



Efficient cooling in open spaces and semi-open areas

Al Khafaji Motors

Car showroom

System installed

Direct Evaporative Cooling System

Supplier & Installer

DITANA

Equipment & Configuration

6 x Breezair units

The Mohammed Al-Khafaji car showroom is located in the Al-Nahda district and covers an area of 660 square meters. The showroom accommodates a large number of vehicles, offering a diverse selection that caters to different tastes and needs.

Background

The facility hosts a large number of vehicles within a semi-open exhibition space, a common layout for automotive showrooms in the region. This configuration led to a significant accumulation of heat caused by the combination of several factors: the high ceiling, the large number of cars inside the showroom, and the strong lighting system. Together, these elements created a “pyramidal heat load,” pushing indoor temperatures up to 42°C.

As a result, the indoor environment became uncomfortable and unsuitable for both employees and customers, particularly during peak summer periods. The showroom therefore required an effective cooling solution capable of handling a large semi-open space without relying on traditional, high-energy air conditioning systems..

The solution

A Breezair evaporative cooling system was selected as the most suitable solution for the specific conditions of the showroom. The project involved the installation of six Breezair units, delivering a total air flow capacity of 60,060 cubic meters per hour. In addition, a dedicated duct system was designed and implemented, equipped with two air distribution outlets to ensure proper airflow throughout the space.

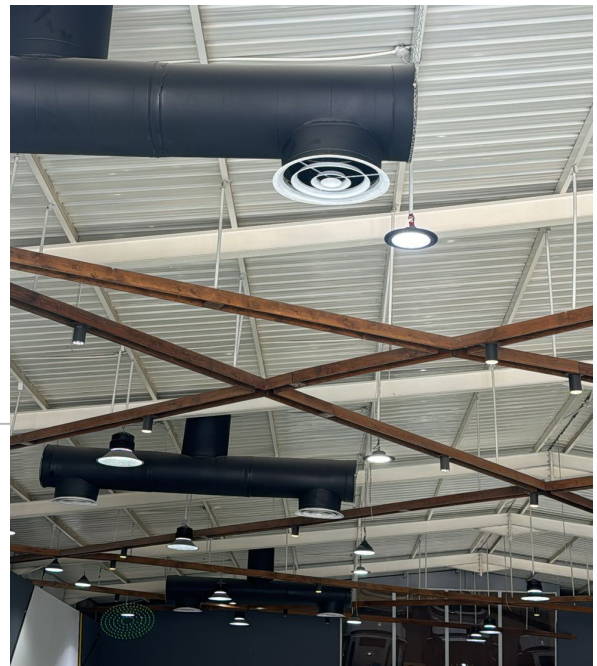
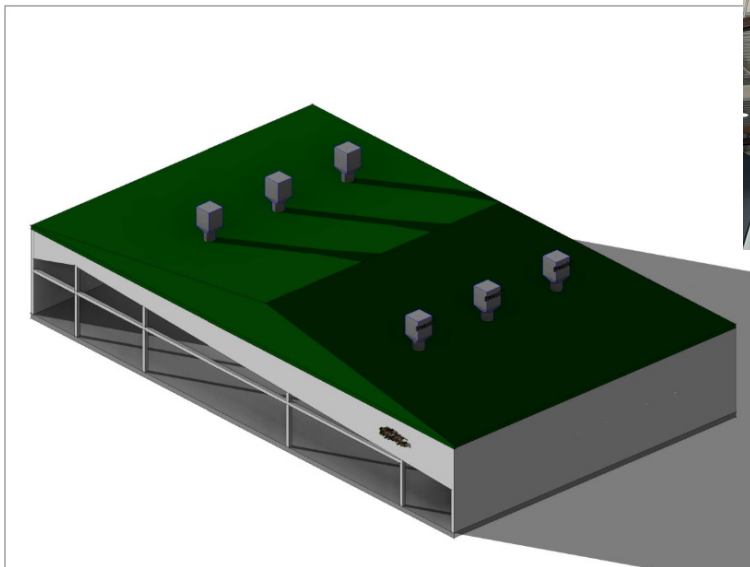


The result

After the system was installed and put into operation, the showroom experienced clear and measurable improvements. The indoor temperature dropped from 42°C to 24°C, resulting in a substantial enhancement in thermal comfort for both employees and visitors. The airflow distribution became uniform throughout the exhibition space, eliminating hot spots and improving the overall indoor environment. As a result, the showroom was successfully transformed into a comfortable, functional, and modern display area, better aligned with the needs of both staff and customers.

Why Breezair

This solution was chosen for its ability to deliver effective cooling across large areas while supplying 100% fresh, continuously renewed air. Unlike traditional air conditioning systems, it ensures a more natural and efficient cooling process, particularly suited to semi-open environments. The system also guarantees even air distribution and significantly reduces energy consumption compared to conventional HVAC solutions.



Watch the case study video!

