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Subject: Vapour Permeance Performance of Boreal Nature Elite at Thicknesses less than 50mm

In accordance with the CAN/ULC S705.1 Material Standard, the vapour permeance of Genyk Boreal Nature Elite is measured using the ASTM E96 method. As required by the E96 test, products are tested at 50mm.

At 50mm, Genyk Boreal Nature Elite has a vapour permeance performance rating of 34ng/(Pa*s*m2). Thus, the product exceeds the requirements of the OBC – 60ng/(Pa*s*m2) as stated in OBC 9.25.4.2.(1).

Thickness changes effect on vapour permeance. Below is a chart demonstrating the vapour permeance of Genyk 'Boreal Nature' at various thicknesses.

	25mm	38mm	50mm	65mm	76mm	90mm
Vapour Permeance ng/(Pa*s*m²)	64	42	34	30	26	23
Thermal Resistance (ft²*hr*0F/BTU)	R5.75	R8.7	R11.8	R14.9	R18.1	R21.5

At 38mm, the spray foam would meet the OBC criteria for vapour permeance (considered a vapour barrier). However, at ng/(Pa*s*m2), the Boreal Nature Elite would not be considered an NBC compliant vapour barrier product. If using 25mm as a vapour permeable product, consultation with the Design Professional and local Building Official is required.

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Genyk Polyurethane