

Technical Data Sheet Nordic Void ThermaGuard TG-250

Engineered Void Form

Nordic Void is a strong, flexible and water resistant closed-cell elastomeric Void Form designed to be compliant yet resilient when used under suitable pile/pile-cap (caisson), pile cap/grade beam and slab on grade foundations.

MATERIAL PROPERTY	MATERIAL DATA	TESTING METHOD
Thermal Conductivity	0.0389 W/m*K	
k (mean) @ -5 °C (23 °F)	(.273 Btu-in/hr-ft ² -F)	ASTM C518
k (mean) @ 24 °C (75 °F)	0.0432 W/m*K (.294 Btu-in/hr-ft ² -F)	ASTIVI CS18
Thermal Resistance		
R-Value (RSI) @ -5 °C (23 °F)	R – 3.7 Hr-ft ² -°F/Btu (RSI599)	ASTM C518
R-Value (RSI) @ 24 °C (75 °F)	$R - 3.4 \text{ Hr-ft}^2 - ^{\circ} F/Btu (RSI652)$	
Compressive Deflection:		
10% Compression	68.3 kPa (9.9 psi)	
20% Compression	73.8 kPa (10.7 psi)	
25% Compression	78.6 kPa (11.4 psi)	ASTM D1621
30% Compression	85.5 kPa (12.4 psi)	
40% Compression	104.8 kPa (15.2 psi)	
50% Compression	133.1 kPa (19.3 psi)	
Multiple Cycle Rebound @ 0°C (32°F) Rebound following multiple cycles of 25% compression performed @ 0°C following a 24 hour pre-load at 24.1 kPa (3.5 psi). Value reported is the per-cent recovered of the pre-load thickness.	> 95% (% recovery)	Norseman MPS-112
Compression Set: @ 50% compression	< 20%	ASTM D3575
Compressive Creep		
300 hours & 1,000 hours @ 17.3 kPa (2.5 psi)	< 4% @ 300 h / <6% @ 1,000 h	ASTM D3575
300 hours & 1,000 hours @ 24.1 kPa (3.5 psi)	<5% @ 300 h / <10% @ 1,000 h	
Tensile Strength at Peak	165.5 kPa (24 psi)	ASTM D3575
Tear Strength	1.4 kN/m (8 lb/in.)	ASTM D3575
Thermal Stability - % shrinkage	< 2.0 %	ASTM D3575
Water Absorption	1.5 kg/m² (0.3 lb/ft²)	ASTM D3575

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