



Maintaining Indoor Air Quality and Providing Protection for Hay Fever Sufferer

Introduction

The versatile Unico HVAC System can maintain high levels of Indoor Air Quality (IAQ) through air filtration, purification and disinfection. It is protecting a family member who suffers severely from hay fever to the point where an inhaler has been prescribed. This means that windows and doors need to remain tightly closed during the high-pollen season, limiting the ability to cool the home

down even when it is cooler during the late evening and night. The modern four-bedroom detached house is typical of modern new build properties with its air-tight construction and extensive glazing. A cooling and ventilation system was required to address the needs of the family by maintaining a high level of Indoor Air Quality, keeping humidity levels under control as well as providing cooling throughout hot summer days and nights.

Strategy

The Unico System operates using high-velocity airflow delivered through flexible mini-ducts and room outlets, providing even distribution of conditioned air throughout all rooms. It is equipped with standard high-efficiency filters capturing airborne allergens from the air as it circulates through the system. Fine particulate matter such as pollen, dust mites, pet hair and mould spores, which can also be common triggers for hay fever and other respiratory issues, is removed from the indoor space. Air filtration can be further enhanced with optional HEPA or activated carbon filters, which help remove odours and volatile organic compounds (VOCs) that can irritate the airways.

In addition to the basic filtration, the installed Unico System includes an ultraviolet UV-C light air purification module that neutralises bacteria, viruses and other airborne pathogens that may be present in the air, ensuring the air remains sanitised too. The indoor air circulation provided by the Unico System means that windows in the property do not need to be left open for ventilation. There is no longer the risk of Indoor Air Quality being compromised through the intrusion of unwanted airborne pollutants from outside.



Results

"We are delighted with Unico and the way it addresses our family health considerations. It has also met our requirements by providing exactly the right indoor temperature and comfort levels throughout the year," says the homeowner.

Key Features

Installation Date: Summer 2023

Property Type:
New build

System Specification:
Unico 1218 Air Handling Unit
Daikin Air to Air Split Heat Pump System