TOWN OF DUDLEY
WOOD, PELLET, COAL STOVES
INSTALLATION CHECKLIST

Name:_____ **Permit No.**_____

Address:_____ **Permit Fee:** **$55.00**

_____ **Call 508-949-8012 for Inspection**

Telephone:_____

Date Inspected:_____ **PERMIT NOT VALID UNTIL "CERTIFICATE OF INSPECTION" IS ISSUED.**

Building Inspectors Signature:_____

Type

New_____ Used _____

Manufacturer

Model # _____ Serial #_____

Report # _____ ASTM#_____ UL#_____

Dimensions

Height_____ Length_____ Width_____

Collar Size _____

Location (Circle One) Free Standing Insert

What room is it in?_____

Masonry Chimney

New_____ Existing_____

Size (Flue area)_____

Other appliances connected to flue_____

Lined_____ Flue Liner_____

Height_____ Cap_____

Prefab Chimney

Manufacturer_____

(Circle One) Through Wall Through Roof

(Circle One) Single Wall Double Wall

Height_____ Cap_____

Hearth - (Non combustible)

Material_____ Sub floor_____

Minimum Dimensions_____

Wall Clearances

Type of Protection_____ Clearance_____

TOWN OF DUDLEY
BUILDING DEPARTMENT

PLEASE NOTE: **ALL DEPARTMENTS NEED TO SIGN OFF BEFORE THE BUILDING DEPARTMENT WILL ACCEPT ANY APPLICATION FOR REVIEW!**

PROJECT ADDRESS: _____

Property Owners Name _____

Property Owners Address _____

Contractor/Business Name _____

Contractors Address _____

TAX COLLECTOR/ TREASURER

Unpaid bill (Contact Tax Collector for more information) _____

Completed by _____ Date _____

BOARD OF HEALTH

Approved by Not Needed Date _____

SEWER DEPARTMENT

Approved by: Not Needed Date: _____

WATER DEPARTMENT

Approved by: Not Needed Date _____

CONSERVATION COMMISSION

Approved by Not Needed Date _____

FIRE PROTECTION REVIEW

Approved by Not Needed Date _____

REGULATIONS

After obtaining the permit, there are three major areas I the stove installation process to consider. First, the stove; second, the chimney; and third, the actual installation.

First: All new woodburning stoves installed in Massachusetts must be tested and approves to U.L. 1482 and/or U.L. 737 as appropriate. Used stoves may be approved by the building department or the fire department. Every solid fuel-burning room heater shall bear a permanent and legible factory-applied label containing at least the following information:

1. Manufacturer's name and trademark
2. Model and/or identification number of the appliance
3. Type of fuel(s) approved
4. Testing laboratory's name or trademark and location
5. Date tested
6. Clearance to combustibles
   a. Side
   b. Rear
7. Test standard
8. Label serial number

Second: Existing chimneys should be checked for the presence of a flue liner and general structural condition. A smoke test may be used to determine if the draft is adequate, if the flue is without obstruction and if there is any smoke leakage. A visual inspection of the chimney is needed to check for creosote deposits, surface cracks or breaks, and if the damper is in good working order. The following two areas related to the chimney are important to inspect. The area where the chimney penetrates through the floor of ceiling joists should be checked to be sure that there is at least two inches clearance between combustible materials and the chimney.

Third: Chimneys and chimney connectors shall be installed with the required clearances (see installation clearance table). The connector should be sloped upwards toward the chimney and the connections overlapped upward to prevent creosote leakage. A two inch clearance shall be maintained where insulated pipe penetrates a combustible wall, unless it is tested and approved for lesser clearances.

A non-combustible hearth must be provided. Most stoves have legs and allow air to pass below; if the legs are not present, and air space below the con-combustible hearth must be provided. Clearances vary with circulating and radiant stoves. In general, a non-combustible shield should be installed with ventilation behind it for lesser clearances, no protection for large clearances, and if the wall is a concrete foundation wall, a minimum distance may be allowed.

STANDARDS

Test procedures have been developed by Underwriter Laboratories and the Canadian Standards Association for testing of different types of solid fuel appliances and chimneys. The standards are as follows:

U.L. 103 – FACTORY BUILD CHIMNEYS:
Concerns residential type chimneys used I conjunction with gas, liquid and solid fuel appliances.

U.L. 127 – FACTORY BUILD FIREPLACES:
Concerns metal fireplaces, consisting of fire chamber, chimney, and related parts designed to be built into a wall.

U.L. 737 – FREE STANDING FIREPLACES:
Concerns fireplaces which are free standing fire chamber assemblies. These units are typically made of lighter weight metal and have open fire chambers which cannot be closed.

