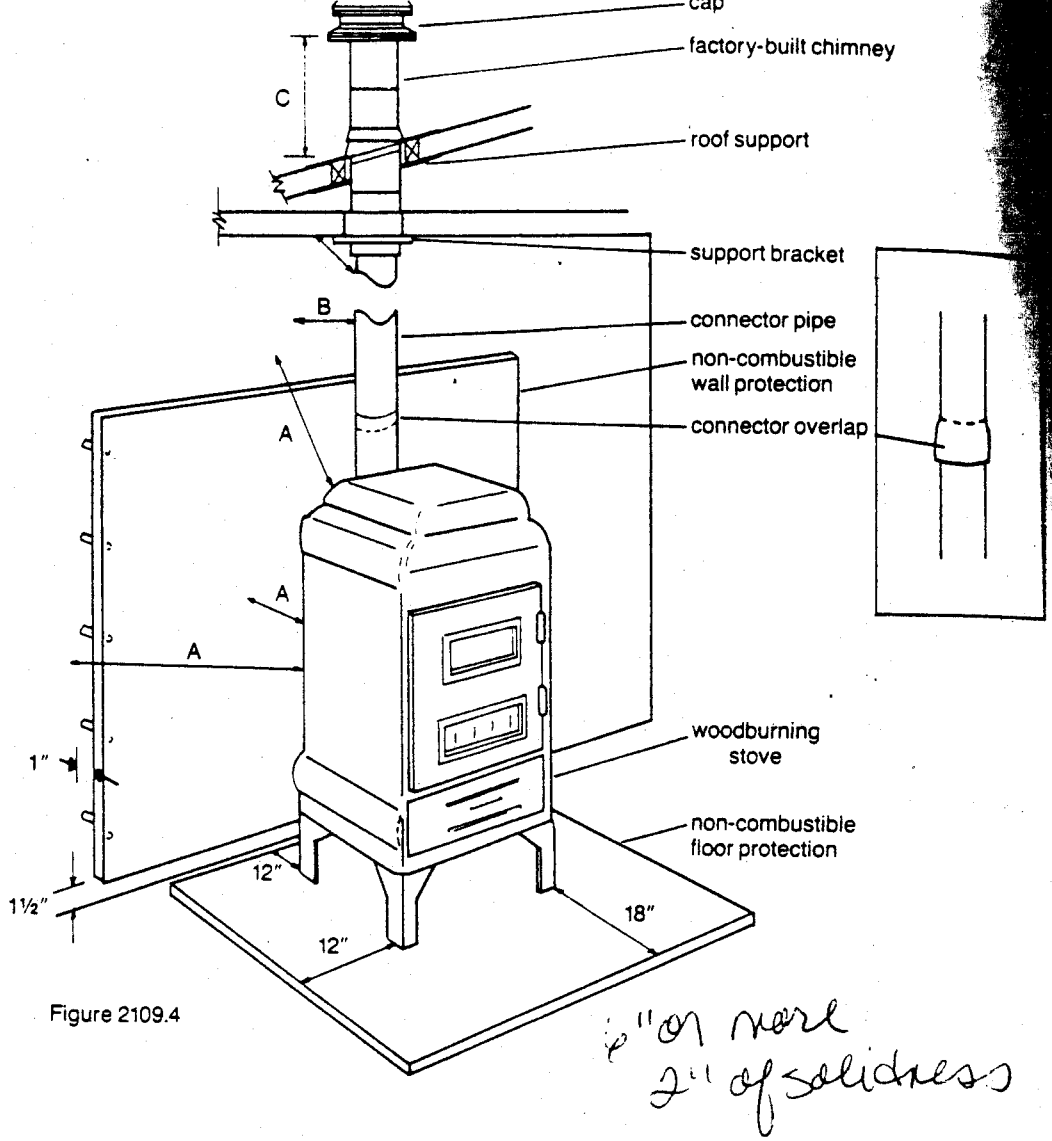


Figure 2109.4

Figure 2109.4
STOVE INSTALLATION CLEARANCES

Stove Components	Combustible Material	½" Asbestos Millboard Spaced Out 1" 2.	Concrete/Masonry Foundation Wall	Spaced Out 1" 4" Brick Veneer
Radiant Stove 1. —Front	36"	—	—	—
Circulating Stove 1. —Front	24"	—	—	—
A. Radiant Stove 3. —Side/Back/Top	36"	18"	6"	18"
A. Circulating Stove —Side/Back/Top	12"	6"	6"	6"
B. Single Wall Connector Pipe	18"	12"	6"	8"
B. Insulated Connector Pipe	2"	2"	2"	2"
C. Chimney Height (Metal or Masonry)	Three (3) feet above adjacent roof and two (2) feet above any roof ridge within 10 feet			
D. Damper	If a damper is not included in the stove construction, it must be installed in the connector pipe.			

1. Front: Fuel or ash access side.
2. Non-combustible spacers required.
3. Clearances on each side of a radiant stove with a heat shield shall be measured as if a circulating type.

Note: Clearances shall be measured perpendicular to stove body.
Laboratory verified test clearances permitted.

