



## **Geothermal System Installation Inspection Checklist**

***This checklist is a guide and does not include all code requirements***

- Each appliance shall have a 30" X 30" level working space. IRC M1305.1.2
- Visual inspection and 30 minute **100 psi hydrostatic water test** of the piping from the well to the inside house foundation wall is required to be witnessed by the code official. IRC M2103.4
- Provide a minimum clear working space of 36 inches deep x 30 wide at the electrical disconnect(s) serving the appliance. IRC E3405.2
- White wires used as phase conductors in 208 - 240-volt single phase circuit located at geothermal unit and electric panel must be identified as current carrying conductors (marked with black or red tape). IRC E3407
- Single conductors on circuit breakers unless breaker approved for 2 conductors under a circuit breaker device screw. (Nut and make take tails if terminal rated for 1 conductor) IRC E3406.10
- Verify circuit breaker size matches the breaker(s) size listed on the installed geothermal equipment. IRC E3702.10
- Circuit breaker(s) for geothermal equipment must be identified / labeled in the electrical panel(s). IRC E3706.2
- All exterior wiring must be protected from physical damage by approved wiring methods, such as Liquidtight flexible nonmetallic conduit (Carflex) or liquidtight flexible metallic conduit (Sealtight). IRC E3802
- Carflex and Sealtight must be supported within 1 foot from both the disconnect and the unit. EMT to be secured within 3 feet of each box, cabinet or other termination. IRC Table E3802.1
- 120-volt tamper resistant service receptacle installed within 25 feet of furnace. IRC E3901.12
- Receptacle must be GFCI if in an unfinished basement area or garage. IRC E3902.5
- All metal boxes on furnace must be grounded with green ground screw/clip. IRC E3908.15
- Electrical circuit to new furnaces must have equipment grounding conductor. IRC E3908.1
- Electrical disconnects or listed circuit breaker locks shall be installed when geothermal equipment is out of sight of the electrical panel that serve such equipment. IRC E4101.5
- Bushings required for rigid metal conduit where conductors leave the conduit. NEC 344.46