GUIDANCE FOR GOLDSTAR HVAC CONTRACTORS

BPI recognizes that in some instances work conducted by HVAC contracting companies may not fall under the requirements of the BPI national standards for Heating and AC/Heat Pump Professional and therefore would like to clarify what work (tasks) that do not necessarily fall under the requirements of these standards and as such, are excluded and will not be subject to BPI quality assurance. Page 10 of BPI GoldStar Contractor Policies and Procedures Manual states the following:

Section 9. Quality Assurance

Contractors participating in the BPI GoldStar Contractor program agree to complete home performance work in accordance with BPI standards, where applicable.

This clarification addresses the requirement above. The tasks that BPI has determined to be excluded from the requirements of the Heating and AC/Heat Pump Professional Standards typically fall under two categories; (1) Maintenance/General Upkeep, and; (2) Service/General Repairs. BPI has defined each of these categories below and has included a list of what specific tasks fit under these categories. BPI is providing guidance with the description below for BPI GoldStar HVAC contractors to determine if the work being completed needs to comply with the BPI standards. The HVAC Company and their employees should always use their best judgment when determining if the work they are completing needs to comply with the BPI standards and any related Combustion Safety testing. In some instances, service or maintenance may lead to a situation where modification to the system and/or replacement of equipment is necessary, and therefore may require additional work that involves BPI standards and any related Combustion Safety testing.

Definitions:

Maintenance/General Upkeep: An annually scheduled onsite visit which maintains the proper condition and upkeep of pre-existing appliances and does not change the equipment design or dynamics of the home. A maintenance onsite visit will typically include, but is not limited to, an annual inspection and cleaning of heating/cooling appliances and replacement of filters on forced-air systems; fan motor service; condensate drain cleaning; and condenser/evaporator coil cleaning.

Service/General Repairs: A customer generated onsite visit which repairs and re-establishes the proper condition of pre-existing appliances and does not change the equipment design or dynamics of the home. An onsite service visit will typically include, but is not limited to, no heat/no cooling due to open circuits or faulty control/transformer; dirty condenser/evaporator coil; low refrigerant charge; excessive noise or vibration; water leaks; no domestic hot water, unusual odors.

Changes to the Building Envelope and/or Heating/Cooling System: Air sealing and insulation installed to the building envelope representing more than 15% or more of the total building shell; modifications to or replacement of the distribution system; replacement of the heating/cooling system, or parts of the system that have a direct impact on the dynamics of the home, combustion process, or combustion appliance zone (CAZ).
**Minimum Health and Safety Testing**

BPI will require minimum Health and Safety testing on all work of HVAC contractors. This includes annual maintenance and service work. Below is the minimum Health and Safety testing required to be conducted and documented to ensure the safety of the occupants of the home. If testing reveals that a Health and Safety issue exists and corrective action is needed, it is the responsibility of the HVAC contractor to alert the homeowner/occupants of the problem and, with their permission, take the appropriate actions to remedy the issue.

**Minimum Health and Safety Testing Required at All Times**

The following tasks must be performed whenever a BPI GoldStar Contractor enters a home for service, maintenance, energy auditing, or upkeep purposes:

- Monitor ambient levels of Carbon Monoxide (CO).
- Monitor ambient levels of Natural Gas/Propane in residential buildings that have combustion equipment utilizing these gases.
- Perform a visual inspection of oil lines of residential buildings that have combustion equipment utilizing oil-fired equipment.

**Excluded Work (Tasks) from the BPI Standards**

**OIL-FIRED EQUIPMENT**

- **Service/General Repairs** - No or inadequate heat from oil-fired equipment
  - Nozzle replacement
  - Filter replacement
  - Oil viscosity issues due to low temperatures
  - Plugged heat exchanger
  - Plugged vent
  - Electrical (repair/replace the following: open circuits, faulty ignition components, relays, burner motor, oil delay valve)

- **Maintenance/General Upkeep**
  - Replace oil line filter
  - Nozzle replacement
  - Electrode replacement
  - Cleaning heat exchanger

**GAS-FIRED EQUIPMENT**

- **Service/General Repairs** - No or inadequate heat from gas-fired equipment
  - Clean heat exchanger
  - Adjustment/replacement of limit controls
  - Adjustment/replacement of thermostats
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- Electrical (repair/replace the following: open circuits, faulty ignition components, inducer motors, relays, fuses, transformers)
- Gas valve replacement

Maintenance/General Upkeep
- Check gas pressure
- Check safety/limit controls
- Check heat exchanger
- Check operating controls
- General cleaning of equipment

HYDRONIC SYSTEMS

Service/General Repairs - No or inadequate heat from hydronic systems
- Circulator- repaired/replaced
- Hydronic piping and associated components – check for leaks, condition and repair/replace
- Pressure relief valve-repair/replace
- Expansion tank-repair/replace
- Zone valves-repair/replace
- Boiler water feed valve-repair/adjust/replace
- Excessive noise or vibration
- Leaks from fittings and/or valves

Maintenance/General Upkeep
- Circulator motor lubrication
- Circulator replacement/repair
- System pressure check
- Adding Antifreeze
- Blowdown of steam boilers
- Valve replacement/repair

AIR HANDLING SYSTEMS

Service/General Repairs – No or inadequate air flow - all air handling systems
- Fan control- adjustment/replacement
- Blower motor- repaired/replaced
- Blower fan- repaired/replace
- Blower motor belt- adjustment/replacement (if equipped)
- Air filter- cleaned or replaced

Maintenance/General Upkeep
- Electrical (repair/adjust/replace the following: relays, transformers, thermostats, contactors, all wiring, switches and breakers/fuses)
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- Replace filters
- Adjustments to air flow (heat rise and static pressure checks)
- Replace fan blade
- General cleaning of unit

A/C & HEAT PUMPS

Service/General Repairs- No or inadequate cooling or heating from A/C & Heat Pumps

- Compressor, condenser, evaporator- repair
- Fan blade and motor repair
- Electrical (repair/adjust/replace the following: relays, transformers, thermostats, all wiring, switches and breakers/fuses)
- Check and adjust operating controls
- Check and adjust limit controls
- Icing of evaporator
- Repair broken air handler drive belt
- Faulty condensate pump
- Plugged condensate drain
- Excessive noise or vibration
- Physical damage to outdoor coil or refrigerant lines
- Unusual odor
- Vibration and noise, loose panels

Maintenance/General Upkeep

- Check refrigerant charge (super heat/sub cooling) add/remove as needed.
- Electrical (repair/adjust/replace the following: relays, defrost timer, transformers, thermostats, contactors, all wiring, switches and breakers/fuses)
- Checking safety/limit controls
- Checking operating controls
- General cleaning of equipment

If you feel that there are additional tasks that could be added to this list, please forward with clear reason and justification to John Jones, National Technical Director at bpi.org and BPI will consider for addition.