

Combining our expertise and specialist equipment, we supported Arena Group to create ice rinks at iconic locations across the UK, including Hampton Court Palace, Westfield Shopping Centre, Blenheim Palace, and Marsh Farm.





Maintained ice temperature of -4°c for a 3-month period.



2MW of cooling capacity and 1MW of temporary power

How Arena Group delivered a festive ice skating experience with our support





Ice-skating has long been a festive tradition for many across the UK.

Arena Group contracted us to provide the temperature control and temporary power equipment needed to create a safe and memorable experience for thousands of visitors from November to January.

Challenges

To achieve optimal skating conditions and ice thickness, the surface temperature of the ice rinks needed to be maintained at -4°c. With the ice rinks open to the public and skaters of all ages and abilities, ensuring their safety was extremely important to Arena Group. If the surface temperature is too warm, the ice becomes soft and slushy, increasing the risk of trips and more frequent resurfacing. Similarly, if the ice gets too cold, it becomes overly slick, making it harder for skaters to control their movements.

With strict timescales to adhere to and a total of 3,000sqm of ice to create and maintain, Arena Group needed an experienced supplier that could design, deliver, install, and manage a complete solution across nationwide locations.

It was a pleasure to support Arena Group over this festive period. The thousands of skaters who were able to take to the ice are a testament to the teamwork required to deliver these projects.

A personal highlight was delivering training to Arena Group employees, equipping them with the knowledge to carry out the daily equipment checks, ensuring the rinks operated at peak performance at all times.

Nick Morley

National Operations Manager - HVAC - Sunbelt Rentals

Our equipment and services supplied at a glance

Temperature Control

- 2 Megawatts (nominal) of cooling capacity delivered through heat pump chillers
- 7000L capacity buffer tanks
- 14 fluid pumps (including backup pumps for each site)
- 657 metres of 4" suction hoses
- Bespoke stainless steel adapters and fittings

Temporary Power

- 1 Megawatt of temporary power delivered through generators
- 8000L capacity fuel tanks with supporting fuel lines
- Cabling and distribution
- Commissioning of all electrical systems

Other

- 2 Welfare vans
- 45 Lion trakway panels

Solution

Having previously partnered with Arena Group, we were familiar with their requirements and able to design a bespoke solution for each of their locations, factoring in the size of the ice rinks and working around the existing architecture of each site.

The primary equipment deployed on each site were heat pump chillers, supported by buffer tanks and pumps to circulate cooled glycol through the tubing to form the ice. Where required, generators were used to power the temperature control setup, ensuring uninterrupted operation.

Throughout the 3-month period, each site was remotely monitored, and the output of the chillers was adjusted in line with the ambient air temperature to maintain the optimal surface temperature.

Result

By providing the solution, each ice rink successfully maintained a high-quality and safe skating surface, over a 3-month period.

Combining specialist temperature control equipment, generators, and decades of experience, we helped provide memorable experiences for thousands over the festive period.