Protected Entrance Halls

Where protected entrance halls to flats are required under the Part B guidance, 30 minutes fire resistance needs to be provided to the protected entrance hall. This is normally achieved by constructing 30 minute fire resisting partitions extending from structural floor to structural soffit as shown in Diagram a).

Since the introduction of Robust Details for Part E there has been a significant increase in the use of metal framed suspended ceilings installed below concrete floor decks in blocks of flats. Site practice may dictate that the metal framed suspended ceilings are constructed and lined with plasterboard prior to the erection and lining of the internal partitions.

In this situation consideration needs to be given to preventing fire spread within the void over the top of the partitions enclosing the protected entrance hall.

The guidance in Approved Document B confirms that either cavity barriers capable of achieving 30 minutes fire resistance should be installed vertically in line with the partitions surrounding the protected entrance hall or a 30 minute horizontal cavity barrier be installed throughout the whole of the flat compartment.

An example of an acceptable arrangement for vertical cavity barriers is shown in Diagram b)

An example of an acceptable arrangement for a horizontal cavity barrier is shown in Diagram c). Where a horizontal cavity barrier is used it is important that any ceiling penetrations are also fire protected. i.e. recessed lights are fitted with intumescent hoods or are fire rated to at least a 30 minute standard. Extract duct penetrations should be protected with a suitable fire damper.

There may be other acceptable solutions, these examples are intended to represent the principles of three different methods of maintaining adequate fire separation of the protected entrance hall, particularly where metal framed suspended ceilings are used.

NB The sound insulation requirement between bedrooms and other rooms within the flat is 40dB and any continuous ceiling should be capable of providing that level. Therefore, a suitable barrier may be required above the partition separating the bedrooms from other rooms similar to that shown in Diagram b).
Diagram a) Full Storey Height Partitions
Diagram b) Vertical Cavity Barriers in Ceiling Void

- **Room**
- **Protected entrance hall**
- **Room**

- **50mm fire barrier compressed between soffit and clamping plate with anchor fixings**
- **Fire barrier draped over suspended ceiling and fixed to grid**
- **30 minute fire resisting partitions fixed to ceiling grid in accordance with manufacturer’s recommendations**

**Standard suspended ceiling lining in accordance with Part E or Robust Details**
Diagram c) Horizontal Cavity Barrier throughout Flat

30 minute fire resisting ceiling to extend over all rooms and protected entrance hall. Any penetrations to ceiling lining to be protected to maintain 30 minutes fire resistance.

30 minute fire resisting partitions fixed to ceiling grid in accordance with manufacturer's recommendations.