



Building Control

Householder Guidance Leaflet No. 7

Loft Conversions

This leaflet is one of a series produced by the Hertfordshire Building Control Technical Forum

Introduction

The aim of this leaflet is to provide you with guidance as to when you should submit an application under the Building Regulations for proposed works involving the conversion of the roof space of a dwelling. It is not intended to provide comprehensive details of the associated regulations but highlights the most important matters that need to be considered. Such works can be more complex than other extensions and we recommend that you seek professional assistance before submitting a Building Regulation application for us to check.

Is An Application Required?

Building Regulations permission is required for conversions that create any type of room in the roof space even where this is only for storage use. An application is not required where a small proportion of the space is boarded for light storage or access to water tanks as long as this is only served by a portable or retractable loft ladder.

Structural Considerations

Most ceiling structures are not strong enough to serve as a floor. Upgrading the structure will involve the installation of new floor joists and in some cases steel or timber beams to carry the floor and roof loads.

- Existing walls, lintels and beams may need to be assessed for adequacy to carry additional loads. In some cases foundations may need to be exposed and checked.
- The involvement of a Structural Engineer is often needed to calculate the sizes of new structural members.

Fire Safety

The formation of a room in the roof of a two-storey house creates a potentially increased risk to occupants of the new floor in the event of a fire. As a result of this the regulations require that a protected escape route be formed from the new rooms at second floor level to a final exit at ground floor level such as the front door. The structure forming this enclosure must have 30 minute fire resistance and the doors must be fire doors. Existing floors separating rooms from landing areas may need to be upgraded to achieve a 30-minute fire rating.

It is usually necessary for the stair enclosure to lead directly to a final exit to external air (i.e. via a ground floor hallway) without passing through a room (as in fig 1). If this cannot be achieved then it is permissible to form two alternative routes to exits that are separated from each other by fire resisting construction and fire doors. (as fig2).

Achieving the above requirements can be difficult and undesirable to clients in houses with open plan ground floor layouts. Recognising this, the regulations allow an alternative arrangement incorporating a sprinkler system. Using this option, the ground floor is separated from the upper floor by a fire resisting partition and fire door at either level. A residential sprinkler system to BS 9251:2005 is fitted to cover the ground floor only with any kitchen being separated from the space by fire resisting construction. This allows a viable alternative emergency escape route from the new loft rooms via suitable escape windows at first floor level.

Smoke alarms should be fitted at every floor level. These should be mains powered with a battery back up supply and conform to BS.5446. Optical type detectors (rather than ionisation type) are less prone to false alarms. They should be fitted in hallways and landings ensuring that manufacturers'

guidance on location and maintenance is followed. They should also be linked so that a single unit activating will set off all the sounders in the dwelling.

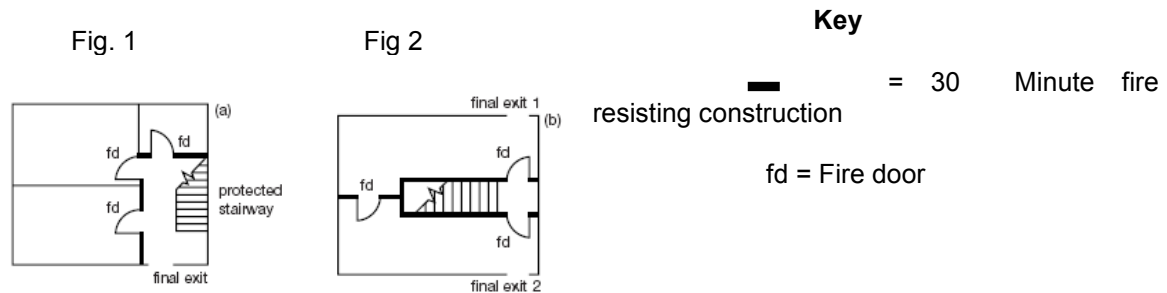


Fig 3

Stairs

A retractable ladder is not a permitted means of access to a loft conversion. The four types that can be considered are;

- A standard staircase
- A spiral staircase
- An alternating tread ('space saver') staircase
- A fixed ladder

The last two types are only acceptable where serving a single room (and a bathroom) and where it is not possible to create sufficient space for a standard or spiral stair.

The pitch (steepness) of the stairs and the dimensions of steps and balustrades must comply with the appropriate Building Regulations contained in Approved Document K. A full 2.0metre headroom is normally required over new stairs although a reduced dimension is sometimes acceptable under sloping ceilings if this is not achievable.

Sound Insulation

With conversions in attached properties, the sound insulating properties of party walls within the loft space need to be considered. The Local Authority may require parts of walls to be upgraded where they are of a lesser standard than walls at habitable floor levels. Where no party wall exists in the loft, a new wall must be constructed up to the underside of the roof finish with appropriate fire-stopping measures. The specifications of this wall should comply with Approved Document E that deals with sound insulation.

Thermal Insulation

A loft conversion creates new 'thermal elements' i.e. walls and roofs that separate the heated space from an unheated space or outside air. The thermal insulating properties of such elements need to be upgraded to comply with Building Regulations. Our Technical Guidance Note 10 gives examples of common specifications that comply.

Electrical Installation

This must comply with Part P of the regulations. Design, installation, inspection and testing should be carried out by a contractor who is a member of a competent person's scheme for electrical wiring approved by the Secretary of State. If this is not the case then you should check with your local Building Control department for advice on their procedure for checking this part of the work.

The Party Wall Act 1996

The Party Wall Act places a legal responsibility on building owners to give notice to adjoining owners when carrying out works affecting a wall separating dwellings.

This is often applicable for loft conversions in semi detached and terraced properties. The Act is civil legislation that is not enforced by your Local Authority and planning permission and Building Regulations approval does not remove the need to comply with it. Further information on the Act is available on the websites mentioned below.

Planning Permission

Some loft conversions require planning permission and if unsure we would strongly advise you to check with the Local Authority's Development Control section before starting work.

Extra information may be found on the Communities and Local Government website www.communities.gov.uk or the Planning Portal at www.planningportal.gov.uk

Other Sources of Guidance

Useful detailed guidance can also be found in the Loft Conversion Project Guide published by the Construction Products Association and available at www.constructionproducts.org.uk

