Rooftop ice and snow melting at the LG Arena







The system completely clears the roof without exception...

The Goal

The NEC Group wished to suspend additional audio visual equipment from the roof of the LG Arena, however this was not possible without strengthening the roof as the current structure did not have enough spare holding capacity.

The goal was to find a way to increase the load the roof could carry, without the costly and disruptive work of strengthening the roof.

Heat Mat's Solution

Installing one of Heat Mat's roof protection Ice and Snow melting systems ensured that the roof area would not experience a buildup of heavy ice and snow.

By ensuring that the possibility of significant snow buildup was excluded, this freed up additional load carrying capacity with the roof structure as it was no longer required for potential snow drifts.

This allowed additional audio visual equipment to be suspended from the roof without the requirement to strengthen the structure.

Due to the significant size of the flat roof specialist cables were manufactured to match the exact requirements onsite and Heat Mat's experts worked with The NEC Group to ensure that the specialist system fixing the cables to the roof was compatible with the roof surface, whilst also allowing for future maintenance of the roof if required.

A fully automated timer/thermostat system was installed to automatically control the system ensuring it only operated when necessary to maximise energy efficiency; the system is expected to cost no more than $\mathfrak{L}1,000$ to run even in a snowy winter.

The Result

In the words of the client "The system was used intensely between the 22nd and 23rd of March (2013) during which time a substantial amount of snow fell. The system completely clears the roof without exception, and all drainage areas are cleared well and there is no problem relating to water run off."

Project in detail

Date Installed:

July 2012

Location:

LG Arena, Birmingham, UK

Client:

The NEC Group

System Supplied Through:

Leeds Based Electrical Wholesaler

Installer:

Heat Mat specialist installation partner

System Specifications:

- 12km of specialist UV stable ice and snow melting cable
- Proprietary roof fixings and specialist adhesives
- Automatic monitoring and control equipment including temperature and moisture sensors

About The NEC Group:

The NEC Group is a Birmingham based venue management company that operates four world-class venues: the National Exhibition Centre, the International Convention Centre, the LG Arena and the National Indoor Arena.

About Heat Mat

With more than 1,000,000m² of underfloor heating installed and 19 years' experience of the UK underfloor heating market, you can rely on Heat Mat to understand your needs and supply the products to satisfy your requirements. This is why we are the Professional's Choice, the number one underfloor heating supplier to the professional installation market.









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