

# You need to be able to trace some plumbing pipes

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This year, Wisconsin's legislature passed and Governor Doyle signed Act 425, which impacts water purveyors, municipalities, and plumbing and utility contractors. The legislation requires that when non-metallic building sewers (including sanitary, storm, and private interceptor main sewers) and water services (including private water mains) are installed, the sewers and services must be accompanied by a means of locating the underground pipe. **The law becomes effective for new installations on December 31, 2006.** The language is located in Section 182.0715(2r) of the statutes. (This does not pertain to private onsite wastewater treatment system laterals. It is limited to laterals that connect to sewer and water facilities.)

Previously, when excavations were planned, Diggers Hotline or a similar service marked buried utilities. This marking rarely included buried water services or building sewers, as these are frequently plastic and because excavations are rarely at the depth of the sewer and water piping.

Dangerous situations were sometimes created when a building sewer was split or punctured when underground gas lines were installed using trenchless technology. When plumbers were cleaning a sewer affected by root intrusion (allowed by the punctured or severed pipe), the gas pipe was broken by the drain-cleaning auger. Gas entered the basement through the sewer. Explosion!

Since there are no mandatory requirements for tracer wire included in the Wisconsin Plumbing Code, here are suggestions for compliance with the new statute.

+ Tracer wire is normally specified as 10 to 14 gauge (most commonly 12 gauge) solid copper wire with a plastic coat to prevent corrosion. There are other options such as tracer tape or copper-coated steel wire. In all cases the conductive metal is protected by a plastic coating.

+ Tracer wire may be taped to plastic water or drain pipe. It is never connected to gas piping. When it is attached, the tracer is secured to the pipe every 6 to 20 feet and at all bends. Spacers are installed to keep tracer wire from contacting gas pipe. Some instructions call for the tracer to be located under the pipe, but most allow it to be placed on top. Do not wrap tracer wire around a pipe, as this could stress and break the tracer wire during backfilling.

+ Tracer wire installation requires access points at least every 300 feet. At access points the tracer wire is brought up to grade with valve boxes, clean outs, manholes, vaults, or other covered access devices. When running tracer wire up at curb stops, put the wire outside the box, so the tracer wire doesn't get tangled or torn when the valve is turned.

+ Splices in tracer wire should be made with split bolt or compression-type connectors. Wire nuts shouldn't be used. A water-proof connection is necessary to prevent corrosion.

+ Testing of tracer wire continuity after installation is a good idea.

+ If you're installing a pipe using a boring or jetting tool, tracer wire can be pre-installed in conduit, installed concurrently with the pipe or blown in after the pipe is installed.

+ If the tracer wire is ever broken, it should be replaced or repaired so that continuity is preserved.