

Do not use a weed burner on a slab or sidewalk to remove ice.



Make sure we cover the tops of forms for walls & footings at the end of the day to protect from weather.



Urea is generally ineffective under 20°F and needs a large amount of material to work, polluting the environment.



Winter, concrete and Ice, three words that should not be mixed, however, we can not stop construction in the Winter. When we mix all three items, we have a conflicting issue with quality & safety, and how to control both without sacrificing either.

**The following steps will give us both options.**

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### ISSUES USING SALT AS A DE-ICER ON CONCRETE

1. Calcium chloride attacks aluminum/steel in or on concrete.
2. Salt-water expands at a much greater rate than just plain water. ( 9% for water & 16% by volume for salt water )
3. Any salt-water mixture will seep into the fresh concrete, which will create the spalling, scaling, or pitting.
4. Magnesium chemically bonds to concrete and causes spalling, scaling, or pitting, and reactivate itself after each cold cycle to draw more water in the salty solution.
5. Interior concrete does not have the concrete cover or the air-entrainment as exterior concrete, which means that interior concrete can not take the freeze/thaw pressures.
6. It usually takes at least 28 days for concrete to reach design strength, allowing water to seep into the hard troweled concrete finish.
7. Chloride mixture should never be within the concrete mixture or in the forms.
8. Fresh concrete will **NOT** melt ice. Ice must be removed prior to the pour!  
**PAY ATTENTION!**

### WHEN AND HOW TO USE SALT AS A DE-ICER SAFELY, WITH QUALITY IN MIND

1. **Ideally, Don't use salt at all. Use sand.**  
*Sometimes, I know this is just not practical, so...*
2. When you do use salt, find a product without magnesium, use "Eco Melt".
3. Use salt sparingly. Do not broadcast the salt on a deck, only use on the areas directly affected by ice. **Once the ice melts, clean the slurry off the concrete.**
4. **Make sure that the salt mixture does not stay for any length of time on the concrete to allow it a chance to seep into the concrete.**
5. We need to make sure, checking twice, that there is no salt or salt-water on or in the concrete when we will be pouring on top of it, such as a column or wall.
6. When ice is in a traffic route to a new concrete area to be poured, salt has a chance to get in the new area from shoes or sitting water in the forms. We need to get rid of the salt crystals or slurry quickly once the ice is melted and verify that salt has not entered into the new area or is sitting within the forms.

