What is a Fabric First Approach?

The Fabric First Approach is a design and construction philosophy that prioritises improving the thermal performance of a building's fabric (walls, roof, floors, windows, and doors) before considering mechanical or renewable energy systems. This approach aims to reduce energy demand, enhance occupant comfort, and achieve compliance with UK Building Regulations, particularly Part L (Conservation of Fuel and Power).

The Fabric First Approach focuses on minimising heat loss and maximising energy efficiency through high-quality insulation, airtightness, and thermal bridging reduction. It is a cornerstone of sustainable building practices and aligns with the UK's commitment to achieving net-zero carbon emissions by 2050.

Practical Examples:

1. **Insulation Upgrades**: Retrofitting solid walls with internal or external insulation to improve thermal performance.
2. **Airtightness Measures**: Installing airtight membranes and sealing gaps around windows and doors to reduce uncontrolled air leakage.
3. **High-Performance Glazing**: Replacing single-glazed windows with double or triple-glazed units to minimise heat loss.
4. **Thermal Bridging Solutions**: Using insulated cavity closers and thermal breaks to prevent heat transfer at junctions.

Related Terms:

1. **Airtightness**: The measure of a building's resistance to uncontrolled air leakage, crucial for energy efficiency.
2. **Thermal Bridging**: Areas in a building's fabric where heat transfer occurs more readily, reducing overall thermal performance.
3. **U-Value**: A measure of heat loss through a building element, with lower values indicating better insulation.
4. **Part L (Building Regulations)**: The section of UK Building Regulations that sets standards for energy efficiency in new and existing buildings.
5. **Retrofit**: The process of upgrading existing buildings to improve energy efficiency and reduce carbon emissions.