

# Temporary Climate Solutions

## Case Study: Polygon provides solutions for ice rinks.

**Preventing condensation on the ice sheet during events allows lower ice sheet temperatures to be achieved. Blowing a blanket of dry air over the arena prevents the formation of condensation on overhead surfaces, the ice sheet and structure. The elimination of condensation prevents rust on the permanent structure, improved ice quality and the elimination of fog.**

### Problem

High humidity and dew points are typical obstacles to be addressed during the warmer summer months as increased temperatures impact upon the arena temperatures, in turn causing poor ice quality. In order to keep the ice surface dry and operational, a temporary climate solution is often required.

### Solution

Utilising their state of the art technology and industry expertise, Polygon are able to ensure that the optimum environment is achieved. To best determine the method for drying the arena air, Polygon's technicians measure the arena and ice sheet area. Following the inspection they are then able to advise on the most appropriate dehumidification equipment that should be installed, in order to create the required optimum environment.

Polygon's desiccant dehumidifiers allow ice surfaces to be kept dry and operational, with temperatures able to be maintained below ambient dew point. The use of these dehumidifiers allows Polygon's technicians to process the plant air by removing moisture via a vent in the ice machine bay or return air duct. This dehumidified air is then introduced to the arena operation, which in turn is able to lower the ice sheet area dew point. Polygon applies dry air directly to the arena above the ice sheet. This drives moisture from the area and effectively lowers the dew point and reduces the risk of condensation.



### Benefits

Polygon can provide moisture control all year round, irrespective of weather. Operators can maintain good ice quality, keep spectators and players happy whilst eliminating costly moisture related maintenance issues. Better ice quality means reduced cost because moisture is removed by fit-for-purpose dehumidifiers, maintaining operation time and schedules, no matter what the season.