

# What are Dust Mites?

**Dust mites are microscopic arthropods, typically measuring 0.2-0.3 millimetres in length, that thrive in household dust. They feed on organic matter such as human skin flakes and are commonly found in bedding, carpets, upholstered furniture, and soft furnishings. Dust mites are a significant allergen source, contributing to respiratory issues such as asthma and allergic rhinitis.**

In the UK house building, residential retrofit, and home renovation sectors, controlling dust mites is crucial for maintaining indoor air quality and ensuring occupant health. This is particularly relevant in older properties or during retrofits where ventilation and insulation improvements may inadvertently increase humidity levels, creating favourable conditions for dust mite proliferation.

## **Synonyms:**

House dust mites, *Dermatophagoides pteronyssinus* (common species in the UK).

## **Related Terms:**

1. **Indoor Air Quality (IAQ):** The quality of air within and around buildings, particularly as it relates to the health and comfort of occupants. Dust mites are a key factor in IAQ degradation.
2. **Ventilation:** The process of supplying fresh air to indoor spaces and removing stale air. Proper ventilation reduces humidity, which helps control dust mite populations. Refer to *Approved Document F* of the Building Regulations for ventilation standards in the UK.
3. **Humidity Control:** Managing moisture levels in indoor environments to prevent mould growth and dust mite proliferation. The ideal indoor relative humidity for dust mite control is below 50%.
4. **Allergens:** Substances that cause allergic reactions. Dust mite faeces and body fragments are common indoor allergens.
5. **Building Regulations:** UK standards for construction and renovation, including requirements for ventilation and moisture control to mitigate dust mite-related issues.
6. **Retrofit:** The process of upgrading existing buildings to improve energy efficiency, comfort, and health, often involving measures that impact dust mite habitats.
7. **Soft Furnishings:** Items such as curtains, cushions, and upholstery that can harbour dust mites if not regularly cleaned or treated.

## **Practical Examples:**

- **New Builds:** Incorporating mechanical ventilation systems with heat recovery (MVHR) to maintain low humidity levels and reduce dust mite populations.
- **Retrofits:** Sealing gaps and improving insulation while ensuring adequate ventilation to prevent moisture build-up, as outlined in *Approved Document L*.
- **Home Renovations:** Replacing carpets with hard flooring and using hypoallergenic materials for bedding and soft furnishings to minimise dust mite habitats.