

# APPLICATION OF SPORTS COATINGS

## Environment

The application of sports coatings are greatly affected by environmental conditions such as temperature, rain, wind, light, etc. To ensure that sports coatings are finished to the highest standards these environmental conditions must be suitable before coatings can be applied. For example, high temperatures will cause lap mark appearance, rain or moisture can cause discoloration, and wind causes the product to cure too fast or line marking to be uneven. For this reason application cannot be managed based on a building schedule or an expected time frame. The application must be managed based on environmental conditions and ensuring these are suitable before applying products. Advantage Sports & Leisure will not apply sports coatings outside the required conditions and will not be held to a time frame if conditions are not suitable.

## Cracking and movement

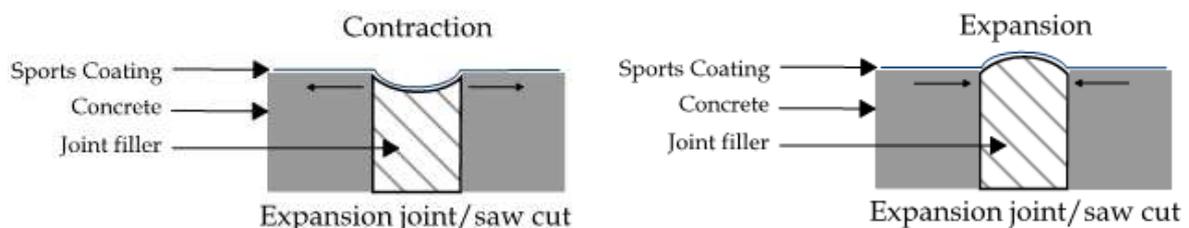
Both Concrete and Asphalt courts can move by expanding and contracting. This movement is normally due to, but not limited to, environmental temperature and ground movement. This movement can cause cracking throughout the court. In a similar manner to roads and concrete footpaths, sports courts can also crack.

There are products that are used to help hide and disguise cracks however they are only reducing the appearance of the cracks, they are not fixing the fundamental problem of movement which causes the cracks. A sports coating will not fix or prevent cracking in any surface, at best it will only reduce the appearance of the crack for a period of time.

## Expansion joints and concrete joints

When pouring a concrete slab it is standard practice to include expansion joints and saw cuts throughout the slab. Joints and saw cuts will be visible after the coating has been applied, so the positioning of the joints and saw cuts should be carefully considered to ensure they minimize the impact on the sport being played. For example, tennis court key joints should be placed under the net. Connolly or Danley key joints with **removable** capping are highly recommended. Avoid bull nosing any joints that are to be coated as large bull nose key joints tend to cause more fatigue on the sports coating.

Joints will be filled with a suitable polyurethane sealant. When temperature changes cause the slab to expand the sealant will swell causing a lump to appear and when the slab contracts a depression will become visible. Fatigue of the sports coating may also occur along these joints. Although the polyurethane is flexible the sports coating isn't, so hairline cracks may occur along these joints.



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### **Colour variation and application marks**

Even when color coatings are applied with care by a skilled operator, some squeegee marks and other slight variations in color and texture are inevitable. This is because the formulation of acrylic causes components to migrate to the edge of the material as it is being applied. As a result, an observer will be able to locate the spot where the acrylic material was poured on the surface, where the squeegee operator turned to make a pass in the opposite direction or where one pass overlapped another. Squeegee marks will be more visible on lighter colours and bright colours such as blue and will be more common when coatings are applied in hot weather or when they include coarser sand. Humidity, the angle of the sun when the acrylic is applied and other factors may also affect the frequency and visibility of these marks. These marks will not affect play and will become less visible as the court ages.

### **Rust stains**

Certain geographical locations are more susceptible to these naturally occurring ferrous materials which cause unsightly brown stains (rust marks), blisters and pitting to appear on new acrylic surfaces. As moisture permeates through the acrylic colour surface it moistens the aggregate in the asphalt layer. The oxidation process is initiated and with time migrates to the court surface becoming evident as a rust colour. These rust spots and streaks can be merely an aesthetic issue or they can be capable of causing localised surface and base layer failures. It can take six to twelve months after the courts are completed for the rust stains to appear or streaks may form in the direction of the fall of the courts where the water is draining away. These rust streaks can continue to increase in number over the following twelve months or more. A sports coating will not fix this issue as the stains will continue to leach through the coating.