

INTRODUCTION

FPA Design Guide for the fire protection of buildings

The FPA Design Guide is a document aimed at protecting businesses against disruption and loss of critical stock and machinery due to fire. It is published by the Fire Protection Association, in association with the InFiReS fire research group.

In 2000, the LPC published the most recent edition of Design Guide for the Fire Protection of Buildings. This was a major work of reference for those most closely concerned with the design and construction of industrial and commercial buildings.

Now published by the FPA, the Design Guide informs architects and designers about the business risk management issues which relate to the fire protection of buildings, issues which supplement in very important ways the life safety requirements contained in the principal legislative controls (Approved Document B). Within the document, there is information on extent of the zone, fire ratings etc expected by insurers and the industry as a whole.

The FPA has subsequently published a number of separate guides covering specific topics these are available through the FPA website at <http://www.thefpa.co.uk>

PROMAT SUPALUX® TECHNOLOGY

As a product designed to protect against fire, SUPALUX® calcium silicate technology developed by Promat is highly specialist, yet very simple to install. Protected zones are often suspended above head height as a lining to the roof, the lightweight nature of Promat SUPALUX® means that it is ideally suited to the application.
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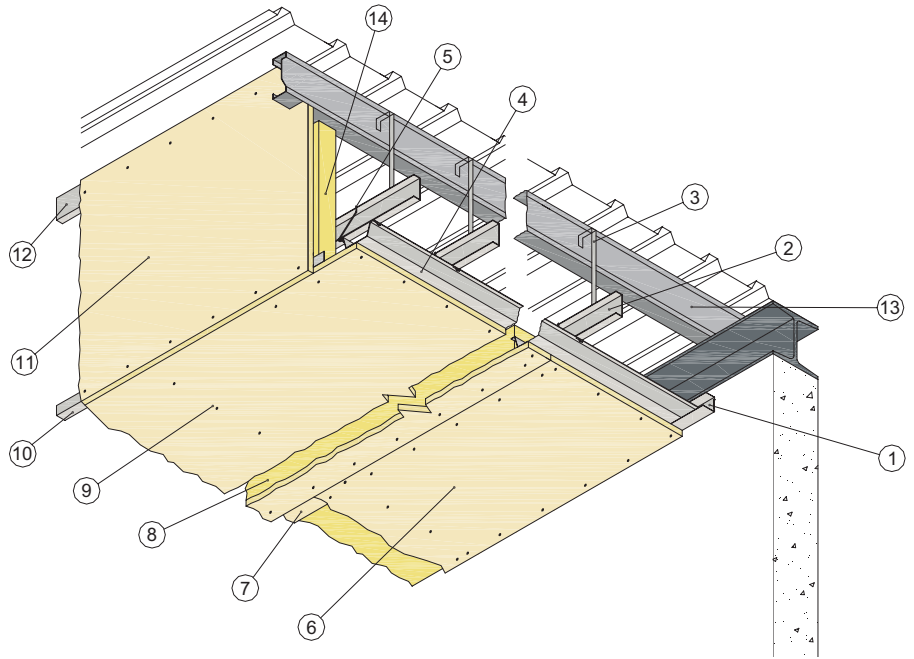
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CONSTRUCTION

This control zone construction is only applicable to roof coverings that will not in themselves contribute to fire spread. For confirmation of this, consult with the roof manufacturer.

1. Gypframe MF6 perimeter channel (1) 20 x 28 x 30mm x 0.5mm , fixed to surrounding construction at 500mm centres using non-combustible screws or plugs and anchors (depending on element of construction).
2. MF7 primary support channel (2) 15 x 45 x 0.9mm thick suspended from purlins at max. 610mm centres using 25mm x 0.55mm thick Gypframe MF8 strap hangers (3). MF7 channels rested on top flange of Gypframe MF6 perimeter channel at 600 centres.
3. MF8 strap hangers (3) fixed to purlins using 38mm Ejot Tec screws. Hangers fixed to MF7 primary grid system 2 x 32mm drywall screws.
4. Gypframe MF5 ceiling sections (4) 80 x 26 x 0.5mm at max. 610mm centres on underside of primary grid, connecting to MF7 Gypframe using MF9 connecting clips (5) and engaging into MF6 perimeter channel.
5. 9mm Supalux® ceiling (6) fixed to MF5 channel using 25mm drywall screws at 200mm centres.
6. 9mm Supalux® 100mm wide cover strips (7) fixed at transverse joints using 32mm drywall screws at 200 mm centres, fixed on both sides of the joint.
7. Rock wool insulation (8) 50mm thick x minimum 35 kg/m3 laid over Supalux® boards, insulation butted up to MF 5 ceiling sections. The vertical rock wool (14) is retained in position using 1mm iron wire.
8. Vertical boards (1 layer of 9mm Supalux®) (11), fixed to steel sections with 100mm wide cover strips at transverse joints. Boards cut to fit within purlin and fitted flush to underside of roof. Any gaps to be fire stopped with rock wool. Board fixed at base to angle fixed to MF5 section (10) and also at top to MF7 channel (12) spanning between, and fastened to the purlins. Maximum drop 600mm.
9. Purlins (13) at maximum 1.8m centres, supported by steel beam or on top of blockwork wall. Steel beams require boxing with minimum of 20mm Vermiculux® to provide required 60 minutes fire compartmentation and fire protection to the steel (omitted for clarity - contact Etex Building Performance technical team for confirmation of board thickness required).
10. All gaps, abutments, air and smoke paths to be fire stopped, and sealed with Promaseal® Intumescent Sealant.



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