
Building Permits	Building permits are required for all fireplaces.
Permit Fees	Fireplace permits are set fee of \$100.00, plus \$1.00 state surcharge
Plan Requirements	The permittee must submit two (2) copies of plans and specifications for each unit installed. If installing a fireplace, a floor plan and construction details denoting materials, sizes and location is required.

Masonry Fireplace Requirements

- Footings - 12 inches thick; 6-inch projection; 3,000 lb. concrete
- Wall Thickness - Firebox 8 inches on all sides with lining. 10" minimum when no lining is provided. chimney 4-inch
- Firebox Depth - 20 inches
- Firebrick - 2-inch minimum depth; 1/4-inch maximum joint
- Flue Size - 1/10 (one-tenth) of fireplace opening for square or rectangular flues; 1/12 (one-twelfth) of fireplace opening for round flues;
- Dampers - Minimum of 12-gauge steel. When fully opened, damper openings shall be not less than 90% of the required flue area.
- Hearths- For fireplace openings less than 6 (six) square feet; 6-inch front projection, 8-inch side projection, 4-inch thick. For fireplace openings 6 (six) square feet or larger; 20-inch front projection, 12-inch side projection, 4-inch thick.
- Clearances to Combustibles - Two inches - (Combustible material may not be placed within 2 inches of fireplace, smoke chamber or chimney walls.)
- Combustibles Around Fireplace Openings - 6 inches minimum; within 12 inches, combustible materials may project 1/8-inch for each 1-inch of clearance from opening.
- Chimney Liners - Must be carefully bedded in mortar with close fitting joints, left smooth on the inside. Mortar must be refractory mortar complying with ASTM C105 or an approved equivalent.

Factory-Built Requirements

- All factory-built heating appliances, chimneys and terminations must be listed by an approved testing agency and installed in accordance with their listing. Manufacturers' installation instructions must be adhered to and available for inspector at inspection.
- All chimneys shall terminate three feet (3') above the highest point where they pass through the top of a combustible chase or the roof of a building and be at least two feet (2') above all portions of any building within ten feet (10'). EXCEPTION: If the chimney is part of a listed assembly with an approved termination assembly and the listing allows a reduction of the three-foot (3') requirement, the assembly may be installed in accordance with its listing.

Installation of Gas Logs, Lighters and Fireplaces

Gas Logs

- Chimney may be masonry or class B.
- The damper must be blocked part way open.
- An approved gas valve is required within three feet of the fire box area.
- The gas pipe may be of copper or iron in the firebox area. Pipe passing through concrete or masonry must be sleeved or be suitably coated against corrosion. No concealed joints in iron pipe.
- The gas log unit must be approved and listed with A.G.A., U.L. or another approved testing company and installed as per manufacturers' installation instruction.
- The entire gas line must be air pressure tested at 25 lbs. for 12 hours.
- If not already present, a means must be provided to supply the firebox with combustion air.

Gas Log Lighters

- The gas log lighter must be approved and listed with A.G.A., U.L. or another approved test company.
- An approved gas valve is required within three feet of the firebox area.
- Only iron pipe may be used in the firebox area. No bends or concealed joints in the pipe. All pipe passing through concrete or masonry must be sleeved or suitably coated against corrosion.
- The entire gas line must be air pressure test at 25 lbs. for 12 hours.

