## **BCA Technical Guidance Note 2**

Rev 0 Jan 2011



## **Protected Entrance Halls**

## **Purpose**

BCA technical guidance notes are for the benefit of it's members and the construction industry, 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 building control body 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.

## **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).

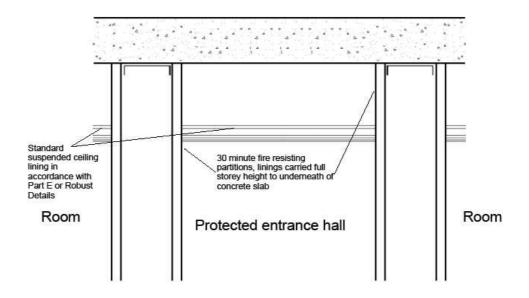


Diagram a) Full Storey Height Partitions

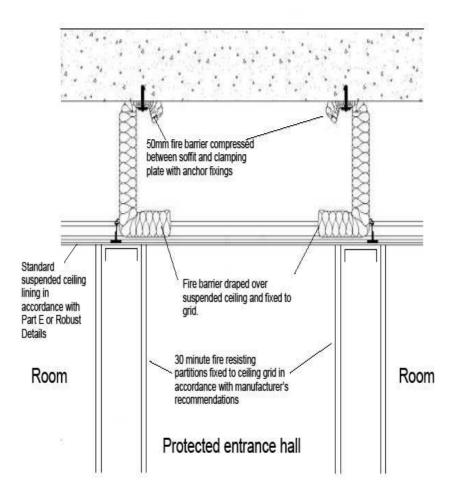


Diagram b) Vertical Cavity Barriers in Ceiling Void

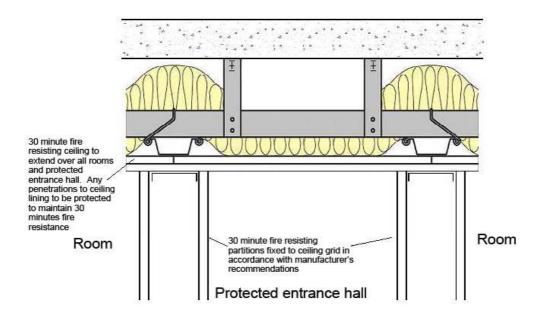


Diagram c) Horizontal Cavity Barrier throughout Flat