



Subfloor Frost

Do you have a subfloor heating system and is it working?

A subfloor heating system is vital to combat subfloor frost and eventual heave. Have you checked your subfloor heating system performance lately? Do you have subsoil temp sensors? Do you monitor your subsoil brine temperatures? If you need guidance with any of these questions, feel free to contact us and we can help.

Do you have subfloor frost?

Seasonal Ice Rink Floors - If you have a seasonal ice rink (operating up to 9 months a year and then shut down for 3) you may generate subfloor frost. But the time that your chiller system is shut down is long enough for the ground heat to recover naturally. Most seasonal ice rinks usually can perform just fine without a functioning subfloor system.

Year-round Ice Rink Floors - If you have a year-round rink, a functioning subfloor heat system is vital. Depending on soil conditions and cold floor construction, subfloor frost can start to build in just a few months.

What is frost heave and might you have it?

This link gives you a thorough explanation of frost heaving - [Frost Heaving - Wikipedia](#)

There are a couple telltale signs that you are experiencing the effects of frost heave on your ice rink. One may be the tilting of your dasher boards where the heaving has pushed up some sections while other sections are still at their original elevation. Some rinks experience their board tipping back away from the ice surface. In either circumstance, there is an opportunity for gaping or sharp edges being exposed leaving you vulnerable for a possible injury claim. Another sign is ice levels creeping up the kick plate in certain sections of your rink. This can lead to uneven ice or may cause you to carry thicker ice thus increasing your chiller costs.

How can I determine how much frost I have?

GPR – Ground Penetrating Radar – American Arena has developed expertise using ground penetrating radar and then processing that information with cutting edge algorithms can determine how deep frost levels are across your entire ice rink. This is an inexpensive vital first step on your way to determining the extent of your frost issue and how much it may cost to address it.

Removing Frost?

American Arena is the industry leader in applying heat to subfloor frost affected floors. We find that more times than not, this is the most cost-effective way to correct the problem and get you back up and



running with a flat floor. Our years of experience will help you determine the cost for removing the frost and the timelines needed to complete the process.

Give us a call or send us an email and we will be happy to share our knowledge and help you solve your sub floor frost heave problem.