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GUIDELINES FOR ROUTING OF ANALOGUE LINEAR HEAT DETECTION CABLE (L.H.D.C)

Before installing Linear Heat Detection Cables the following points should be observed:-

1) The cable should not be in contact with any material that can act as a heat sink and delay the sensing of temperature increase from the area being monitored.

2) The correct size and type of cable gland must be used on all junction boxes etc.

3) Due to the high impedance of the system, all connections at zone monitors, end of line units, junction boxes and interposing cable must be protected with silicone grease.

4) The cable should be installed so that it is not severely compressed and is not in contact with sharp objects that may damage the outer sheath.

5) The minimum bending radius is l0mm.

6) Cable ties shall not be used directly on the cable. The neoprene sleeve must be employed.

7) L.H.D.C. must not be over tensioned between supports especially at changes in direction.

8) The distance between supports shall be between 0.6 and 1.2 metres dependant on fixing positions available.

9) The routing of L.H.D.C. shall be chosen to avoid contact or close proximity with any local sources of heat e.g. light fixings, steam pipes etc.

10) The minimum number of joints should be made in any zone and these connections should be in the recommended Patol junction box. P/N 700506.

11) Adjacent zones should overlap by a minimum of 6cm.

12) Approved fixing clips and brackets shall be used.

13) All interposing cables shall have a screen/braid/sheath/armour as part of its construction, and this should be connected to earth to improve RFI and EMI immunity.

SPECIAL GUIDELINES FOR CABLE WAY PROTECTION

In addition to the recommendations in 1-13 above the following should also be observed: -

14) L.H.D.C. should be installed to cover each cable tray or ladder rack intended for supporting cables.

15) L.H.D.C. should be installed such that it can rapidly respond to heat convected and/or radiated from any source. In general it should be between 150mm to 200mm vertically above the cables that are to be protected.

16) Generally one run of L.H.D.C. should be provided centrally above each level of tray or ladder rack with a further run of cable below the bottom level.

17) On short lengths of vertical racking, used for carrying cables between horizontals, L.H.D.C. shall be located across the top of the rising group of cables in a similar manner to the horizontal racks/trays.

SPECIAL GUIDELINES FOR SPACE PROTECTION ON CEILINGS

In addition to the recommendation in 1-13 above the following should be observed:-

18) L.H.D.C. should in general be spaced on the ceiling above the area to be monitored such that the cable is no more than 2 metres away from any zone boundary or wall and no more that 9 metres between adjacent runs.

19) L.H.D.C. should not transverse other zones to reach control equipment or end of line units, an interposing cable should be used.

20) L.H.D.C should be installed such that it is between 25mm and 150mm from the ceiling.

NOTE

The above are general recommendations for guidance only, there may be conditions at site or client requirements where some of the above criteria need to be varied.