Homeowner Concrete Information

Common concrete issues and the home:

Cracking

It is common for all concrete to go through a slight shrinking process as the plastic or wet concrete hardens (dries) and loses water.

The builder and the contractor can both **minimize** and **control** shrinkage cracking by taking certain precautions, such as installing control joint material in walls or saw-cutting floor slabs in a timely fashion. *See DRIVEWAY Brochure in Technical Information Section*

Excessive water

Too often contractors demand *excessive* amounts of water to be added to the concrete prior to placement in the forms, to make concrete more flowable. This excessive water is very harmful to the overall performance and quality of your concrete. This practice does not conform to Ontario Building Code minimums.

Excessive water can:

Increase	**Decrease**
- shrinkage	- strength – compressive
- flow	- strength gain
- amounts of evaporable moisture in basement which can lead to health hazards from mould and mildew (biological attack)	- durability
	- density – makes it more porous

Performance Rated Concrete

Home Builders and Forming Contractors should be following the minimum standards as set out in the Ontario Building Code and many do. Ready Mixed Concrete Association Members offer ***Performance Rated Concrete*** to the marketplace across the province. ***PRC*** is designed to offer the builder and/or contractor concrete with improved performance with the placing characteristics he/she is used to, and still meet OBC minimums. Ask your Builder if your concrete is ***PRC***.

Structural Cracking can be seen in two basic forms, each with its own cause and affect.

- Settlement – when the sub-base or footings settle after construction causing the walls or floors to crack from excess strain
- Backfilling – if basement walls are backfilled too early and/or with improper procedures followed, the result can be a crack. It can be caused from too much lateral pressure exerted on one side of the wall, with no lateral support or sufficient bracing on the inside of the wall during the procedure.

Dusting Floors- usually occurs when the concrete floor slab has been finished improperly:

1. Floor finished **too early**, working the excess surface moisture into top of slab which weakens surface
2. Floor finished **too late** adding free water to surface and finishing into top of slab which weakens surface
3. Carbon dioxide from unvented heaters which attacks cement product which weakens surface

Other – For answers to more questions please contact us at homeownwer@rmcao.org