U.L. 1482 – WOOD AND COAL BURNING STOVES:
Concerns room heaters which are free standing fire chamber assemblies of the circulating or direct radiation type.

C.S.A. B366-M1979 – SOLID & LIQUID FUELD CENTRAL HEATING APPLIANCES:
Wood, coal, and oil burning hot water or hot air central heating appliances.

U.L. – Underwriter's Laboratories
C.S.A. – Canadian Standards Association
A.S.M.E. – American Society of Mechanical Engineers (Any type of water pressure vessel should bear a stamp from this organization.)

1. **CUMBUSTION AIR:** Most homes have some degree of infiltration, but in cases where the building is so airtight that normal infiltration does not occur, provisions for combustion air may need to be provided.
2. **HEARTH:*** The solid fuel burning appliance shall be mounted on a hearth of masonry or other non-combustible materials with not less than one-hour fire resistance and shall extend twelve (12") inches beyond the appliance on all sides and eighteen (18") inches on the fuel and ash access side.
   *Note: The non-combustible hearth shall be permanently installed on the finished floor or sub-floor.
3. **DAMPER:** A damper of No. 12 steel (.11 in., Birmingham or subs gauge) is requires within the stove installation.
4. **USED SOLID FUEL ROOM HEATERS:** All used stoves shall be inspected by the Building Department or Fire Department, and approved prior to issuance of the installation permit. Existing used stoves should be checked for the following: a) cracks and gaps I the body; b) loose welds or cement; c) thin spots; d) rust or corrosion; e) inoperable moving parts (.e. damper, doors, vents, etc.)
5. **CLEARANCES:** All solid fuel burning stoves shall be installed with the specified minimum or reduced clearances or manufacturer's clearances as laboratory tested.
6. **FIREPLACE INSTALLATION:**
   A. Fireplace stove – adapted or designed for installation into the face of a fireplace. (Figure 9.1)
   B. There are problem areas to be considered when connecting directly into the removed damper or with a non-combustible fireplace closure. The removed damper method may have problems with condensation build-up which results in pipe deterioration. The fireplace closure may have draft and excessive creosote build-up problems caused by the large volume of cold air in the fire chamber. A third method (not illustrated here) is to install the stove connector into the wall above the fireplace so that it enters directly into the flue. (Figures 9.3 & 9.4)
   C. Fireplace inserts* (Figure 9.2)
   *Note: Hearth must adhere to the same requirements as when installing a stove in a room.
7. **CHIMNEYS:**
   A. Clean outs: Every flue shall be provided with a clean out and a tight fitting cover.
   B. Cap: It is recommended that all chimneys have caps and spark arresters.
   C. Height: Chimneys shall extend at least three (3) feet above the highest point where they pass through the roof of a building and at least two (2) feet higher than the portion of a building with ten (10) feet. These are minimum design standards, the chimney must be of adequate height and area to provide proper draft (see installation checklist).
   D. Masonry: Masonry chimneys shall be constructed in an approved manner of solid masonry units or reinforced concrete. Every masonry chimney shall have an approved flue liner. Required clearances shall be maintained from combustible construction. Existing unlined chimneys shall have approved flue liners installed.

E. Factory Built: Single wall pipe shall not be used as a chimney. Exterior and interior chimney shall have a clearance of not less than two (2") inches from combustible construction, or shall be installed to manufacturer's recommended clearances, according to test results. Factory built chimneys shall be tested and labeled showing compliance to U.L. Standard 103.

8. **CONNECTOR PIPE:** The connector pipe may only be used within the room where it originates from the solid fuel appliance. The area of the connector shall not be less than that of the appliance's smoke outlet. The maximum length of the connection run shall not exceed 75% of the total chimney height. The connector shall slope down away from the chimney a minimum of ¼" per foot. Chimney and connector sections shall be installed so that the pipe joints overlap with the upper pipe placed snuggly into the lower pipe.

INSTALLATION

The installation of any woodburning stove and chimney must conform to these provisions of the Massachusetts State Building Code or maufacturerers' recommended procedures (as required by the lab tested requirements).

1. PERMIT: A permit must be secured prior to installation of a woodburning stove. The application for the permit shall be accompanied by a list of components to be assembled and a diagrammatic sketch of the planned installation.

2. LABEL: Every new woodburning stove to be installed in Massachusetts must be labeled as having been tested (see standards) by a laboratory accredited by the State Building Code Commission.

3. CHIMNEY (General): Every woodburning stove shall be connected to either an existing chimney or a new chimney. All chimneys shall be secured at each floor level or at least every 10'-0" and adequately supported. All spaces between chimneys, floors, and ceilings shall be firestopped to a depth of two (2") inches.