

Slab on Grade Concrete Paving Maintenance Instructions

The service life of a concrete pavement can be improved when considering the following in your maintenance planning:

1. **Clean surfaces last longer.** Pavements should be swept clean of dirt or debris each fall and spring. Additional cleaning should be performed as required to remove any foreign matter which can act as an abrasive (i.e.: screws, bolts, broken glass etc.).
2. **Keep joints and cracks clean of debris.** Joints which are filled with sand and grit will deteriorate in saturated freezing conditions. All un-sealed joints should be cleaned of foreign matter in the fall and spring each year.
3. **Seal joints & cracks.** Debris in joints and cracks can significantly increase damage caused by freezing and expansion. Water and debris should not be permitted to saturate joints and cracks in freeze-thaw environments. Clean out and fill joints and cracks 6-9mm deep with a traffic bearing material that remains elastic through all seasons.
Inspect and repair cracks and de-bonded joint sealants each fall.
4. **Protect against heavy loads.** Pavements should be protected from impact and heavy loads. Do not drag heavy loads across your pavement. Surface should be protected from direct contact with vehicles that have steel tracks, steel blades and steel wheels.
5. **Concrete is absorptive.** Concrete is a porous material that may require protected from staining. Clean up of spills should commence without delay to minimize staining. Surface sealers are available to reduce moisture absorption.
6. **Concrete is attacked by acids.** Concrete is an alkaline material that can be seriously damaged by acids (i.e.: battery acids, fruit juices, caustic detergents etc.). Specialized epoxy systems can be used to protect concrete surfaces from acid attack.
7. **Do not over-seal:** Surface sealing will reduce moisture absorption, improve colour appearance and resist staining. Too much sealer can make your surfaces very slippery when wet (rain or snow). Non-slip aggregates may be added to sealers to reduce slipperiness.
8. **Use calcium chloride or sodium chloride to melt snow and ice.** Magnesium chloride, ammonium nitrate, ammonium sulphate must not be used as de-icers on concrete.

We recommend that you review all concrete paving modifications with your concrete contractor prior to performing any work.

Note: Suspended concrete slabs require protection against corrosion induced structural failure – a traffic topping membrane system is essential to protect the embedded reinforcing steel from salt corrosion. Existing suspended concrete slabs subject to freezing and chlorides, should be reviewed for structural integrity.

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