Direct Burial Loop Installation Instructions

Preformed direct burial installation tips and directions

This is not a Saw-Cut Loop

Installation in Concrete
See Reverse side of this page.
(Pictures included)

Installation Under Pavers
If the sub-base is concrete or a slurry do not use this loop. Saw-Cut in a loop instead.

Determine loop position and footprint to include lead-in run to gate operator. Be sure to use the correct loop size.

Dig a 50mm wide by 75-100mm deep trench in the pattern of the loop and lead-in (see figure 1)

Fill Trench with one inch of sand.

Place loop in trench and run lead-in through 20mm schedule 40 or 80 rigid PVC. Glue all PVC joints with a proper PVC glue.

Cover loop and lead-in PVC run with sand.

Installation under Asphalt
Position and shape the loop on sub-base. Be sure to use the correct loop size.

Pull lead-in through 20mm schedule 40 or 80 rigid PVC. Glue all PVC joints with a proper PVC glue.

Dig a 50mm wide by 75-100mm deep trench in the size and place of the loop footprint and lead-in.

Fill the trench with one inch of sand base.

Lay the loop and lead-in run in the trench on top of sand base and use supplied ground stakes to secure the loop corners.

Cover loop and lead-in PVC run with sand.

Elsema Loops cannot come in direct contact with hot asphalt.

Installation in Gravel Road
Position and shape the loop on sub-base. Be sure to use the correct loop size.

Pull lead-in through 20mm schedule 40 or 80 rigid PVC. Glue all PVC joints with a proper PVC glue.

Dig a 180-250mm deep trench in the size and place of the loop footprint and lead-in.

Fill the trench with one inch of sand base.

Lay the loop and lead-in run in the trench on top of sand base and use supplied ground stakes to secure the loop corners.

Cover loop and lead-in PVC run with sand. Compact sand around the loop then fill in with road base.

Harness Wire: Solder all connections

Plug/Screw Connectors: Tint all connections

Basic loop layout guidelines to follow

Entry and Exit Loops

> 1.5m from the gate/door
> For Swing gates, at least 1.5m from the fully open and closed position
> 0-600mm from each curb
> 1.5m from every other Elsema loop

Detection height of loop is determined by 2/3 of the short leg of the loop.
Residential 1.2m short leg (Detection of standard size vehicles - 0.80m detection height)
Commercial 1.8m short leg (Detect higher bed vehicles - 1.2m detection height)

Loops should be encased in sand.

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Installing in Concrete Over Rebar

When installing Loops over rebar make sure to follow these simple instructions:

> Determine loop position and lay loop on top of rebar (never below).
> Offset the loop from the rebar pattern (see picture below) then use supplied cable ties to secure loop in place.
> Always run the lead-in underneath the rebar. (see picture below)
> Run the lead-in 6-8" under the concrete form.
> Run the lead-in in conduit (20mm Schedule 40 or 80 recommended) making sure to glue all PVC joints with a proper PVC glue.

![Diagram of installing loops](https://www.elsema.com)

In the picture to the right notice how the “Correct” loop is offset from the rebar pattern. The loop is coming in contact with the rebar as little as possible.

![Correct loop placement diagram](https://www.elsema.com)