

Heat Exchange Unit

A device manufactured from thermo-conductive materials that facilitates the transfer of heat between two or more fluids without mixing them. Heat exchange units are commonly used in Mechanical Ventilation with Heat Recovery (MVHR) systems to improve energy efficiency in buildings by reclaiming heat from exhaust air and using it to warm incoming fresh air.

In the UK, heat exchange units play a crucial role in retrofitting existing homes to meet modern energy efficiency standards. They help reduce heating costs and enhance indoor air quality by ensuring that fresh air is supplied at a comfortable temperature.

In a typical MVHR system installed in a newly built home, the heat exchange unit extracts heat from the warm, stale air being expelled from the building. This heat is then transferred to the cooler incoming air, pre-heating it before it enters the living spaces. This process can significantly reduce the energy required for heating, particularly in colder months, thus contributing to lower energy bills and a reduced carbon footprint.