

LABC Technical Guidance Note



Subject : Application of B1 to Loft Conversion Works
Fire Doors to Protected Stairway

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Purpose

LABC technical guidance notes are for the benefit of its members, to provide information, promote good practice and encourage consistency of interpretation for the benefit of our clients. They are advisory in nature, and in all cases the responsibility for determining compliance with the Building Regulations remains with the Local Authority concerned.

This guidance note is based upon information available at the time of issue and may be subject to change. The Approved Documents should be consulted for full details in any particular case.

Introduction.

The approved document to regulation B1 2006 is now in two volumes. Volume 1 – Dwellings deals with means of warning and escape to this category of building only.

It is no longer necessary to provide self closing devices to doors within a dwelling house other than to an integral garage. However where an existing roof space is converted into habitable rooms the previous varying provisions relating to this work have been removed, making it necessary to satisfy the recommendations in full.

The provision of an egress window at second floor level in lieu of a fully protected route of escape has been removed. The new floor is still required to achieve 30 minutes fire resistance as are those areas that separate any rooms from the stairwell enclosure.

This guidance is intended to provide an alternative approach that aims to achieve the functional requirements of regulation B1 for loft conversions. It is intended to be applied to two storey houses that are converted to form 3 storeys. The floor area should not exceed 50m² to the new 3rd storey level. It is not intended for houses in multiple occupation that are covered under the Housing Act 2004.

Key Issues

The approved document to regulation B1 requires FD20 doors to all habitable rooms in a new or altered dwellinghouse with one floor more than 4.5m above ground level, where they form part of the enclosure to the stair. Interlinked smoke detection is required to the circulation spaces at each level.

If there is a desire to retain existing doors within a dwelling house, when undertaking alterations to form habitable rooms in the roof, the following may be considered as suitable alternatives to replacing some or all doors.



General provisions

1. In addition to smoke detectors at every storey level, detectors should also be provided at half landing levels adjacent to habitable rooms. A heat detector should be provided in the kitchen and smoke detectors in all habitable rooms entered from the stair enclosure. All alarms should be mains powered with standby backup, interlinked so that detection of heat or smoke in one unit operates the alarm in all others.
2. BS 5839:6 recommends optical smoke detectors in circulation areas with ionization detectors better for living and dining rooms. Optical may be better in bedrooms although either type would be considered acceptable.
3. There should be at least one window at first floor level of a size that would permit emergency egress to either a rear garden of sufficient depth or to the front elevation.

Panel doors in excess of 32mm thickness

1. The door should be attached to the door frame with steel hinges, not be visibly warped, fit well into its frame and there should be no visible defects particularly in the panels.
2. Any existing glazing to doors or fanlights should be replaced with wired glass or similar fire resistant glazing to provide adequate resistance for integrity and stability.
3. There should be no significant defects to adjacent walls or around door frames forming the stair enclosure.

Existing Panel doors less than 32mm in thickness

1. In addition to the recommendations for panel doors in excess of 32mm indicated above, if it is intended to retain doors less than 32mm in thickness a proprietary solution should be sought to upgrade the door. This may include the application of fire resistant materials to the panels and stiles on the room side of the door. Such doors can be provided with a certificate from a specialist supplier confirming their upgraded suitability.
2. Alternatively, the door can be upgraded, on the room side, by infilling the panel with a fire resistant board and applying a similar board glued and screwed over the entire door.

Hardboards Flush doors.

Existing hardboard or other lightweight flush doors are not considered adequate to provide a reasonable level of fire protection to a stair enclosure and should be replaced with FD 20 doors in accordance with the recommendations of the approved document.
