



### EXISTING CEILING

In floors where access to the underside is restricted, or where the existing ceiling is to be retained, the existing ceiling (3) may not always be relied upon to provide any degree of fire protection to the supporting floor structure. This may be especially true in older buildings with lathe and plaster ceilings.

Under these circumstances all remedial fire protection measures must be applied to the ceiling from above and the toe of the ceiling joists must be assumed to be effectively unprotected.

Up to 40mm of charring at the toe of the joists may therefore be expected to occur after 60 minutes exposure.

Consequently, assuming that adequate protection can be provided to the sides of the joists and to the flooring membrane, there is a minimum joist depth required to sustain the load bearing capacity as a result of the reduction in depth of the joist section.

### JOISTS

Timber joists (1), minimum 38mm wide x 170mm deep at maximum 610mm centres.

### FLOORING

T&G boarding or chipboard (2), minimum 19mm thick.

### FILLETS

4 off SUPALUX® fillets, 12mm thick x 75mm deep (4), fastened to each side of all timber joists and any cross noggings, using 75mm x 4.2mm woodscrews (5) at 300mm centres. The screw fixings *must* be inserted 50mm up from the toe of the joist.

### CEILING PANELS

12mm SUPALUX® panels (6), are laid on top of SUPALUX® fillets.

### INFILL

Minimum 80mm thick x 30kg/m<sup>3</sup> mineral wool (7) installed over the SUPALUX® boards, tight into the sides of the joists.

**Note:** Since this upgrade is carried out from above, the floor boarding will required to be lifted. Existing boarding may be reused provided that it be in sound condition and free from splits and holes. If the boarding is square edged, it must either be replaced with T&G boarding or overlaid and pinned with 4mm hardboard.

**AUTHORITY: PROMAT RECOMMENDATION - BASED ON IN-HOUSE KNOWLEDGE AND TECHNICAL EXPERIENCE**

