

**BUILDING INSPECTION  
DEPARTMENT**

Phone:276-821-6091

**CITY OF BRISTOL  
VIRGINIA**



City Hall  
300 Lee Street  
Bristol, VA 24201

**HEATING / AIR CONDITIONING PERMIT APPLICATION**

HVAC Permit No. \_\_\_\_\_

DATE \_\_\_\_\_

\*TYPE OF WORK: Commercial \_\_\_ Residential \_\_\_

\*LOCATION OF JOB: \_\_\_\_\_

\*Licensed Contractor: \_\_\_\_\_ \*License No: \_\_\_\_\_

\*Contractor Address: \_\_\_\_\_ \* Phone No: ( ) \_\_\_\_\_

\*E-Mail Address \_\_\_\_\_

\*Property Owner: \_\_\_\_\_ \*Owner's Phone: \_\_\_\_\_ Owner's Email \_\_\_\_\_

**\*\* NOTE: ON SYSTEMS COMBINING HEATING AND AIR CONDITIONING  
FILL IN APPLICABLE INFORMATION FOR BOTH.**

**HOT WATER OR STEAM SYSTEM**

\_\_\_\_\_ ° F inside when \_\_\_\_\_ ° F outside

\_\_\_\_\_ ° F Boiler water \_\_\_\_\_ psi

\_\_\_\_\_

\_\_\_\_\_ BTU/hr.

\_\_\_\_\_ BTU/hr

\_\_\_\_\_ BTU/hr

\_\_\_\_\_ " x \_\_\_\_\_ " ; \_\_\_\_\_ "h

\_\_\_\_\_ " x \_\_\_\_\_ " ; \_\_\_\_\_ "h

IS THIS AN OIL TO GAS CONVERSION?: YES \_\_\_ NO \_\_\_

**DESIGN CONDITION**

**DESIGN TEMP. OR PRESSURE**

**TYPE OF SYSTEM**

**TYPE OF FUEL**

**BUILDING HEAT LOSS**

**TOTAL NET LOAD ON BOILER OR FURNACE**

**MAKE, MODEL & NO. OF BOILER OR FURNACE**

**NET LOAD RATING OF BOILER OR FURNACE**

**FURNACE MFGRS. CHIMNEY RECOMMENDATIONS**

**BUILDING'S CHIMNEY**

**MECHANICAL DRAFT EQUIP. (If used)**

**WARM AIR SYSTEM**

\_\_\_\_\_ ° F inside when \_\_\_\_\_ ° F outside

\_\_\_\_\_ ° F bonnet air

\_\_\_\_\_

\_\_\_\_\_ BTU/hr.

\_\_\_\_\_ BTU/hr.

\_\_\_\_\_ BTU/hr.at bonnet

\_\_\_\_\_ " x \_\_\_\_\_ " ; \_\_\_\_\_ ' h

\_\_\_\_\_ " x \_\_\_\_\_ " ; \_\_\_\_\_ ' h

**AIR CONDITIONING AND REFRIGERATION**

Design Conditions: Inside \_\_\_\_\_ ° F Outside \_\_\_\_\_ ° F.D.B Area to be conditioned \_\_\_\_\_ sq. ft. \_\_\_\_\_ cu. ft.

Total Refrigeration Capacity: \_\_\_\_\_ BTU/hr. Refrigerant: \_\_\_\_\_

Mfg. and Model No: \_\_\_\_\_ No. Cooling Machines and Type : \_\_\_\_\_

Type of Condensing: Evap. \_\_\_\_\_ Air \_\_\_\_\_ City Water \_\_\_\_\_ Cooling Tower \_\_\_\_\_ Other (describe) \_\_\_\_\_

Total Fan Capacity of all Systems: \_\_\_\_\_ cfm Fresh Air \_\_\_\_\_ cfm

\*DESCRIPTION OF WORK: \_\_\_\_\_

I HEREBY MAKE APPLICATION FOR A PERMIT TO DO HEATING/AIR CONDITIONING WORK ACCORDING TO THE ABOVE DETAILED STATEMENT. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE VIRGINIA UNIFORM STATE BUILDING CODE IN EFFECT AT THE TIME OF APPLICATION AND WITH ANY AND ALL REGULATIONS OF THE CITY OF BRISTOL.

\*Signature of Applicant: \_\_\_\_\_ \*Print Name: \_\_\_\_\_

\*Estimated Value of Work: \_\_\_\_\_ Fee: \_\_\_\_\_

\*Denotes required field

## PERMIT FOR HEATING SYSTEMS

In order to take out a permit for a heating system you must furnish:

- The installation manual for the unit being installed.
- A heat loss calculation.
- A gas piping size calculation.
- Type of gas pipe to be installed.
- A combustion air calculation.
- A drawing showing location of exhaust pipe showing distance off the ground and clearance from combustibles and all building openings.

If it is a NON-high efficiency system, the chimney must be inspected and cleaned by a **qualified** chimney contractor and the report submitted with the permit application.

A chimney liner permit will be required and a properly sized liner must be installed. If a gas high efficiency furnace is replacing a standard efficiency furnace and there is a gas fired hot water heater in the same chimney, the gas hot water heater cannot be orphaned in the chimney as the tile liner is too large to allow proper draft for the unit. A chimney liner permit will be required and a properly sized liner must be installed for the hot water heater.

### **M1801.3.1 Size.**

The chimney or vent shall be resized as necessary to control flue gas condensation in the interior of the chimney or vent and to provide the *appliance*, or *appliances* served, with the required draft. For the venting of oil-fired *appliances* to masonry chimneys, the resizing shall be done in accordance with NFPA 31.

## **SECTION G2408 (305) INSTALLATION**

### **G2408.1 (305.1) General.**

Equipment and appliances shall be installed as required by the terms of their approval, in accordance with the conditions of listing, the manufacturer's instructions and this code. Manufacturers' installation instructions shall be available on the job site at the time of inspection. Where a code provision is less restrictive than the conditions of the listing of the equipment or appliance or the manufacturer's installation instructions, the conditions of the listing and the manufacturer's installation instructions shall apply.

Unlisted appliances approved in accordance with Section 2404.3 shall be limited to uses recommended by the manufacturer and shall be installed in accordance with the manufacturer's instructions, the provisions of this code and the requirements determined by the code official.

Most gas appliance installation manuals state: *CH-240 ASME. Combination Water Heater. / Heating Boiler. MODEL. CH ... Installation and service must be performed by a qualified installer, service agency or the gas supplier.*

***NOTE: Separate Plumbing permit for gas lines are required.***