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Technical Bulletin #202

**Subject: Boreal Nature Elite Underslab Performance**

Genyk Boreal Nature Elite is a successful product in underslab installations as well as geothermal underground applications.

As an underslab insulation material, Genyk Boreal Nature Elite also serves the purpose of vapour barrier and radon protection membrane.

Regarding the vapour barrier characteristics - 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. At 50mm, Genyk Boreal Nature Elite has a vapour permeance performance rating of  $34\text{ng}/(\text{Pa}\cdot\text{s}\cdot\text{m}^2)$ . The product exceeds the requirements of the OBC –  $60\text{ng}/(\text{Pa}\cdot\text{s}\cdot\text{m}^2)$  as stated in OBC 9.25.4.2.(1). Further, increases in thickness have a linear improvement in vapour permeance. Thus, at 65mm, the vapour permeance performance rating will be  $30\text{ng}/(\text{Pa}\cdot\text{s}\cdot\text{m}^2)$ .

Similarly, the air permeance of Genyk Boreal Nature Elite is measured using the CCMC 07273 methodology. The air permeance performance of Boreal Nature Elite directly correlates to radon gas protection. Genyk Boreal Nature Elite has an air permeance performance rating of  $0.001\text{ L}/(\text{s}\cdot\text{m}^2)$ . The product exceeds the requirements of the OBC –  $0.02\text{ L}/\text{s}\cdot\text{m}^2$  as stated in OBC 9.25.3.2.(1).



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