

Appendix I



Performance Tested Comfort Systems - Geothermal Heat Pump Design and Installation Standards

April 15, 2007

1. Systems should be designed and installed according to IGSHPA guidelines, manufacturer recommendations, and all local, state, and federal laws and ordinances.
2. System installer shall be an IGSHPA Accredited Installer. Exception: Proof of successful completion of an IGSHPA installer's workshop and exam shall qualify in lieu of IGSHPA Accredited Installer certification.
3. ARI-rated COP shall be no less than 3.3 for closed loop systems (GLHP) or no less than 3.6 for open loop systems (GWHP).
4. Systems should be sized to meet no less than 100% of the design heating load.
5. All system components, including the ground loop, shall be warranted for a period of no less than 5 years.
6. System shall be certified as a "PTCS Commissioned Heat Pump" by an RTF approved PTCS Service Provider certified "Heat Pump Technician". For ground source heat pumps, this requires installations to meet section 4.4 (Control of Auxiliary Heat) and section 6.3 (System Air Flow) of the "Performance Tested Comfort Systems – Air-Source Heat Pump System Installation Standards". In addition, the technician shall test and document startup measurements using the "PTCS GSHP Startup Form". (www.PTCSnw.com)
7. Duct systems shall meet the requirements of the "Performance Tested Comfort Systems – Air-Source Heat Pump System Installation Standards", section 6.

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