

SALT WARNING

CONCRETE CARE & MAINTENANCE (CONT.)



ICE MELTERS CAN DAMAGE NEW CONCRETE

- ▶ Ice melters, even those advertised as “safe for concrete”, can cause damage to concrete, particularly new concrete. When ice and snow melt, the water soaks into concrete, then will refreeze when the temperature drops below freezing. When water inside the concrete freezes, it expands which exerts internal pressure throughout the concrete, which can cause tiny cracks to form. When this is repeated through multiple cycles of snowfall and melting, the cracking can cause small pieces of the concrete surface to flake off, leaving unsightly marks on the surface.
- ▶ When concrete is first poured it becomes strong enough to walk on within a day, and can handle car traffic within 7 days, even though it continues to develop strength gradually over time (even up to 90 days). It can take months for concrete to fully “dry out.” Concrete in its first year is susceptible to the pressures of freeze/thaw cycles. Salt products do provide ice control, but many of the products on today’s market attract water to the surface long after the ice has been removed. This extends the “drying out” period of new concrete and increases the potential for damage.

WHAT ABOUT SLIP AND FALL HAZARDS?

- ▶ Using sand for traction on new concrete is the best for the concrete, but may be undesirable for tracking. While the best thing for the concrete would be to use no ice melters at all, the need to eliminate slip and fall hazards is clearly more important than aesthetics, which is why ordinary rock salt (sodium chloride) is recommended.

FOR MORE DETAILED INFORMATION:
Call your local concrete contractor, ready-mixed producer or
SCAN THE QR CODE ON THIS FLYER



WHY THIS PRODUCT?

How Deicers Affect Concrete

- ▶ **Sodium Chloride** commonly known as “rock salt” or “road salt” is not chemically harmful to concrete, but can still damage new concrete through increased saturation and additional freeze-thaw cycles. **Many ice melt products include a blend of sodium chloride, magnesium chloride, calcium chloride, or other compounds. Some of these compounds are harmful (specifically calcium chloride) to the portland cement in the concrete, which can cause pits to form in the surface of the sidewalk.** This is in addition to the flaking which can occur from the freeze/thaw cycles.

Safer Deicers Options for Concrete

- ▶ The following deicer products can be found at local hardware/home improvement stores and contain only sodium chloride (NaCl) and should be safe for properly cured and sealed concrete.
 - ◆◆ **Morton Safe-T-Salt**
 - ◆◆ **Safe Step Rock Salt, Standard 3300 Ice Melter**
 - ◆◆ **Merit Hall bulk road salt, 98% NaCl**
 - ◆◆ **Compass Minerals / North American Salt bulk road salt**
 - ◆◆ **Cargill bulk road salt, 96% NaCl**

HOW MUCH SHOULD I USE?

- ▶ Please use only enough to provide traction over slippery areas, after snow removal has been completed. Please remove any accumulated slush after the salt has started working. Please **DO NOT** blanket the sidewalk with salt in advance of an anticipated snowfall.

