

Retrofitting Underfloor Heating

Retrofitting underfloor heating has become one of the most effective ways to improve comfort and energy efficiency in existing homes. Modern systems allow homeowners to experience the luxury of warm, evenly heated floors without the need for extensive renovation work or major disruption. Whether you are upgrading a single room or modernising an entire property, today's low-profile systems make it possible to install underfloor heating in almost any type of home.

Retrofitting refers to the process of installing underfloor heating into an existing building rather than including it during construction. Traditional systems often required significant floor excavation, which made them impractical for older homes. However, advances in technology now mean that low-profile and overlay systems can be installed with minimal floor height increase, allowing for a faster and more affordable installation process.

There are two main types of underfloor heating systems suitable for retrofit projects: electric and water-based. Electric underfloor heating uses thin heating cables or mats fitted directly beneath the floor finish, making it an excellent option for smaller areas such as bathrooms, kitchens, and conservatories. Water underfloor heating, also known as a hydronic system, uses flexible pipes connected to a central manifold. Warm water circulates through these pipes from a boiler or heat pump. Modern retrofit water systems are designed to add as little as 15 to 20 millimetres to the floor height, making them ideal for renovations where floor depth is limited.

Retrofitting underfloor heating offers a range of benefits compared to traditional radiator systems. Heat is distributed evenly across the entire floor area, creating consistent warmth and eliminating cold spots. Because underfloor systems operate at lower temperatures, they are more energy-efficient and can help to reduce heating bills. They also free up valuable wall space by removing the need for radiators, giving each room a cleaner and more contemporary appearance. Additionally, underfloor heating works exceptionally well with renewable energy sources such as air and ground source heat pumps, further increasing efficiency and sustainability.

Modern retrofit systems can be installed over a variety of existing floor constructions, including concrete, timber, and suspended floors. Overlay boards are commonly used to house heating pipes or cables, creating a strong and level surface that can be finished with tiles, laminate, vinyl, or carpet.

The installation process typically begins with a full assessment of the existing floor structure and insulation levels. Once an appropriate low-profile or overlay system is selected, the subfloor is prepared to ensure it is clean and level. Insulation boards are installed to reduce heat loss and improve efficiency. The heating cables or water pipes are then laid out according to the room design before being connected to the manifold or power source. After testing the system to ensure it is functioning correctly, the chosen floor covering is fitted to complete the installation.

Before retrofitting underfloor heating, it is important to consider a few key factors such as the floor height increase and its impact on doors or thresholds, the level of existing insulation beneath the floor, the heating output required for each room, and the compatibility of your boiler or heat pump with the new system. A professional installer will be able to design and fit a solution that delivers optimum performance while maintaining efficiency and comfort throughout your home.

The cost of retrofitting underfloor heating depends on the size of the property, the chosen system type, and the level of preparation required. Electric systems generally have a lower installation cost but can be more expensive to run, while water-based systems require a higher upfront investment but offer lower long-term running costs, particularly when paired with a heat pump or other efficient energy source.

If you are considering upgrading your home, retrofitting underfloor heating can provide long-term comfort, improved energy performance, and a modern aesthetic. To explore the options available, visit our [Electric Underfloor Heating](#) and [Water Underfloor Heating](#) pages to learn more about each system and find the ideal solution for your property.