

CONCRETE SCALING

Concrete Scaling is one of the leading complaints of many homeowners, but the risk can be greatly reduced by following the proper procedures.

Unlike most products that are completed in the factory, giving the manufacturing sole responsibility for the quality of its final product, concrete is sold before it is a finished product. A high quality, durable finished product is the responsibility of both the supplier AND the concrete contractor placing the slab.

In most recent years Iowa has seen an increase in concrete scaling problems, While much of the blame falls on the brine mixtures used on roads and locally purchased deicers, the Reality is that properly cured and sealed concrete should defy the effects of most deicing agents.

80% of surface strength can be lost if concrete is not cured. Concrete most likely to scale has been weakened at the surface during the finishing and/or curing process. Curing insures the proper hydration, which allows the concrete to reach its highest potential strength.

PLACING AND FINISHING

Place at no more than a 5" slump.

Wood Tools are recommended.

Strike off and bull-float immediately before water rises.

Wait for bleed water to evaporate, and then continue finishing procedures.

Do Not Over Finish – Fresno and Vibra-Strikes are not recommended.

SPECIFICATIONS

Minimum of 4000 PSI Exterior Concrete Mix

6-8% air

4 inch slump \pm 1". Excessive water will weaken the concrete and increase chances of scaling.

CURING

The number one most important step in protecting any slab is curing. Concrete must have moisture to gain its strength. Wet cure or spray concrete with a curing compound immediately after finishing. 100% coverage is important.

SEALING

The second most important is sealing. Concrete sealants penetrate the slab and create a barrier that prevents the penetration of deicers. Only use breathable sealants that allow moisture to escape, otherwise water will get trapped just below the surface. Most manufacturers of sealants recommend application to take place after concrete has been allowed to cure for 14 to 28 days. This life expectancy of sealants can vary, so a yearly application is recommended. This will require education to the homeowner.

MAINTNENANCE

Deicers should NEVER be used, especially in the first year. However, the chances of most homeowners following this rule are highly unlikely. Recommend to homeowners that they keep it clean of snow, ice and tracked-in deicers. Sand is concrete friendly and is recommended to increase traction, and to help avoid scaling.

