

The question of “why not paint the concrete slab ‘permanently’ white in lieu of annually applying ice paint” is often asked? Given the recent challenges associated with “ice paint disposal”, facility operators are investigating alternatives to painting ice white each year. Here are some points to consider:

A few facilities have installed paint over the entire playing surface to enhance non-ice events [mostly to accommodate in-line skating events] and to hopefully lessen the amount of white ice paint required when ice is being installed.

There are two primary installation questions that should be addressed:

- Painting of sport markings only for sports such as in-line hockey, lacrosse, basketball, tennis, soccer, ball hockey;
- Painting the entire surface white with sport markings.

Although minimal, facility managers must be cautioned that any substance applied to the concrete may result in a “thermal break” between the original concrete and the “ice”- potentially causing “poor bonding and heat transfer conditions”.

Other factors include, the “type of paint” being applied, “the method of the paint application being used” and the type of “surface finish” that is in place at the facility.

Types of paint- petroleum based paints should be avoided as the final product may continually release toxins causing poor ice conditions. An epoxy-based product is considered a better product for the following reasons:

- To make the floor less slippery than smooth concrete, since the epoxy; paint provides better traction for the inline skates,
- To provide for better "glide" of the special puck used for inline hockey, and;
- To brighten the surface (and correspondingly, the entire arena) so the puck can be more visible, due to the contrasting colours of the floor and the puck.
- Although apparently not regulated by any standard, light blue tends to be the most commonly used colour of the portable inline floors,

as well as the colour used for painting the concrete.

Method of application - the surface must be extremely clean and smooth prior to painting.

Type of surface finish - the actual type of finish that is in place can also add to the challenges of painting concrete. Ground monolithic is the supreme surface offering a smooth durable finish; trap rock shake and plain trowel finish will both have related challenges to paint installations? Further, a caution is extended to any surface that has had a sealer applied to help control erosion and keep dust in-check. These sealers may also interact with any paint being applied.

Seeking professional advice prior to installing any paint on concrete is strongly recommended!

MOST COMMON PROBLEMS ASSOCIATED WITH PAINTED SURFACES INCLUDE:

- Damage to the surface when ice is being removed with heavy equipment
- Cleaning-the light colour attracts dirt and “marking” from in-line skates will occur. To maintain a high level of professional appearance scheduled maintenance must regularly occur
- The thicker the ice, the less attractive the surface.
- Markings will still need to be installed in the ice using a quality ice paint
- Insulation factor of the paint resulting in higher operating costs
- Loss of “reflective value” of a quality ice paint-a quality ice paint will reflect heat away from the surface resulting in lower operating costs

Disclaimer

©Ontario Recreation Facilities Association Inc., 2014

The information contained in this reference material is distributed as a guide only; it is generally current to the best of our knowledge as to the revision date, having been compiled from sources believed to be reliable and to represent the best current opinion on the subject. No warranty, guarantee or representation is made by ORFA as to the absolute correctness or sufficiency of any representation contained in this reference material and ORFA assumes no responsibility in connection therewith; nor can it be assumed that all acceptable safety and health measures are contained in this reference material, or that other or additional measures may not be required in particular or exceptional conditions or circumstances.

While ORFA does not undertake to provide a revision service or guarantee accuracy, we shall be pleased to respond to your individual requests for information at any time. Reference to companies and products are not intended by the publisher as an endorsement of any kind