

Whole Dwelling Extract Ventilation

Whole Dwelling Extract Ventilation (WDEV) refers to a system designed to remove stale, humid air from all areas of a residential building. This ventilation method is crucial in maintaining indoor air quality by ensuring that moisture-laden air is effectively extracted, thus preventing issues such as mould growth and structural damage.

WDEV systems operate by using fans to extract air from various rooms within a dwelling, including kitchens, bathrooms, and utility rooms. The removal of this air creates a negative pressure, which allows fresh air to enter the building through passive vents or openings. This process helps to maintain a balanced airflow, ensuring that the indoor environment remains healthy and comfortable.

Practical Example

In a typical UK home, a WDEV system might be installed to combat the effects of high humidity levels, particularly in areas prone to moisture, such as bathrooms and kitchens. For instance, after cooking, the kitchen can become filled with steam and odours. A WDEV system would automatically activate to extract this humid air, allowing fresh air to circulate in.

Real-World Application

Consider a family living in a newly retrofitted home that has been upgraded for energy efficiency. While the insulation and airtightness improvements are beneficial for energy conservation, they can inadvertently trap moisture indoors. By implementing a WDEV system, the homeowners can ensure that any excess moisture generated from daily activities—like showering or cooking—is effectively removed. This not only enhances comfort but also protects the property from potential damp-related issues.