



Reno A & E
4655 Aircenter Circle
Reno, NV 89502-5948 USA
Telephone: (775) 826-2020
Fax: (775) 826-9191
Website: www.renoae.com
E-mail: contact@renoae.com



Engineering Excellence!

The following specification describes the minimum acceptable requirements for a prefabricated inductive loop / lead-in assembly:

The loop / lead-in assembly shall be suitable for applications in which the loop / lead-in assembly will be overlaid with hot asphalt or embedded in concrete.

The loop cable shall be a four-conductor, double-jacketed cable with a nominal outer diameter of 0.360". The individual conductors shall be #18 AWG wire (formed from seven strands of #26 AWG copper wire) with a 0.020" thick layer of cross-linked polyethylene (XLPE) insulation. The inner jacket shall be 0.040" thick cross-linked polyethylene (XLPE). The void between the conductors and the inner jacket shall be spiral wrapped with a clear, moisture resistant binder tape and filled with an amorphous water-block compound. The outer jacket shall be 0.035" thick cross-linked polyethylene (XLPE).

The lead-in cable shall be a two-conductor, double-jacketed cable with a nominal outer diameter of 0.360". The individual conductors shall be #16 AWG wire (formed from nineteen strands of #28 AWG copper wire) with a 0.020" thick layer of cross-linked polyethylene (XLPE) insulation. The inner jacket shall be 0.040" thick cross-linked polyethylene (XLPE). The void between the conductors and the inner jacket shall be spiral wrapped with a clear, moisture resistant binder tape and filled with an amorphous water-block compound. The outer jacket shall be 0.042" thick cross-linked polyethylene (XLPE).

The cross-linked polyethylene (XLPE) insulation used for wire insulation and cable jacketing shall be capable of withstanding temperatures up to 426° Fahrenheit.

Splices between the individual loop cable conductors, and the splices between the loop cable conductors and the lead-in cable conductors shall be soldered, sealed, and waterproofed. The enclosure that encapsulates the spliced connections shall be fabricated from a high impact glass impregnated plastic with a minimum thickness of 0.240". The two halves of the splice enclosure shall be sealed with a water resistant gasket material. The interior cavity of the splice enclosure shall be completely filled with an amorphous water block compound. The splice enclosure shall be submerged in a saltwater solution for three (3) days. At the end of this three day period, the electrical integrity of these splices shall be verified by using a 500 Volt DC MegOhm meter to ensure that the resistance between either lead-in conductor and the saltwater solution is 200 MegaOhms or greater.

The loop / lead-in assembly shall be a Model PLH manufactured by Reno A & E or an approved equal. Approved equals shall not be allowed unless approved prior to bid submission.