

Guidelines for laying cable support systems in fire safety installations

1. A base for laying cable support systems should have a fire resistance classification at least equal to the cable way category (30 or 90 min.). The optimal base for cable support systems that supports their proper functioning is either concrete (category B25 min.) or natural stone.

A sprinkler system should be used if for constructional reasons it is impossible to reach base category 90 min.

2. Support systems should be run in a manner which does not risk a deterioration in proper functioning during fires (falling construction elements, installations exposed to risk of explosion, expansion joints in buildings).

3. Support systems should be run above the sprinkler system, because cable insulation is not tight during fire (mica or ceramics).

4. In the case of vertical cable support systems, compensation reserves should be provided every 3.5m (according to the DIN 4102-12) and cables should be fastened to a supporting structure min. every 300mm. Instead of compensation reserves, other elements can be used to prevent the cable from slipping after the sheath burns (cable boxes, culverts).

5. All other system elements including connection boxes and wall culverts should have a category at least equal to that of the cable support systems.

6. Cables shall be laid with a reserve compensating for ceiling bend and deflection of supporting structures.

7. Do not use clamps with sharp edges, which may block cable movement or cause insulation damage.

8. In order to ensure proper functioning of the system, it is recommended that clamps are used to stabilise the cable's distance from the base.

9. A suitably larger clamp compared to the cable diameter should be selected so as to ensure that the cable moves freely.

10. When selecting the cables, one should bear in mind the possible effects occurring during fire, particularly cable movement due to expansion of the working conductors.

In case of any questions, please contact the manufacturers of the cable support systems elements.

The way a cable support systems and its elements are designed and made determines about safety during fire.

PROTECT HUMAN LIFE AND PROPERTY BY USING CLASSIFIED CABLE SUPPORT SYSTEMS!