

## Check List for New Furnace

**The first 13 items listed below are done in order to assure that you have an efficient and reliable system.**

1. Heat loads using Manual J by Air Conditioning Contractors of America (ACCA) will be done to make sure that the unit is the proper size. If unit is too large it will short cycle which can cause uneven temperatures, shorten the life of the unit and cost more to operate. If the unit is too small it will not heat adequately. See the Energy Star Web Site found at [www.energystar.gov](http://www.energystar.gov) and the comfort institute web site found at [www.comfortinstitute.org](http://www.comfortinstitute.org).
2. Heating and Air Conditioning contractor will guarantee 70-degree space temperature at the thermostat when the outside temperature is minus 10 Degrees F.
3. Ductwork will be checked to see that it is adequate for size of unit. If the ductwork is not adequate the furnace will cycle on and off of the limit switch, which will cause the limit switch to fail prematurely, reduce the efficiency of the furnace, and shorten the life of the furnace
4. On 90 percent efficient furnaces a PVC exhaust pipe and a PVC combustion air intake pipe will be run. The combustion air intake pipe is important to prevent pre-mature failure of the furnace, especially if it is located close to the laundry area. On tight houses it prevents the furnace from making carbon monoxide.
5. The furnace will be connected to the ductwork using transition fittings that are shop made, and not field made. This will assure that there is smooth airflow through the system, which increases the airflow and prevents the furnace from cycling on and off of the limit switch. If air conditioning is also involved it prevents the efficiency of the system from being reduced.
6. If the furnace is connected to the return air ductwork through the side, a sheet metal pan will be attached to the bottom of the furnace using pop rivets to prevent screw heads from damaging the surface that the furnace sets on.
7. The sheet metal pan will be sealed to the bottom of the furnace so that air does not leak through the bottom of the furnace and pull dust and dirt into the system.

8. If the furnace has a larger air flow (over 1200 CFM) (Three ton AC unit) then return air will be brought in from the bottom of the furnace or from both sides of the furnace depending upon duct configuration. This will prevent the problems in item number 3 and 5 above.
9. Canvas connections will be used on the supply and return air of the furnace ductwork. This reduces the amount of noise that is transmitted through the ductwork.
10. Electric will be connected to the furnace with conduit. A flexible connector will not be used unless the furnace is located in a closet and conduit can not be used.
11. Gas piping will be connected to the furnace with rigid black gas pipe and a union. A flexible "range connector" will not be used.
12. A sediment trap will be installed on the gas pipe for the furnace as per NFPA 54 code.
13. An inspection of the furnace will be performed to make sure that the furnace operates properly. The following items will be checked: return air temperature, discharge or supply air temperature, gas pressure, limit switch operation, and blower motor amperes.
14. Contractor will remove all old equipment and parts and will take care to work in a clean and neat manner. Tarps will be used when necessary to protect your home.
15. Contractor to furnish Certificate of Insurance to prove insurance coverage.
16. Contractor to furnish a copy of a business license.

This checklist is for work being done at \_\_\_\_\_

Signed \_\_\_\_\_ Date \_\_\_\_\_  
CONTRACTOR