



CO: 800.524.8672  
TX: 888.546.4641  
www.coloradolining.com

## RPE - REINFORCED POLYETHYLENE

RPE is a proven solution to many containment needs due to its excellent puncture resistance and UV stability.

Colorado Lining can supply you with custom sized panels or facilitate a full installation with one of our certified installation crews. We want to work with you to make your job a success.

### Products & Features:

- Warranty Info:
  - 24 MIL: 10 YEAR
  - 36 MIL: 15 YEAR
  - 45 MIL: 20 YEAR
- Fish Friendly
- Flexible
- Available In Custom Sized Panels
- Extremely Durable
- Quick Installation
- UV Stable
- Available In 24, 30, 36, & 45 Mils

### Uses & Applications:

- Wastewater Treatment Plants
- Agriculture Ponds
- Baffle Curtains
- Oil and Gas Temporary
- Evaporation Ponds
- Golf Course Ponds
- Drop-In & Large Tank Liners
- Irrigation Reservoirs & Canals

- **Project Photo: Hangman Valley Golf Course in Spokane, WA**
- **Pond Liner**
- **27,000 SF 36 Mil RPE**



# I – Series

Available in  
24 & 36 mil

| PERFORMANCE                            |  |                    |                              |
|--|--|--------------------|------------------------------|
| GRAB TENSILE                           | Warp 258 lb 1150 N   | Weft 250 lb 1114 N | ASTM D751/NSF                |
| TONGUE TEAR                            | Warp lb N  | Weft lb N          | ASTM D2261-96                |
| TONGUE TEAR-LARGE SCALE                | Warp 140 lb 621 N  | Weft 149 lb 663 N  | ASTM D5884-01                |
| TRAPEZOIDAL TEAR                       | Warp 200 lb 890 N  | Weft 130 lb 578 N  | ASTM D4533-04                |
| MULLEN BURST                           | 370 psi 2553 kPa   |                    | ASTM D3786-01                |
| HYDROSTATIC RESISTANCE                 | 208 psi 1438 kPa   |                    | ASTM D751-00                 |
| PUNCTURE RESISTANCE                    | 76 lb 339 N  |                    | ASTM D4833-00                |
| PUNCTURE RESISTANCE                    | lb N   |                    | FTMS 101C, 2031              |
| CARBON BLACK CONTENT                   | 3.71 %   |                    | ASTM D4218-96                |
| CARBON BLACK DISPERSION                | Rating =   |                    | ASTM D5596-03                |
| VOLATILE LOSS                          | 0.07 %   |                    | ASTM D1203-94                |
| DIMENSIONAL STABILITY                  | Warp -1.40 %   | Weft -1.34 %       | ASTM D1204-02                |
| LOW TEMPERATURE FLEX                   | Warp Pass @ -40°   | Weft Pass @ -40°   | ASTM D2136-94                |
| ACCELERATED UV WEATHERING <sup>1</sup> | >95% strength retention after 2000 hrs exposure @ 0.77 W/m <sup>2</sup> /nm, or 1200 hours exposure @ 1.35 W/m <sup>2</sup> /nm. |                    | ASTM G151-00<br>ASTM G154-04 |

<sup>1</sup> Q.U.V. [A-340 Lamps]: 8 hrs UV @ 60° C; 4 hrs condensation @ 50° C

**CONSTRUCTION:** Reinforcing polyester scrim between LLDPE barrier Layers.  
**COLOUR:** Black and other colors available after consultation.  
**WEIGHT:** 16 oz/yd<sup>2</sup> (542 g/m<sup>2</sup>) +/- 5%  
**THICKNESS:** Nominal 24 mils 0.024" (0.61 mm)

These values are typical data and are not intended as limiting specifications.

NOTE: All cut edges where the scrim is exposed must be sealed using PE welding rod.

### WARRANTY

A 15 year limited warranty is offered on liner applications. Contact your CLI representative for further details.