WINTER FIRE SAFETY TIPS FOR THE HOME

The high cost of home heating fuels and utilities have caused many Americans to search for alternate sources of home heating. The use of wood burning stoves is growing and space heaters are selling rapidly, or coming out of storage. Fireplaces are burning wood and man-made logs.

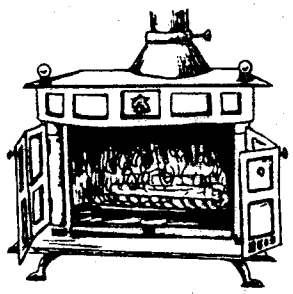
All of these methods of heating may be acceptable. They are however, a major contributing factor in residential fires. Many of these fires can be prevented. The following fire safety tips can help you maintain a fire safe home this winter.

KEROSENE HEATERS

- Be sure your heater is in good working condition. Inspect exhaust parts for carbon buildup. Be sure the heater has an emergency shut off in case the heater is tipped over.
- Never use fuel buring appliances without proper room venting. Burning fuel (kerosene, coal or propane, for example) produces deadly fumes.
- Use *ONLY* the fuel recommended by the heater manufacturer. ***NEVER*** **introduce a fuel into a unit not designed for that type fuel.**
- Keep kerosene, or other flammable liquids stored in approved metal containers, in well ventilated storage areas, outside of the house.
- ***NEVER*** fill the heater while it is operating or hot. When refueling an oil or kerosene unit, avoid overfilling. Use caution with cold fuel for it may expand in the tank as it warms up.
- Refueling should be done outside of the home (or outdoors).
- Keep young children safely away from space heaters--especially when they are wearing nightgowns or other loose clothing that can be easily ignited.
- When using a fuel burning appliance in the bedroom, be sure there is proper ventilation to prevent a buildup of carbon monoxide.

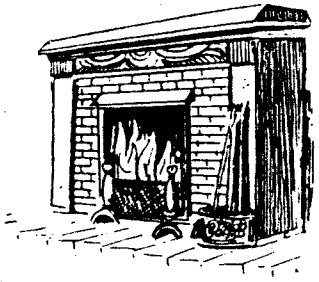
WOOD STOVES AND FIREPLACES

Wood stoves and fireplaces are becoming a very common heat source in homes. Careful attention to safety can minimize their fire hazard.



To use them safely:

- Be sure the stove or fireplace is installed properly. Woodstoves should have adequate clearance (36") from combustible surfaces, and proper floor support and protection.
- Woodstoves should be of good quality, solid construction and design, and should be UL listed.
- Have the chimney inspected annually and cleaned if necessary, especially if it has not been used for some time.
- Do not use flammable liquids to start or accelerate any fire.
- Keep a glass or metal screen in front of the fireplace opening, to prevent embers or sparks from jumping out, unwanted material from going in, and help prevent the possibility of burns to occupants.



- The stove should be burned hot twice a day for 15-30 minutes to reduce the amount of creosote buildup.
- Don't use excessive amounts of paper to build roaring fires in fireplaces. It is possible to ignite creosote in the chimney by overbuilding the fire.
- Never burn charcoal indoors. Burning charcoal can give off lethal amounts of carbon monoxide.
- Keep flammable materials away from your mantel. A spark from the fireplace could easily ignite these materials.
- Before you go to sleep, be sure your fireplace fire is out. ***NEVER*** **close your damper with hot ashes in the fireplace.** A closed damper will help the fire to heat up again and will force toxic carbon monoxide into the house.
- If synthetic logs are used, follow the directions on the package. Never break a synthetic log apart to quicken the fire or use more than one log at a time. They often burn unevenly, releasing higher levels of carbon monoxide.

TOWN OF FRANKLIN

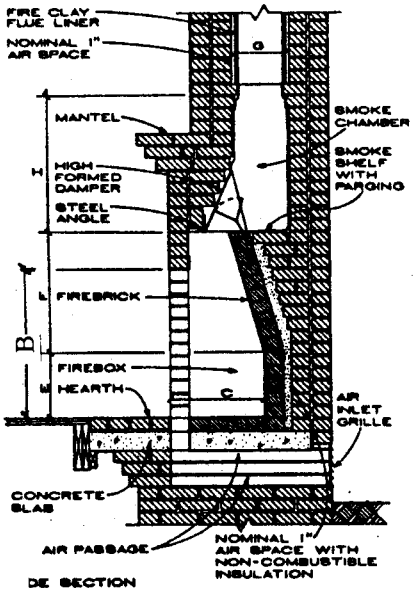
INSPECTION DEPARTMENT

Building Inspection - Division of Wires - Division of Gas
Division of Plumbing - Sealer of Weights & Measures

