

ALBERTA BUILDING CODE 2014

As of November 1st 2015, the transition period has passed and we are now governed by the new ABC. What does this mean for our industry? It means we have an opportunity to promote all the benefits that concrete brings to continue to support the construction industry in this province as the building code evolves to meet the needs of our residents and businesses.

One of the code changes that presents an opportunity for us includes provisions for protection against termites. Although this change is predominantly applicable to the southeastern part of our province, it's still another chance for us to remind prospective owners that this issue is put to rest when foundations and retaining walls are constructed using concrete.

The issue of Radon gas in dwellings is being addressed in the new code through required provisions for a rough-in soil depressurization system to vent the gas should this become a concern post construction. To date, the concern about radon has been limited in Alberta but with recent adjustments (lowering) in allowable exposure limits established by Health Canada, more Alberta homes are being found to exceed these new limits. As a result home owners are on the hook at substantial cost to install systems to depressurize the soil beneath their foundations in order to vent the radon gas to the exterior. The new rough-in requirement makes installing a venting system much easier and less costly to the homeowner in the event that it should be discovered necessary.

How does this change play out in our industry? The new rough-in system mandates the placement of polyethylene sheet directly below the concrete slab to act not only as a vapour retarder but also as a soil gas barrier. As such it must not be compromised with any perforations that are not subsequently sealed to prevent any uncontrolled migration of any gases from the soil below. To the concrete placer and finisher using the floor slab mix we as an industry have supplied to date, this means more bleed water to deal with and potentially greater wait periods between finishing operations. To the producer this presents an opportunity to work closer with their customers to develop mix design solutions to address these challenges.

Another element of this new rough-in soil depressurization system that presents a challenge for some parts of the province is the requirement for a gas-permeable layer between the air-barrier and the ground using a prescriptive approach of a 100 mm layer of granular material containing not more than 10% passing the 4 mm sieve. The good news is that there is a performance alternative whereby alternate materials such as a dimpled membrane may be used if they provide a gas-permeable layer between the poly and the ground across which the soil gas will migrate to a depressurization outlet pipe.

An excellent link that highlights the changes in the new ABC 2014 can be found on the CHBA Alberta Site at: <http://chbaalberta.ca/uploads/files/2015-05%2045%20Overview%20of%20Changes%20in%20the%20Ab%20Bldg%20Code%20.pdf>