



POTENTIAL DAMAGE TO CONCRETE

A common misconception is that concrete damage occurs because the ice melter chemically attacks the surface. Chemically, sodium chloride is no more damaging to concrete than is calcium chloride. In fact, none of the commonly used ice melter materials have any chemical action against concrete.

All concrete contains small micropores into which water will penetrate. Any damage that occurs is a physical interaction between expanding water as it freezes in the pores of the concrete. By minimizing the freeze/thaw cycle, de-icers with low melting temperatures also reduce the degree of spalling and surface crumbling that takes place with more frequent freeze/thaw cycles.

Damage to concrete is also minimized by containing the proper air entrainment for the environment where it is used. These micropores in the concrete increase its strength, thus allowing the use of ice melters at colder temperatures. Contact your local reputable concrete manufacturer or the Portland Cement Association for details. Make sure your concrete has cured for a minimum of 1 year to increase resistance to spalling and damage.



HOT TIP



Reducing the frequency of freeze /thaw cycles will minimize spalling and surface flaking on concrete surfaces. Use ice melters which are routinely effective below 0° F to provide the best protection.

Before most common de-icers are used on concrete, always allow the surface to cure for one year. In addition, make sure your concrete has proper air entrainment according to Cold Weather Concrete Specifications as described by the Portland Cement Association.