What is a Shallow Retrofit?

A shallow retrofit refers to a limited set of energy efficiency improvements made to an existing residential building, typically focusing on individual measures rather than a whole-house approach.

These interventions are often simpler, quicker, and more cost-effective than deep retrofits but provide smaller overall energy savings. Shallow retrofits are commonly undertaken to address specific issues, such as reducing heat loss or improving heating system efficiency, and are often a first step towards more comprehensive energy upgrades.

Synonym(s): Light retrofit, basic retrofit.

Shallow retrofits are particularly relevant in the UK, where many homes require basic energy efficiency improvements to meet modern standards. Common measures include:

1. **Insulation:** Adding loft insulation or cavity wall insulation to reduce heat loss.
2. **Draught-Proofing:** Sealing gaps around windows, doors, and other openings to prevent cold air ingress.
3. **Heating System Upgrades:** Replacing old boilers with high-efficiency condensing boilers or installing smart heating controls.
4. **Lighting:** Switching to energy-efficient LED bulbs.
5. **Minor Window Upgrades:** Replacing single-glazed windows with double-glazed units.

While shallow retrofits can improve energy efficiency and occupant comfort, they often fall short of achieving the significant carbon reductions required to meet the UK's climate targets. They are typically guided by Building Regulations, particularly Approved Document L (Conservation of Fuel and Power), which sets minimum standards for energy efficiency in existing buildings.

Practical Examples:

1. A 1930s semi-detached house in Birmingham undergoes a shallow retrofit, including loft insulation, draught-proofing, and a new condensing boiler, improving its EPC rating from E to D.
2. A terraced house in Glasgow installs cavity wall insulation and upgrades to LED lighting, reducing its annual energy bills by 15%.

Related Terms:

1. **Energy Efficiency:** The use of less energy to perform the same task, reducing energy waste.
2. **Insulation:** Materials used to reduce heat transfer through the building envelope.
3. **Draught-Proofing:** Sealing gaps to prevent unwanted air leakage.
4. **Condensing Boiler:** A high-efficiency boiler that recovers heat from exhaust gases.
5. **Energy Performance Certificate (EPC):** A document that rates a building's energy efficiency on a scale from A (most efficient) to G (least efficient).