

High Voltage Cables in Manholes

Question: What code requirements are there for the installation 5 kV airport #8 series cables in manholes? The drawings, specifications and scope of work for the project exclude this and the present system installed at an airport has no cable tray. I have reviewed section 74 which does not address this situation and Rule 36-106 which does not address concrete manholes. The conductors have been left in loops, tyrap together around the manhole in a neat manner. Also what about 24" concrete pullboxes?

Answer: Installation of HV underground cables falls under C22.3 No 7-94 Underground Systems (Part 3 of the Code) which advises on identification of cables within a pull pit or chamber. Cable supported in the manhole with approved strapping, or tyrap should be acceptable. Bonded cable tray is a more common method but lacking specifications either method satisfies the code. If this was a Federal airport they have additional electrical specifications designed by Transport Canada that include, Pull Pits for the 2.5 kV series lighting loops.