MUNICIPAL BUILDING — 150 EMMONS STREET
FRANKLIN, MASSACHUSETTS 02038

Phone: 520-4926

Allan B. Fraser C.B.I., C.P.C.A.
Building Commissioner



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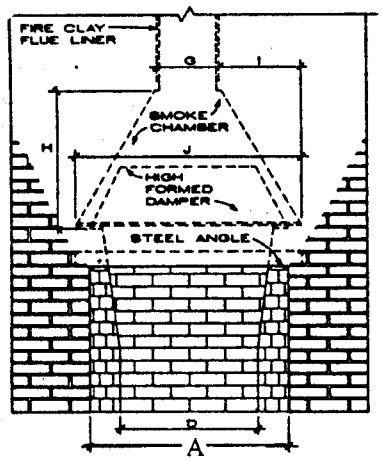
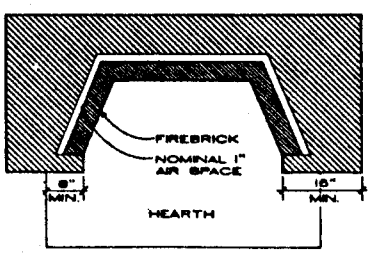


FRONT ELEVATION



LAN

SINGLE FACE FIREPLACE

SINGLE FACED FIREPLACES

The design of single faced fireplaces has been well documented, thus a reasonably accurate set of design dimensions of fireplace openings, dampers and flue linings has been developed.

Single faced fireplaces can be efficient radiant heaters. The amount of heat radiated and reflected into the room is directly proportional to the masonry surface area exposed to the fire. The Rumford fireplace is a variation of the single faced fireplace with a shallow firebox, a high throat, and widely splayed sides, all features for optimal direct radiant heating.

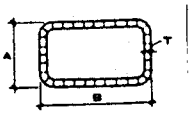
In addition, the energy efficiency of new fireplaces can be improved by:

1. Placing the fireplace on the interior of the house, preferably as close to the center as possible.
2. Supplying outside air for combustion and maintenance of positive room pressure.
3. Providing glass screens to prevent unwanted air infiltration.

RECOMMENDED DIMENSIONS FOR WOOD BURNING FIREPLACES (IN.)

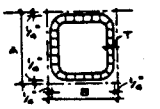
TYPICAL FIREPLACES

FIREPLACE OPENINGS			BACKWALL (INCLINED)			FLUE LINING (OUTSIDE DIM.)	SMOKE CHAMBER		
A	B	C	D	E	F	G	H	I	J
24	24	16	11	14	18	8 x 12	19	10	32
28	24	16	15	14	18	8 x 12	21	12	36
30	29	16	17	14	23	12 x 12	24	13	38
36	29	16	23	14	23	12 x 12	27	16	44
42	32	16	29	14	26	16 x 16	32	17	50
48	32	18	33	14	26	16 x 16	37	20	56
54	37	20	37	16	29	16 x 16	45	26	68
60	37	22	42	16	29	16 x 20	45	26	72
60	40	22	42	16	31	16 x 20	45	26	72
72	40	22	54	16	31	20 x 20	56	32	84



RECTANGULAR FLUE LINING (STANDARD)

AREA (SQ IN.)	A	B	T
51	8 1/2"	8 1/2"	5/8"
79	8 1/2"	13"	3/4"
108	8 1/2"	18"	7/8"
125	13"	13"	7/8"
168	13"	18"	7/8"
232	18"	18"	1 1/8"
279	20"	20"	1 3/8"
338	20"	24"	1 1/2"
420	24"	24"	1 1/2"



RECTANGULAR FLUE LINING (MODULAR)

AREA (SQ IN.)	A	B	T
57	8"	12"	3/4"
74	8"	16"	7/8"
87	12"	12"	7/8"
120	12"	16"	1"
162	16"	16"	1 1/8"
208	16"	20"	1 1/4"
262	20"	20"	1 3/8"
320	20"	24"	1 1/2"
385	24"	24"	1 5/8"

REQUIRED FIREPLACE DIMENSIONS:

A. = _____ INCH'S

B. = _____ INCH'S

FLUE SIZE = _____

3408.7.4.5 Smoke chamber: All walls, including back walls, shall be at least eight (8) inches in thickness.

3408.3.2.6 **Termination (height):** Masonry 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 any portion of a building within ten (10) feet.

3408.7 Fireplaces

3408.7.1 General: Fireplaces, barbecues, smoke chambers and fireplace chimneys shall be of solid masonry or reinforced concrete or other approved materials, and shall conform to requirements of this section.

3408.7.2 Construction: Structural walls of fireplaces shall be at least eight (8) inches thick. Where a lining of low duty refractory brick (ASTM C64) or the equivalent, at least two (2) inches thick laid in fire clay mortar (ASTM C105, medium duty), or the equivalent, or other approved lining is provided, the total thickness of back and sides, including the lining, shall be not less than eight (8) inches. Where such lining is not provided, the thickness of back and sides shall be not less than twelve (12) inches. The firebox shall be twenty (20) inches in depth and will be permitted to be open on all sides, provided all fireplace openings are located entirely within one (1) room. All fireplaces shall have a tight fitting flue damper with a readily accessible control.

Exception: When the functional design of a fireplace requires a firebox depth of less than twenty (20) inches, hearth extensions as outlined in Section 3408.7.7 shall be increased. The combined dimension of firebox and hearth extension shall not be less than thirty-six (36) inches.

Before Buying, Building or Renting - Check Zoning!