



Pavers & Winter Conditions

DURA PROTECT™ in freeze-thaw environments

Concrete pavers are manufactured to meet winter challenges. Compared to ready-mixed concrete, concrete pavers have many advantages when exposed to freeze-thaw conditions and deicing agents:

- Stronger aggregate bonding from higher cement content and smaller aggregates (more surface area for the cement to bond).
- Pavers are produced in a highly controlled manufacturing plant leading to lower variation in material properties or over-finished surfaces.
- Pavers are properly cured before they leave the manufacturing plant making them more durable.

Deicing Salt Reduction

Deicing salts are often used to prevent pedestrian slips and falls in icy conditions. Unfortunately, over application of deicing salts can accelerate damage to any pavement.

DURA PROTECT™ reduces paver surface permeability, thereby significantly reducing the amount of moisture and deicing salts that can penetrate into the paver and cause degradation.

Because penetration of the deicing salts is significantly reduced, applied salt remains on the surface to do its job of melting the ice.

In this way, less salt is needed to provide an ice-free and safe pavement. Less salt also means less runoff, which is better for the environment.

Slip Resistance

Third-party testing shows that DURA PROTECT™ does not significantly reduce the natural slip resistance of concrete pavers.

To demonstrate this performance, DURA PROTECT™ pavers were tested at the Tile Council of North America (TNCA).

In these tests, tile are tested with soapy water to determine the Wet SLS Dynamic Coefficient of Friction (DCOF) in accordance with ANSI A137.1, American National Standard Specifications for Ceramic Tile. To be deemed safe, a tile must have a DCOF of at least 0.42.

Testing of pavers made with the DURA PROTECT™ system has shown these pavers to have a DCOF of 0.67 which is significantly above the required minimum of 0.42.