Zero Clearance Gas Fireplaces

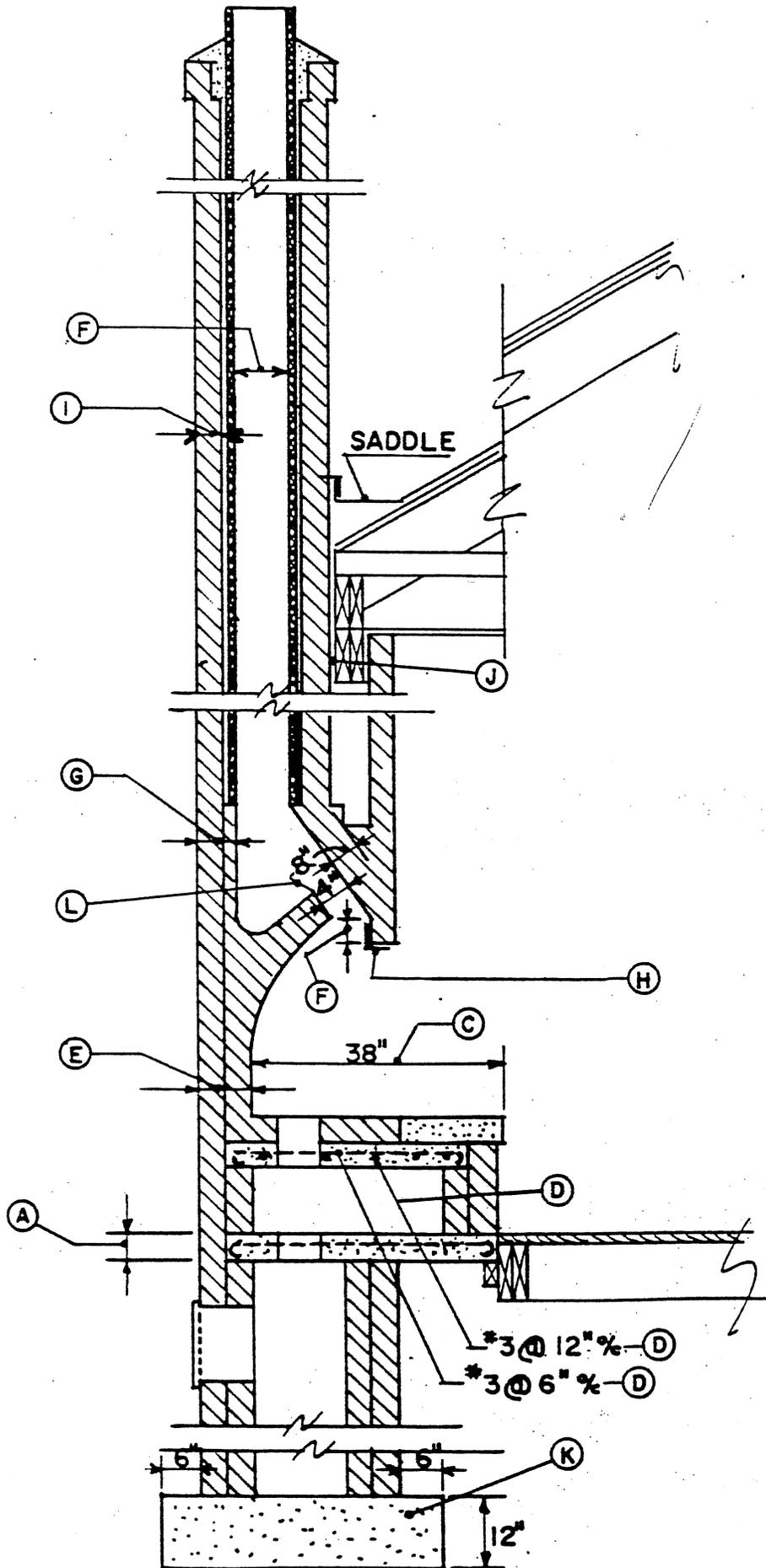
- All zero clearance gas fireplaces must be of the approved type, tested and listed with an approved agency such as A.G.A., U.L., Warnock Hersey etc. If there is no approval label on the fireplace it will not pass inspection.
- All zero clearance fireplaces must be installed exactly per their installation instructions.
- All fireplace chases must be insulated, polyed and sheetrocked on all fours inside walls up to the first firestop(10 feet max)
- A solid $\frac{3}{4}$ inch piece of plywood or particle board or $\frac{5}{8}$ inch sheetrock may be used at required firestops. Flue chases must be firestopped at each floor-ceiling assembly or at 10 foot maximum intervals up the chase.
- Combustion air supply is required per each fireplace listing and the mechanical code. Combustion air supply outlets must be 12 inches minimum above the exterior finished grade.
- A minimum clearance to combustibles from a class "B" flue is one inch. The minimum clearance to combustibles for a class "A" (solid fuel burning flue) flue is two inches. Install all flue with clearances as required by the manufacturer.
- Do not blanket or fill around the fireboxes with insulation unless the installation instructions require it.
- Hearths and mantles must be installed in accordance with installation instructions.
- An approved gas valve must be installed within three feet of all gas appliances. The valve must be fully accessible.

