

Comparison - N-Series vs 40 & 60 Mil HDPE

Properties and Units	Test Method ASTM	N30B ⁽¹⁾	N36B ⁽¹⁾	N45B ⁽¹⁾	40 Mil HDPE ⁽²⁾	60 Mil HDPE ⁽²⁾
Weight – lb/ft ² (min. ave.)	D751	.126	.151	.190	.18	.27
Density (min.) g/cc	D1505	.925	.925	.925	.94	.94
Thickness – Mils						
- Nominal	D5199	30	36	45	40	60
- Min.ave		28	32	40	36	54
Tensile Strength						
- dumbbell – lb/in (min. ave.)	D6693 – IV	-	-	-	84	126
- grab - lb (min. ave.)	D7004	220	240	275	-	-
Tensile Elongation at Break %						
- dumbbell – % (min. ave.)	D6693 – IV	-	-	-	700	700
- Film Break Elongation - %	D7003	22	22	22	-	-
Tear Resistance						
- nonreinforced – lb (min. ave.)	D1004	-	-	-	28	42
- reinforced – lb (min. ave.)	D5884	70	80	100	-	-
Puncture Resistance – lb (min. ave.)	D4833	80	85	90	72	108
Oxidative Induction Time (OIT)⁽³⁾						
- High Pressure OIT (minutes)	D5885	400	400	400	400	400

⁽¹⁾Values taken from N-Series data sheets min. values

⁽²⁾Values used are specified from industry standard GRI-GM13 for HDPE geomembranes

⁽³⁾ OIT values measure anti-oxidant effectiveness of geomembrane.