

## RESIDENTIAL IN-FLOOR HYDRONIC HEATING SYSTEMS

- This handout is intended only as a guide. It shall not be considered a complete set of requirements.
- Materials and installation must comply with the current Minnesota State Building, Mechanical, and Energy Codes, and the manufacturers' installation specifications for each product.
- Residential in-floor heat (mechanical) permits are issued over-the-counter at the municipality office. Commercial projects require a plan review. Please request a Commercial Mechanical Permit Application from your municipality office.
- All hydronic heating systems require a manufacturer's installation manual and/or design professional's instructions.

### PERMIT CARD (throughout the project) shall be:

**POSTED** prior to start of work - **VISIBLE** from street or driveway - **ACCESSIBLE** to the inspector

### INSPECTION REQUIREMENTS:

Inspections **MUST** be scheduled during office hours **AT LEAST** one business day prior to inspection. If a specific date and time is required, additional notice may be needed. Failure to cancel a scheduled inspection may result in a reinspection fee.

- **Office Hours:** Monday - Friday • 8:00 a.m. - 4:30 p.m.
- **Phone:** (952) 442-7520 or (888) 446-1801

#### Inspections:

- **Someone 18 years or older must be present at the time of the inspection.**
- **Rough In:** After the vapor retarder/soil gas membrane, rigid foam insulation, and tubing is installed, prior to concrete placement. During the rough-in inspection, a hydrostatic pressure test shall be placed on the entire system, reading 1.5 times the operating pressure, but not less than 100 psi. Test duration shall not be less than 15 minutes.
- **Final:** After the tubes are attached to the manifold, the manifold is connected to the heating system, and the system is in operation.

**NOTICE:** Construction or work for which a permit is required shall be subject to inspection by the Building Official, and such **construction or work shall remain accessible and exposed for inspection purposes until approved.** It is the responsibility of the permit applicant to be in attendance on site and provide access to the Building Official for all required inspections. If work is concealed and/or work is not complete at time of inspection, an additional inspection is required and a **reinspection fee may apply.**

**Note:** The State of Minnesota requires all residential building contractors, remodelers, roofers, plumbers, and electricians to obtain a state license, unless they qualify for a specific exemption. Any person claiming an exemption must provide a copy of a Certificate of Exemption from the Department of Labor & Industry to the Municipality before a permit will be issued.

**Note:** To determine contractor requirements, or to check the licensing status of a contractor, please call the Minnesota Department of Labor & Industry at 651-284-5065 or toll free 1-800-342-5354.

**Note:** For specific code requirements, contact the Building Inspection Department at 952-442-7520 or 888-446-1801 or e-mail: [info@mnspect.com](mailto:info@mnspect.com).

### PROJECT CHECKLIST:

The following is a guideline to assist in compliance with the requirements of the MN State Building Code.

- The home address must be visible from the street.
- Tubing is approved for the design water temperature.
- Tubing is spaced according to manufacturer's or design professional's specifications.
- Tubing is secured in place by attaching it to the reinforcement, or by the use of staples into the under-slab rigid foam insulation.
- Sleeves are in place at the transition from the concrete slab to the manifold.
- Pressure test is established and holding prior, during, and after the placement of concrete.
- All tubing associated with this system shall be insulated including where it enters and exits the concreted slab. (MN Energy Code 1322. R403.3).