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# E16 Cable trays/protective casings made of plastics materials

(June  
2002)

## 1. General requirement

Cable trays/protective casings made of plastics materials are to be type tested <sup>1)</sup>.

Note: "Plastics" means both thermoplastic and thermosetting plastic materials with or without reinforcement, such as PVC and fibre reinforced plastics - FRP.  
"Protective casing" means a closed cover in the form of a pipe or other closed ducts of non-circular shape.

## 2. Installation Requirements

**2.1.** Cable trays/protective casings made of plastics materials are to be supplemented by metallic fixing and straps such that in the event of a fire they, and the cables affixed, are prevented from falling and causing an injury to personnel and/or an obstruction to any escape route.

Note: When plastics cable trays/protective casings are used on open deck, they are additionally to be protected against UV light.

**2.2.** The load on the cable trays/protective casings is to be within the Safe Working Load (SWL). The support spacing is not to be greater than the Manufacturer's recommendation nor in excess of spacing at the SWL test. In general the spacing is not to exceed 2 meters.

Note: The selection and spacing of cable tray/protective casing supports are to take into account:

- cable trays/protective casings' dimensions;
- mechanical and physical properties of their material;
- mass of cable trays/protective casings;
- loads due weight of cables, external forces, thrust forces and vibrations;
- maximum accelerations to which the system may be subjected;
- combination of loads .

**2.3.** The sum of the cables' total cross-sectional area, based on the cables' external diameter, is not to exceed 40% of the protective casing's internal cross-sectional area. This does not apply to a single cable in a protective casing.

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Note:

1) Cable trays/protective casings made of plastic materials are to be type tested in accordance with the Type Approval Procedure applied by the Society. For guidance on testing, refer to REC 73.