# J – Series

Available in 30, 36,  
& 45 mil

| Properties                                   | Test Method | 30 mil  |                          | 36 mil                   |                          | 45 mil                   |                          |
|--|-------------|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|  |             | Min. Roll Averages  | Typical Roll Averages    | Min. Roll Averages       | Typical Roll Averages    | Min. Roll Averages       | Typical Roll Averages    |
| Appearance                                   |             | Black/Black   |                          | Black/Black              |                          | Black/Black              |                          |
| Thickness                                    | ASTM D 5199 | 27 mil  | 30 mil                   | 32 mil                   | 36 mil                   | 40 mil                   | 45 mil                   |
| Weight Lbs Per MSF (oz/yd <sup>2</sup> )     | ASTM D 5261 | 126 lbs (18.14)   | 140 lbs (20.16)          | 151 lbs (21.74)          | 168 lbs (24.19)          | 189 lbs (27.21)          | 210 lbs (30.24)          |
| Construction                                 |             | **Extrusion laminated with encapsulated tri-directional scrim reinforcement |                          |                          |                          |                          |                          |
| Ply Adhesion                                 | ASTM D 413  | 16 lbs  | 20 lbs                   | 19 lbs                   | 24 lbs                   | 25 lbs                   | 31 lbs                   |
| 1" Tensile Strength                          | ASTM D 7003 | 88 lbf MD<br>63 lbf DD  | 110 lbf MD<br>79 lbf DD  | 90 lbf MD<br>70 lbf DD   | 113 lbf MD<br>87 lbf DD  | 110 lbf MD<br>84 lbf DD  | 138 lbf MD<br>105 lbf DD |
| 1" Tensile Elongation @ Break % (Film Break) | ASTM D 7003 | 550 MD<br>550 DD  | 750 MD<br>750 DD         | 550 MD<br>550 DD         | 750 MD<br>750 DD         | 550 MD<br>550 DD         | 750 MD<br>750 DD         |
| 1" Tensile Elongation @ Peak % (Scrim Break) | ASTM D 7003 | 20 MD<br>20 DD  | 33 MD<br>33 DD           | 20 MD<br>20 DD           | 30 MD<br>31DD            | 20 MD<br>20 DD           | 36 MD<br>36 DD           |
| Tongue Tear Strength                         | ASTM D 5884 | 75 lbf MD<br>75 lbf DD  | 97 lbf MD<br>90 lbf DD   | 75 lbf MD<br>75 lbf DD   | 104 lbf MD<br>92 lbf DD  | 100 lbf MD<br>100 lbf DD | 117 lbf MD<br>118 lbf DD |
| Grab Tensile                                 | ASTM D 7004 | 180 lbf MD<br>180 lbf DD  | 218 lbf MD<br>210 lbf DD | 180 lbf MD<br>180 lbf DD | 222 lbf MD<br>223 lbf DD | 220 lbf MD<br>220 lbf DD | 257 lbf MD<br>258 lbf DD |
| Trapezoid Tear                               | ASTM D 4533 | 120 lbf MD<br>120 lbf DD  | 146 lbf MD<br>141 lbf DD | 130 lbf MD<br>130 lbf DD | 189 lbf MD<br>172 lbf DD | 160 lbf MD<br>160 lbf DD | 193 lbf MD<br>191 lbf DD |
| * Dimensional Stability                      | ASTM D 1204 | <1  | <0.5                     | <1                       | <0.5                     | <1                       | <0.5                     |
| Puncture Resistance                          | ASTM D 4833 | 50 lbf  | 64 lbf                   | 65 lbf                   | 83 lbf                   | 80 lbf                   | 99 lbf                   |
| Maximum Use Temperature                      |             | 180° F  | 180° F                   | 180° F                   | 180° F                   | 180° F                   | 180° F                   |
| Minimum Use Temperature                      |             | -70° F  | -70° F                   | -70° F                   | -70° F                   | -70° F                   | -70° F                   |

MD = Machine Direction  
DD = Diagonal Directions

Note: Minimum Roll Averages are set to take into account product variability in addition to testing variability between laboratories.

\*Dimensional Stability Maximum Value

\*\*30 mil, 36 mil & 45 mil are a four layer reinforced laminate containing no adhesives. The outer layers consist of a high strength polyethylene film manufactured using virgin grade resins and stabilizers for UV resistance in exposed applications. 30 mil, 36 mil & 45 mil are reinforced with a 1300 denier (minimum) tri-directional scrim reinforcement.