

Technical Guidance

Loft hatches and fire resistance



Question

In houses of three or more storeys, are half-hour fire resistant loft hatches/roof void access panels required in the ceiling below a roof space or to roof voids to rooms in the roof?

Considerations

- Approved Document B Volume 1 2006 edition (England and Wales) makes no recommendations for fire protection to the ceiling below a roof space or fire protection to an internal stair in properties with a floor up to 4.5m above ground level (typically two storey properties)
- Diagram 6 Approved Document B Volume 1 2006 edition (England and Wales) indicates two acceptable methods of providing fire protection to the stair in a house with floor level more than 4.5m above ground level (typically three storey properties). These are either to provide:
 - a) a vertical cavity barrier capable of achieving 30 minutes' fire resistance located on the line of the enclosure to the protected stairway, or
 - b) a 30 minute fire resisting ceiling across the whole of the top storey, imperforate, apart from openings that are protected to achieve 30 minutes fire resistance.

Scottish Building Standards Technical Handbook domestic section 2 and Building Regulations Part E (Northern Ireland) have similar requirements).

- CLG (formerly DCLG and ODPM) have confirmed that alternative solutions to those given in Approved Document B may also provide adequate protection to a stairway in dwellings with a floor more than 4.5m above ground level.
- As the risk of origin of fire is considered to be in rooms adjacent the stair, fire resisting loft hatches are not considered necessary where they are formed within the protected stair enclosure.
- A ceiling formed with 12.7mm plasterboard overlaid with glass fibre quilt is considered to be sufficiently robust to form the function of a cavity barrier below the uppermost ceiling.

Answer

For dwellings with a floor situated more than 4.5m above ground level:

- 1) Loft hatches formed within the protected stairway need not be fire resisting (see figures 1 to 4).
- 2) Where the stairs provide access to a single habitable room a loft hatch/roof void access panel formed within the room need not be fire resisting (see figures 1 & 2).
- 3) Where the stairs provide access to more than one habitable room loft hatches/roof void access panels

formed within the habitable rooms should achieve 30 minutes fire resistance (see figures 3 & 4).

In all cases any loft hatch within a separate bathroom need not be fire resisting. The requirement for a loft hatch in an ensuite bath/shower room is the same as if it were located in the adjoining bedroom (see figures 2 & 4).

Figure 1 - Single room on upper floor (plan)

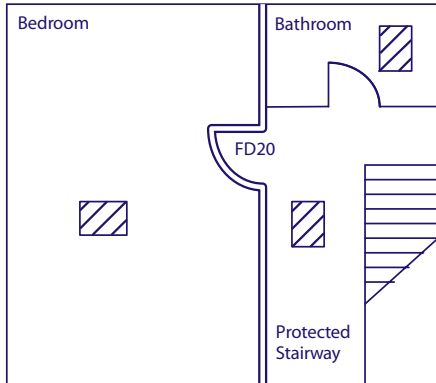


Figure 2 - Room in roof - single room (plan)

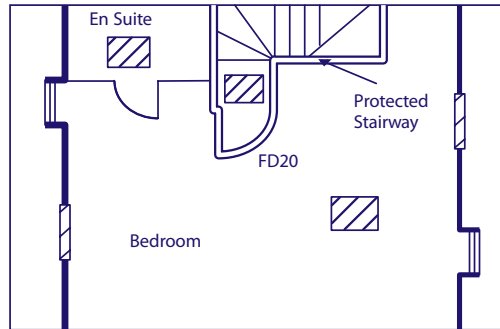


Figure 3 - Room in roof - more than one room (plan)

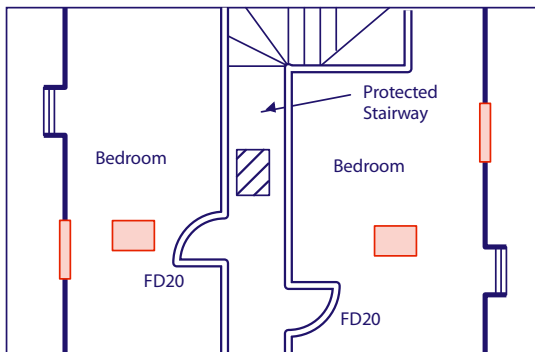
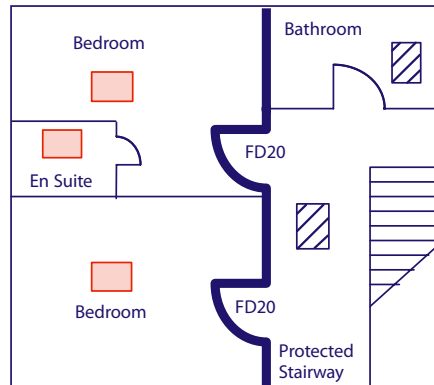





Figure 4 - More than one room on upper floor (plan)



 Standard Loft Hatch or roof void access panel

 Fire resisting Loft Hatch or roof void access panel - secured with catches


 Standard stud partition - typically 12.5mm plasterboard and quilt insulation
 Ceilings typically 12.5mm plasterboard overlaid with quilt insulation