Inspections

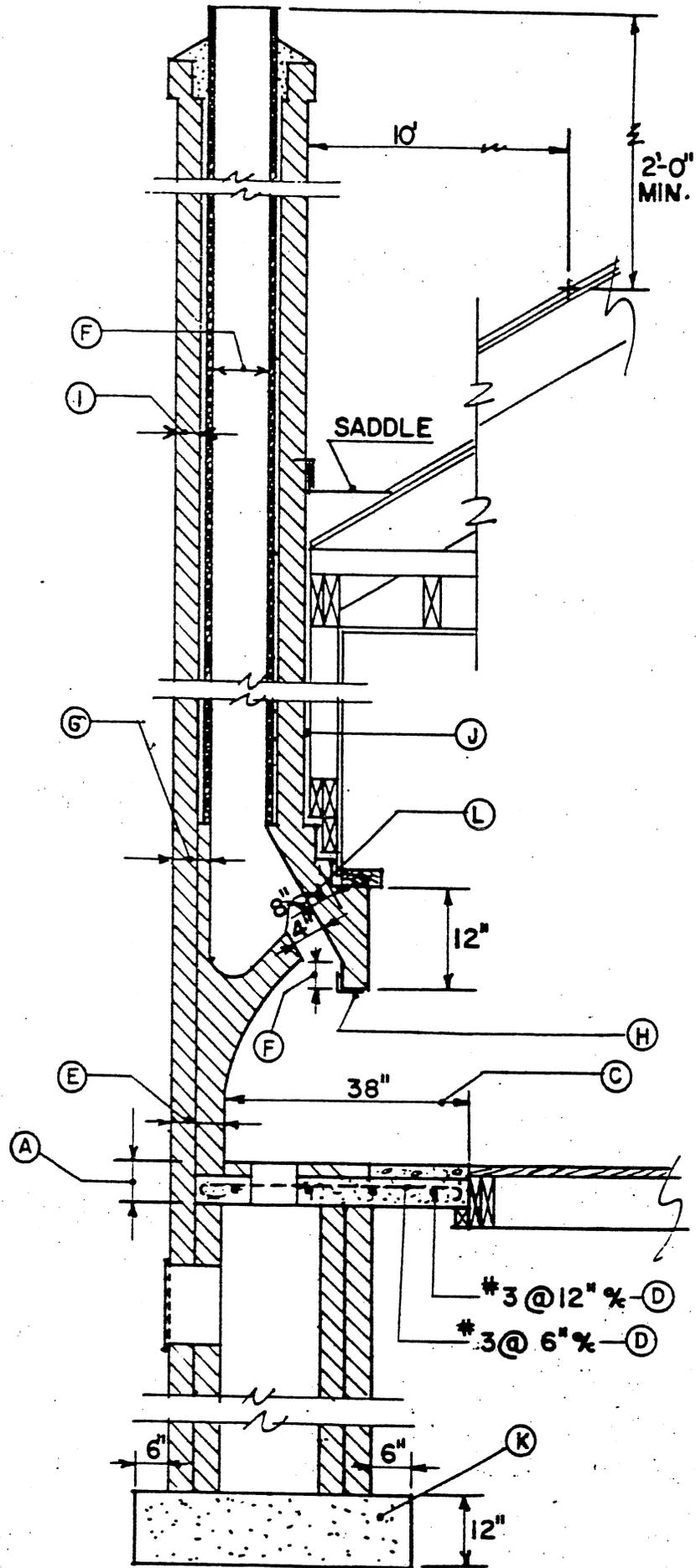
Verify the type and amount of inspections necessary for each type of appliance installation with the inspector. Do not conceal any work prior to inspection and approval.

GENERAL CODE REQUIREMENTS

ITEM	LETTER	INTERNATIONAL RESIDENTIAL CODE
Hearth Slab Thickness	A	4"
Hearth Slab Width (Each side of Opening)	B	8" < 6 sq. ft. or 12" ≥ 6 sq. ft.
Hearth Slab & Firebox Dimensions	C	38" (minimum total dimension) Every masonry fireplace shall be provided with a brick, concrete, stone, or other approved non-combustible earth slab at least 12" wider on each side than the fireplace opening and projecting at least 18" therefrom.
Hearth Slab Reinforcing	D	Reinforced to carry its own weight and all imposed loads. See diagram for specifications.
Thickness of Wall of Firebox	E	10" solid brick or 8" where a firebrick lining is used.
Distance from Top of Opening to Throat	F	8"
Smoke Chamber Area	G	
Rear Wall - Thickness		8"
Front & Side Wall - Thickness		8"
Fireplace Lintel	H	Incombustible material
Walls with Flue Lining	I	4" minimum from flue lining to outside face of chimney.
Clearances - Wood Frame and Combustible Material	J	Combustible material shall not be placed within 2" of fireplace, smoke chamber, or chimney walls. Combustible material shall not be placed within 6" of fireplace opening. No such combustible material within 12" of fireplace opening shall project more than 1/8" for each 1" clearance from such opening.
Above Roof	and	Not less than 3' above the point where the chimney passes through the roof or 2' at 10' (2' above the roof that is 10' away from chimney.)
Footing Thickness	K	12" minimum
Width		6" each side of fireplace wall
Damper	L	Refer to contractor note 2.



