### FIRE DETECTION AND ALARM SYSTEMS

All new dwelling houses must be provided with fire detection and alarm systems. When the roof space of an existing dwelling-house is converted to create an additional storey, a fire detection and alarm system must be provided in accordance with the requirements for a new dwelling house.

Where a loft / attic space has been converted, interconnected mains operated self-contained fire alarm units (preferably with battery back-up power supplies) must be provided within the stairs enclosure at ALL storey levels.

It should be noted that smoke alarms powered only by batteries are *not* sufficient.

# PROTECTION TO STRUCTURAL ELEMENTS

The building regulations impose requirements for fire resisting floor construction to restrict the spread of fire between storeys and to protect against premature collapse in the event of a fire.

A three-storey dwelling house has higher fire resistance requirements for floors than a two-storey dwelling house. A loft / attic conversion in a two-storey dwelling house adds an additional storey to the house and this has implications for the existing first floor and the new second floor construction.

The floor to the new storey will be required to provide the fire resistance requirements for a new three-storey dwelling house.

Special provisions apply to loft / attic conversions where not more than two additional habitable rooms are provided and additional floor area is less than 50m². Where these apply, the existing first floor will normally provide the necessary fire resistance, subject to assessment of the fire performance of the actual construction.

Where the accommodation does not extend into the eaves of the roof, the fire resisting floor construction should be carried through to the external walls.

Where a dwelling house is semi-detached or is part of a terrace of houses, it is essential to ensure that the party wall between adjoining houses continues to the roof level and the roof junction is adequately fire stopped.

There should be no gaps or imperfections in the party wall construction, which would facilitate the spread of fire between houses.

Any new structural members such as floor beams or columns should be provided with the required level of fire resistance.

## FLECTRICAL INSTALLATIONS

It is very important that all electrical work is carried out by a qualified Electrician, as improperly designed / installed fittings and inadequate wiring can constitute a serious fire hazard.

Particular care is required with the design and installation of recessed lighting systems.

### OTHER ASPECTS

This leaflet is intended to draw attention to the importance of properly dealing with fire safety issues in attic / loft conversions, with the help of professional advice. There are 11 other Parts of the Building Regulations, which must be complied with, and which deal with issues other than fire safety including:

- Part A Structures
- Part D Materials and Workmanship
- Part E Sound Insulation
- Part F Ventilation
- Part L Conservation of Fuel and Energy, including thermal insulation

The relevant Technical Guidance Document, on how to comply with Parts A - M inclusive, can be viewed on the Department's website: www.environ.ie "What we do" - "Building Standards" or purchased from the Government's Publications Sales Office, Sun Alliance House, Molesworth St., Dublin 2 [Tel: 01 6476000].

### HOUSES OF ARCHITECTURAL / HISTORIC IMPORTANCE

In the case of older houses, particularly those of architectural / historic importance the application of the guidance set out in TGDB (Fire Safety) on Part B of the Building Regulations will not always be appropriate; and alternative approaches to meeting the fire safety requirements of the Building Regulations will need to be considered. If your house is a protected structure (or a proposed protected structure) under the Planning Act 2000, you may require planning permission for an attic / loft conversion. You, or your professional adviser, should contact the Conservation Officer in the local planning authority, well in advance of designing or carrying out the works.



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# **LOFT CONVERSION**

# PROTECT YOUR FAMILY!

