

MicroSpike® Liner

LINEAR LOW DENSITY POLYETHYLENE

AGRU America's structured geomembranes are manufactured on state-of-the-art manufacturing equipment using the flat die calender manufacturing process, a method that produces a more consistent core thickness than other processes, such as the blown film extrusion process. AGRU uses only the highest-grade HDPE and LLDPE resins manufactured in North America.

PRODUCT DATA

| Property | Test Method | Frequency | Minimum Average Values | | | |
|---|---|------------|---|------------|------------|-----------|
| Thickness (nominal), mil (mm) | ASTM D5994 | Per Roll | 40 (1.0) | 60 (1.5) | 80 (2.0) | 100 (2.5) |
| Thickness (min avg), mil (mm) | | | 38 (0.95) | 57 (1.43) | 76 (1.9) | 95 (2.38) |
| Thickness (min 8 of 10), mil (mm) | | | 36 (0.90) | 54 (1.35) | 72 (1.8) | 90 (2.25) |
| Thickness (lowest individual), mil (mm) | | | 34 (0.85) | 51 (1.28) | 68 (1.7) | 85 (2.13) |
| Asperity Height mils, (mm) | ASTM D7466 | 2nd Roll | 20 (0.51) | 20 (0.51) | 18 (0.46) | 18 (0.46) |
| Density, g/cc, maximum | ASTM D792, Method B | 200,000 lb | 0.939 | 0.939 | 0.939 | 0.939 |
| Tensile Properties (both directions) | ASTM D6693, Type IV | 20,000 lb | 112 (19.6) | 168 (29.4) | 224 (39.2) | 280 (49) |
| Strength @ Break, lb/in width (N/mm) | 2 in/minute | | | | | |
| Elongation @ Break, % (GL=2.0in) | | | | | | |
| Tear Resistance, lb.s. (N) | ASTM D1004 | 45,000 lb | 25 (111) | 36 (160) | 50 (222) | 60 (267) |
| Puncture Resistance, lbs. (N) | ASTM D4833 | 45,000 lb | 50 (222) | 70 (310) | 90 (400) | 115 (512) |
| Carbon Black Content, % (range) | ASTM D4218 | 20,000 lb | 2-3 | 2-3 | 2-3 | 2-3 |
| Carbon Black Dispersion (Category) | ASTM D5596 | 45,000 lb | Only near spherical agglomerates: 10 views Cat.1 or 2 | | | |
| Oxidative Induction Time, minutes | ASTM D3895, 200°C, 1 atm O ₂ | 200,000 lb | ≥140 | ≥140 | ≥140 | ≥140 |

AGRU America's geomembranes are certified to pass Low Temp. Brittleness via ASTM D746 (-80°C), Dimensional Stability via ASTM D1204 (±2% @ 100°C). Oven Aging and UV Resistance are tested per GRI GM 17. These product specifications meet or exceed GRI's GM17.

SUPPLY INFORMATION (STANDARD ROLL DIMENSIONS)

| THICKNESS | | WIDTH | | | LENGTH | | AREA (APPROX.) | |
|-----------|-----|-------|---|--------------|--------|-----|-----------------|----------------|
| mil | mm | ft | m | | ft | m | ft ² | m ² |
| 40 | 1.0 | 23 | 7 | Double-Sided | 750 | 229 | 17,250 | 1,603 |
| | | | | Single-Sided | 800 | 244 | 18,400 | 1,709 |
| 60 | 1.5 | 23 | 7 | Double-Sided | 540 | 165 | 12,420 | 1,154 |
| | | | | Single-Sided | 560 | 171 | 12,880 | 1,197 |
| 80 | 2.0 | 23 | 7 | Double-Sided | 410 | 125 | 9,430 | 876 |
| | | | | Single-Sided | 425 | 130 | 9,775 | 908 |
| 100 | 2.5 | 23 | 7 | Double-Sided | 335 | 102 | 7,705 | 716 |
| | | | | Single-Sided | 340 | 104 | 7,820 | 726 |

Note:

Average roll weight is 3,900 lbs (1,770 kg). All rolls are supplied with two slings. Rolls are wound on a 6" core. Special length available upon request. Roll length and width have a tolerance of ±1%. The weight values may change due to project specifications (i.e. average or absolute minimum thickness) or shipping requirements (i.e. international containerized shipments).

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