstanding resistance to environmental stress cracking even at elevated temperatures and in addition to aggressive chemical environments.

Product Use

RUFECO® PP30 and PP40 are used in a wide variety of applications that require a unique combination of mechanical toughness, exceptional flexibility and environmental resistance. Raven's polypropylene geomembranes also offer a high-friction angle which reduces concerns for side slope stability. A low coefficient of thermal expansion significantly reduces wrinkling in a wide range of temperatures. This product may be considered for containment of leachates from typical Municipal Solid Waste per EPA 9090 testing in addition to black liquor from paper manufacturing.

Size & Packaging

RUFECO® PP30 is available as a custom run product with minimum order requirements. RUFECO® PP40 is available in up to 25,000 square foot panels. All panels are accordion folded every 5 feet, and tightly rolled onto a heavy-duty core for ease of handling and time-saving installation.



Containment Liner

Product	Part #
RUFECO	PP30
RUFECO	PP40

APPLICATIONS

- Canal Linings
- Decorative Ponds
- Landfill Caps
- Waste Ponds
- Golf Course Water Traps
- Brine Ponds
- Aquaculture
- Evaporation Ponds
- Mine Tailing Ponds
- Fire Ponds
- Remediation Liners
- Farm Ponds
- Fish Hatcheries

PROPERTIES	TEST METHOD	RUFACO PP30		RUFACO PP40	
		Min. Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Roll Averages
THICKNESS MIL	ASTM D5199	27.0	30.0	36.0	40.0
WEIGHT		120 lbs/MSF 614 g/m ²	140 lbs/MSF 683 g/m ²	160 lbs/MSF 825 g/m ²	188 lbs/MSF 917 g/m ²
*TENSILE STRENGTH AT BREAK (LBF/IN)	ASTM D6693	72 lbf	85 lbf	82 lbf	95 lbf
*ELONGATION AT BREAK (%)	ASTM D638	700	800	700	800
*TEAR RESISTANCE (LBF)	ASTM D1004	10	11.5	13	14
PUNCTURE RESISTANCE (LBF)	ASTM D4833	35	39	41	45
LOW TEMP, IMPACT FAILURE TEMP	ASTM D2136	-40° C	-65° C	-40° C	-65° C
DIMENSIONAL STABILITY % CHANGE	ASTM D1204		< 1%		< 1%
CARBON BLACK CONTENT (%)	ASTM D1603	2.0	2.5	2.0	2.5
WVTR g H₂O/100 in²/24 hrs (g/m²/24 hrs)	ASTM E96 Method A 73° F, 50% RH		0.083 (1.3)		0.074 (1.1)
MULTI-AXIAL ELONGATION (%)	ASTM D5617	120%		120%	

* Tests are an average of MD & TD directions



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Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.