De Icing Salts	Characteristics	Trade Offs
Sodium Chloride (Rock Salt)	*Good to between 16°F & 20°F.*	WILL RUIN Concrete. Chloride can pollute streams, rivers and lakes. The chloride also causes metal to corrode.
Calcium Chloride	*Good to 0°F*	Cause skin irritation if your hands are moist when using it. Concentrations of calcium chloride can chemically attack concrete.
Magnesium Chloride	*Good to – minus 13°F*	Releases about 40% less chlorides into the environment than either Sodium Chloride (rock salt) or Calcium Chloride. It is also less damaging to concrete surfaces of questionable or unknown quality. Magnesium Chloride is less toxic to plants, trees and shrubs. It also does not leave a powder residue when tracked into your home. Magnesium chloride corrodes certain metals over longer periods of time.
Potassium Chloride	*Good to 15°F. When combined with other chemicals it can melt ice at lower temperatures.*	It is not a skin irritant and does not harm vegetation.
IceClear	*Lowest freezing point – minus 76°F*	IceClear is less corrosive than distilled water. It will not harm metals, concrete or paving which will lead to a longer life for driveways, sidewalks, railings and fences. IceClear will not damage lawns, shrubs, or vegetation, so you can safely use it around expensive landscaping.
Fertilizers as deicing and traction agents	*Differs*	Those that contain ammonium nitrate and ammonium sulfate can rapidly disintegrate concrete. Don't take a chance if you don't know what is in the fertilizer.
Heated Outdoor mats & runners	*All Temperatures*	Worth Investigating as an area alternative.

SMART WORDS for SMART HOMEOWNERS
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From the experience of experts and their advice on relevant homeowner topics

MELTING WINTER ICE

Melting Winter Ice

Let's examine the ways we can keep from falling on the ice and damaging our concrete steps and walkways. There are more solutions than you thought; some bad some very good. We'll look at De-Icing salts and electrical heating "melt mats."

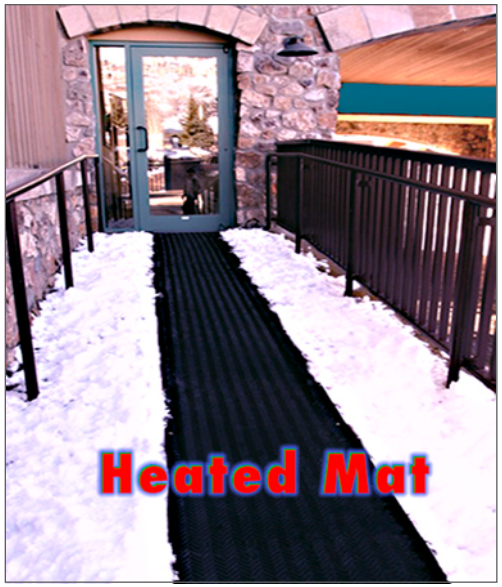
Deicing Salt And What It Does To Concrete

There are four kinds of deicing salts commonly used in winter for ice and snow removal. They run the gamut from caustic to kind. See the chart below. One thing to remember; the wrong one can destroy brick and concrete.

Freeze – Thaw Cycles

The use of deicing salts increases the amount of freeze-thaw cycles that a concrete sidewalk or driveway experiences. Water volume increases about 9% when it is ice. This expansion creates internal pressures that can blast apart weak concrete. Ice is unforgiving.

Some deicing salts can cause severe damage to concrete that has not been formulated, mixed, prepared, installed, cured and finished properly.



Heated Outdoor Mats

Depending on the size of your slip and slide problem you can buy ice melting matts from around $100 to $2500. They are as easy to use as any heating pad and do a very good job. A few names to consider are: HeatTrak Heated Doormat and Ice Away Automatic Snow Melt Mat.

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- ☑ Sussex
- ☑ Parts of Warren, Somerset, Hunterdon.

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