CHIMNEY SECTION RAISED HEARTH

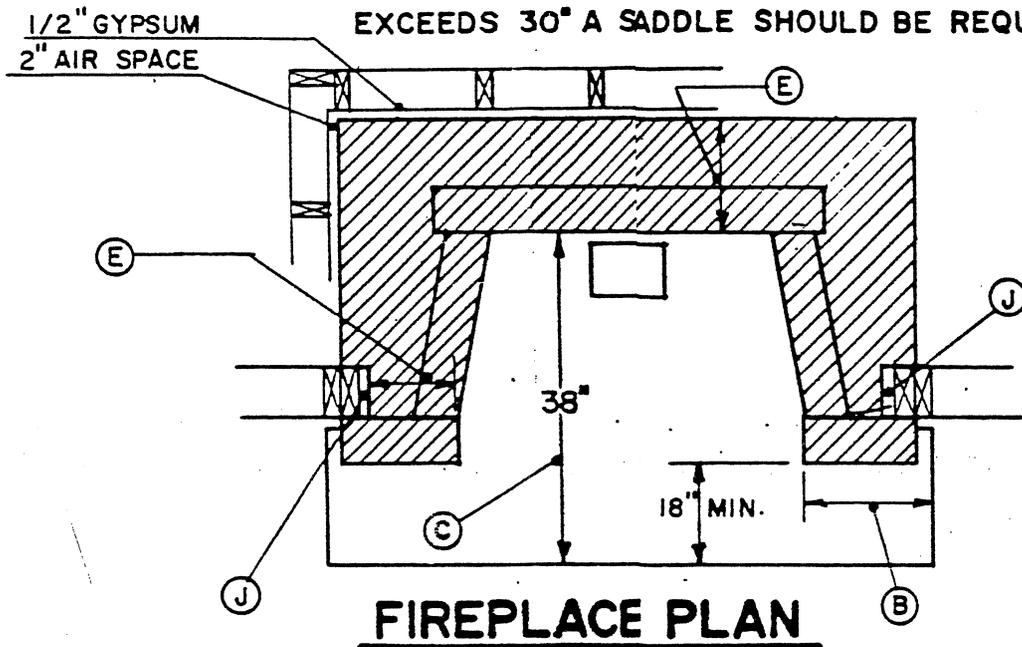


CHIMNEY SECTION FLUSH HEARTH

CONTRACTOR NOTE: 1. WHEN BUILDING STONE OR BRICK ARCHED FIREPLACES, MAKE DIMENSIONAL PROVISIONS FOR FUTURE INSTALLATION OF GLASS DOORS AND FIRE SCREENS. FOR GLASS DOORS, A 1" OVERLAP ON EACH SIDE IS RECOMMENDED.

2. DAMPER - SHALL BE INSTALLED TO CONFORM TO MANUFACTURER RECOMMENDATIONS.

3. FLASHING - ALL FIREPLACE CHIMNEYS SHALL BE PROPERLY FLASHED, WHEN CHIMNEY WIDTH EXCEEDS 30" A SADDLE SHOULD BE REQUIRED.



4. IN SITUATIONS WHERE IT IS NOT PRACTICAL TO MEET HEIGHT REQUIREMENT (ABOVE ROOF), A CHIMNEY CAP IS RECOMMENDED. THE CHIMNEY CAP SHOULD BE A DISTANCE ABOVE THE TOP OF THE FLUE EQUAL TO THE WIDTH OF THE FLUE.

NOTES: 1. DISTANCE BETWEEN ADJACENT FLUES - 4" INCLUDING FLUE LINER.

2. EFFECTIVE FLUE AREAS (BASED ON AREA OF FIREPLACE OPENING)

- ROUND LINING - 1/2" OR 50 SQ. IN. MINIMUM
- RECTANGULAR LINING - 1/4" OR 64 SQ. IN. MINIMUM
- UNLINED, OR LINED WITH FIREBRICK - 1/8" OR 100 Q. IN. MINIMUM