



AGAVE WIRE, LTD

(PE)POLYETHYLENE TRACER WIRE APPLICATION GUIDE

Tracer wire is also known as locating wire. It is used to enable the detection of buried plastic pipes, fiber optics, and non-conducting facilities by providing a metal conductor. It is common practice to use THHN or THWN, Building Wires, for this function. However, neither of the two are specifically designed to withstand underground conditions. While THHN's intended use is for dry locations, THWN is used where wet conditions might be present. Several tests have concluded that the outermost component of THHN, Nylon is not capable of protecting the conductor from the harsh environments that burial rated wires are capable of withstanding. Although interruptions within the circuit may not always be present when using THHN, observations have proved that overtime these wires do not hold up well in buried conditions, rendering your investment worthless.

It is recommended by the NEC that all new construction require the use of "Tracer Wire" specifically designed for the purpose of detecting buried facilities. Tracer Wire insulated with HMW-PE/HDPE (High Molecular Weight Polyethylene), is highly superior to THHN and is also used to construct most underground plastic pipes as well. These compounds are highly resistant to corrosive chemicals, water/salt water and many other organic/inorganic elements which it may come into contact with. This make's PE insulated wire the most efficient compound used within Direct Burial applications.

The specifications for tracer wire should require a minimum of 18AWG Copper or Copper Clad Steel conductor coated with a PE or PVC jacket. PE tracer wires are available in 3 different styles and vary between their designated jacket thicknesses. Although this wire only serves one purpose, it is appropriate to note the limitations of tracer wire technology. Its effectiveness is intended for your safety and is co-dependant on an uninterrupted continuous circuit to prevent potentially harmful situations from occurring.