

INTRODUCTION

The requirements for the treatment of voids above beams which are created by trapezoidal decks in UL Design specifications are different to those used in Europe.

In the USA and for projects using Underwriters Laboratories (UL) Design specifications, such as those in the Middle East market, trapezoidal deck voids are always fire stopped.

The requirement for fire stopping the voids above the beams must be followed as stated on the particular UL Design specification being used – the voids are either **filled** or **plugged**.

FLUTED STEEL DECKS

When steel decks are fluted and the Cafco Spray-Applied Fire Resistant Material (SFRM) thickness selected is based on an all fluted deck, the void between the steel deck and the top flange of the beam shall be **filled**.

Filling the flutes is achieved by spraying the particular SFRM into the fluted cavity to completely fill the void above the beam to provide the fire stop.

ALL CELLULAR OR BLENDED DECKS

When a steel deck is used and the beam has been sprayed with the Cafco SFRM thickness applicable to cellular or blended units, the void between the steel deck and the top flange of the beam shall be **plugged**.

Plugging the profiles is achieved by spraying the Cafco SFRM into each side of the opening above the beam to seal the ends of the void.

Alternatively, the voids can be plugged using a suitable profiled mineral wool batt to close the ends of the cavity on both sides of the beam to provide the fire stop.

For all applications, the minimum required thickness and type of Promat Cafco SFRM must be applied to the beam in accordance with the particular UL Fire Resistance Design Number specification requirements.

The Cafco SFRM must not be applied at a density lower than specified in the particular UL Design.

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