

SAFETY SENSE

Preventing Concrete Damage From Deicers

By Joe Althouse

(NAPSA)—Many home and business owners worry about the effects of deicers on concrete pavement.



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There is a common misperception that deicers chemically attack concrete. Most do not. Concrete spalling is caused by the pressure generated when the water or brine in concrete freezes. This liquid expands when it freezes, and it can create hydraulic pressure if air voids within the concrete are completely saturated with liquid.

Concrete is quite resistant to freeze-thaw damage when it's properly constructed. The Portland Cement Association recommends against using deicers on concrete that is less than three months old.

For existing concrete already showing signs of scaling, application of a concrete sealer may be worth considering. Materials such as silane, siloxane and breathable methacrylate limit the penetration of melt water into the concrete while allowing trapped moisture to evaporate. If sealers are not an option, then the next best thing is to remove slush and loose ice as soon as possible after deicing. This will help reduce the opportunity for melt water to saturate the pavement.

According to *Concrete Technology Today*, Vol. 8, No. 4, "The safest deicers for concrete are also the most common: sodium chloride—rock salt—and calcium chloride."

For more information, visit www.peladow.com.

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