

FIRE PROOF SEALING & FIRE BREAKS

1.0 FIRE-PROOF SEALING OF CABLE PENETRATION

Cables / cable tray openings in walls and floors or through pipe sleeves from one area to another or one elevation to another, between the units and within the same unit, shall be sealed by a fire-proof sealing system. The fireproof sealing system (FPSS) shall effectively prevent the spread of fire from the flaming to the non-flaming side, in the event of a fire. The FPSS shall conform to relevant standard in addition to the following requirements:

- (a) FPSS shall have a fire rating of two hour.
- (b) The FPSS shall be subjected to fire endurance test, hose stream test , temperature measurement of non-flaming side as per ASTM-E-119.
- (c) The FPSS will also conform to the in-combustibility test carried out in accordance with IS: 3144-1992.
- (d) Under fire condition, the FPSS material shall not emit excessive smoke or any corrosive or toxic fumes.
- (e) FPSS shall have minimum life of 25 years.

2.0 FIRE BREAK

- 2.1 Firebreak shall be provided by applying a suitable fire-resistant coating on cables for the required length to meet the fire rating of thirty minutes.
- 2.2 Firebreak shall be provided at an interval of 15 metres in the straight portion of each of the cable tray above ground, at intervals of 30 metres in cable trenches and at 5m for all vertical trays. All cable inter section and tee offs shall be provided with firebreaks.
- 2.3 When pipes sleeves are provided for cables from outdoor area to indoor areas, the pipes opening at the outdoor shall be sealed by fire proof sealing material , which is also continuously waterproof. The indoor side of the pipe opening shall be also be sealed by continuous fire proof sealing material. The duct banks in outdoor area also need to be sealed by water proof deals. It is necessary to explore possibilities of applying waterproof coating on fire proof sealing.