

## Attic Frames - Environment

### Fire

Room-in-the-roof constructions is in an unusual position in regard to fire regulations. The floor, of course, must have the usual, minimum modified half-hour endurance. However, additional precautions should be taken to prevent spread-of-fire into the roof cavities and to ensure the integrity of the connectors for the full half hour.

Alternative solutions are:

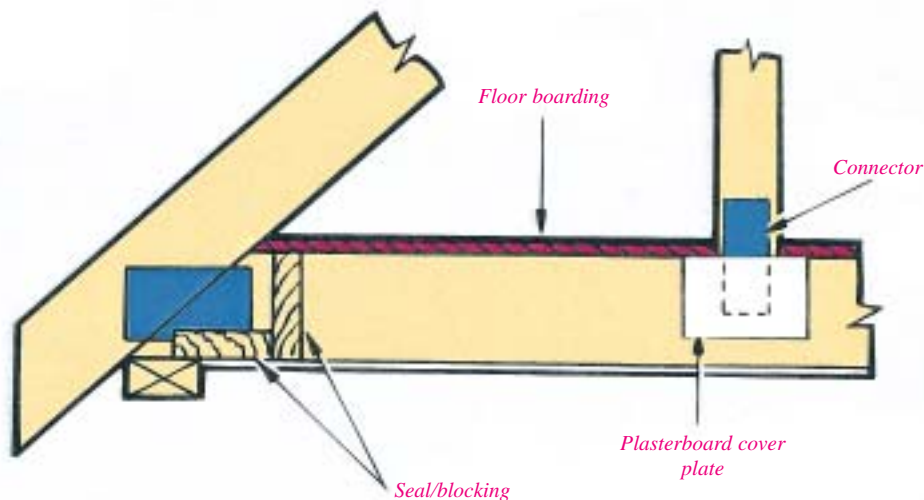
a. Continue the floor boarding into the side triangles sealing it to the wall plate as shown (figure 100a) and protect the connectors with 12.7mm plasterboard cover plates.

b. Install under the floor joists a ceiling lining capable of providing full or almost full protection eg:

1. 12.7mm 'Fireline' plasterboard
2. Normal 12.7mm plasterboard plus a 5mm plaster skim coat
3. 12.7mm plus 9.5mm plasterboard with staggered joints

If compliance with the ventilation requirements of the Building Regulations is to be effected through eaves vents, these should be made impassable to fire.

Figure 100a



### Insulation and Ventilation

Thought should be given to the type and location at an early stage, as this might well determine the depth of rafter to be adopted.

A cool regime (figure 100b) required ventilation to control condensation. An airgap of not less than 50mm should be provided between the top of the insulation and the underside of the roof covering.

With a 100mm mineral wool quilt the smallest standard finished size of timber to provide the necessary depth is 147mm.

Warm roof regimes (figure 100c) need the same ventilation with, in addition, ridge vents providing at least a 5mm minimum continuous gap.

Figure 100b

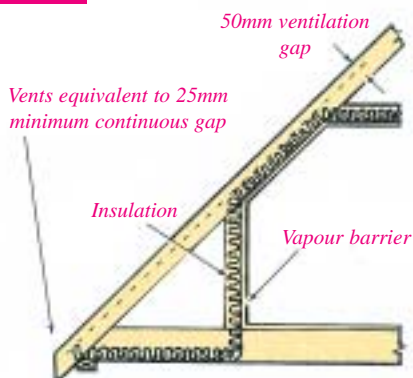


Figure 100c

