



CONSTRUCTION PERMIT APPLICATION

I. IDENTIFICATION

1. Proposed Work at: 106 Grove Street
2. Owner Name: Frederick Chesterman Tel. () 899-1695
Address 106 Grove Street Bay Head, NJ 08742
3. Principal Contractor: Joe Chadwick Tel. ()
Address 445 W. LAKE AVE. Bay Head, NJ 08742
- Lic. No. or Builder Reg. No. _____ Federal Emp. No. _____
4. Architect or Engineer: _____ Tel. () _____
Address _____
5. Responsible Person in Charge of Work _____ Tel. () _____

II. PROPOSED WORK

A. TYPE OF WORK

1. ☐ Minor Work (Single Trade)
2. ☐ Small Job (\$5,000 and no Prior Approvals)
Complete only II.B., III and IV.A. and Page 2
3. ☐ New Building
4. ☒ Addition
5. ☒ Alteration
6. ☐ Repair, Replacement
7. ☐ Demolition
8. ☐ Other: _____

B. CATEGORIES OF WORK

Permit/Category	Estimated
1. ☐ Building/Structural	\$ _____
2. ☐ Plumbing	_____
3. ☐ Electrical	_____
4. ☒ Fire Protection	<u>1000.00</u>
5. ☐ Other _____	_____
6. ☐ Other _____	_____
TOTAL COST	\$ <u>1000.00</u>

C. DO YOU WANT:

1. ☐ Partial Releases 2. ☐ Prototype Processing

D. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Dumbwaiters
2. ☐ High-Pressure Boilers
3. ☐ Refrigeration Systems
4. ☐ Pressure Vessels
5. ☐ Hazardous Uses/Places of Assembly
6. ☐ Cross-connections/Backflow Preventors
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells

III. DESCRIPTION OF BUILDING USE (USE GROUPS)

A. RESIDENTIAL

1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
HMD Reg. No.: _____
3. ☐ Two Family (R-3b)
4. ☒ One-Family (R-3a)

If new construction, enter no. of dwelling units _____

If other than new construction, enter no. of dwelling units: _____

Before Construction: _____

After Construction: _____

Net Gain (or loss): _____

B. NON-RESIDENTIAL

5. ☐ Theatres with Stage (A-1-A)
6. ☐ Movie Theatres (A-1-B)
7. ☐ Night Clubs (A-2)
8. ☐ Restaurants, Libraries, Museums (A-3)
9. ☐ Religious Assembly (A-4)
10. ☐ Outdoor Assembly (A-5)
11. ☐ Business (B)
12. ☐ Educational (E)
13. ☐ Moderate-Hazard Factory (F-1)
14. ☐ Low-Hazard Factory (F-2)
15. ☐ High-Hazard (H)
16. ☐ Institutional Detention Center (I-1)
17. ☐ Hospitals, Infirmarys (I-2)
18. ☐ Group Homes (I-3)
19. ☐ Mercantile (M)
20. ☐ Moderate-Hazard Warehouse (S-1)
21. ☐ Low-Hazard Warehouse (S-2)
22. ☐ Temporary, Misc. (U)
23. ☐ Other _____

State Specific Use: _____

If Change in Use Group, Indicate Former: _____

00150 040717
19890111 SF



* 0 0 0 1 J S 5 V *

IV. BUILDING CHARACTERISTICS

A. OWNERSHIP

1. ☒ Private (Individual, Corp., Non-profit Inst., Etc.)
2. ☐ Public (State, County or Local Govt.)

B. HEATING FUEL

Principal	Secondary	Type
3. ☐	☐	Gas
4. ☐	☐	Oil
5. ☐	☐	Electric
6. ☐	☐	Solid (Wood, Coal, Etc.)
7. ☐	☐	Propane
8. ☐	☐	Solar
9. ☐	☐	Other _____

C. TYPE OF SEWAGE DISPOSAL

10. ☐ Public or Private Company
11. ☐ Private (Septic Tank, Etc.)

D. TYPE OF WATER SUPPLY

12. ☐ Public or Private Company
13. ☐ Private (Well, Etc.)

E. BUILDING CHARACTERISTICS

14. No. of Stories _____
15. Height of Structure _____ Ft.
16. Area—Largest Floor _____ Sq. Ft.
17. Bldg. Area—All Fls. _____ Sq. Ft.
18. Volume of Structure _____ Cu. Ft.
19. Total Land Area Disturbed _____ Sq. Ft.

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION

I hereby certify that I am the owner of the property listed on Page 1. This dwelling is to be occupied by myself and is not to be used for any purpose, other than single family residential use.

- A. ☐ I further certify that I prepared the plans submitted. This statement is made in accordance with the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)vii.
- B. ☐ I further certify that I will perform the work below.
- B1. ☐ Building B2. ☐ Electrical B3. ☐ Plumbing
- C. ☐ I further certify that a new home will be constructed on this property, for my use and occupancy. I attest that all design, construction, plumbing, or electrical work will be done by me or by subcontractors under my supervision, in accordance with all applicable laws; and further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.A.C. 46:3B-1 et. seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.
- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

SIGNATURE _____ DATE _____

II. AGENT SECTION

I hereby certify that the work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☐ Check if contractor.

AGENT NAME _____ TEL.() _____

ADDRESS _____

SIGNATURE _____



CONSTRUCTION PERMIT

PERMIT NO. 89-111
DATE ISSUED 7-14-89
Block 45 Lot 7
Subdivision _____

A. IDENTIFICATION

Owner Fredrick Chesterman Agent Joe Chadwick
Address 106 Grove Address 445 W. Lake Ave.
Bay Head, N. J. 08742 Bay Head, N. J.
Tel. () 899-1695 Tel. () _____
Work Site Address Same Lic. No. _____
Federal Emp. No. _____

PAYMENTS

Permit Fee \$ 45.00
Fees Remitted \$ 45.00
☒ Check No. 9828
☐ Cash _____
☐ Other _____
Collected By: P.M.A.
Date: 7-14-89

is hereby granted permission
to perform the following work:

- ☐ BUILDING ☐ ELECTRICAL
☐ PLUMBING ☒ FIRE PROTECTION
☐ OTHER _____

Description of work:

S. D. Interconnected 1 egress
window each bedroom, fireplace

NOTE: If construction does not commence within one (1) year of date of issuance, or if construction ceases
for a period of six (6) months, this permit is void.

Estimated Cost of Work: \$ 1,000.00

William S. Cobb
CONSTRUCTION OFFICIAL *ama*



CONSTRUCTION PERMIT

PERMIT NO. 89-111
DATE ISSUED 7-14-89
Block 45 Lot 7
Subdivision _____

A. IDENTIFICATION

Owner Fredrook Chesterman Agent Joe Chadwick
Address 106 Grove Address 445 W. Lake Ave.
Bav Head. N. J. 08742 Bav Head. N. J.
Tel. () 899-1695 Tel. () _____
Work Site Address Same Lic. No. _____
Federal Emp. No. _____

PAYMENTS

Permit Fee \$ 45.00
Fees Remitted \$ 45.00
☒ Check No. 9828
☐ Cash
☐ Other _____
Collected By: P.M.A.
Date: 7-14-89

is hereby granted permission
to perform the following work:

- ☐ BUILDING ☐ ELECTRICAL
☐ PLUMBING ☒ FIRE PROTECTION
☐ OTHER _____

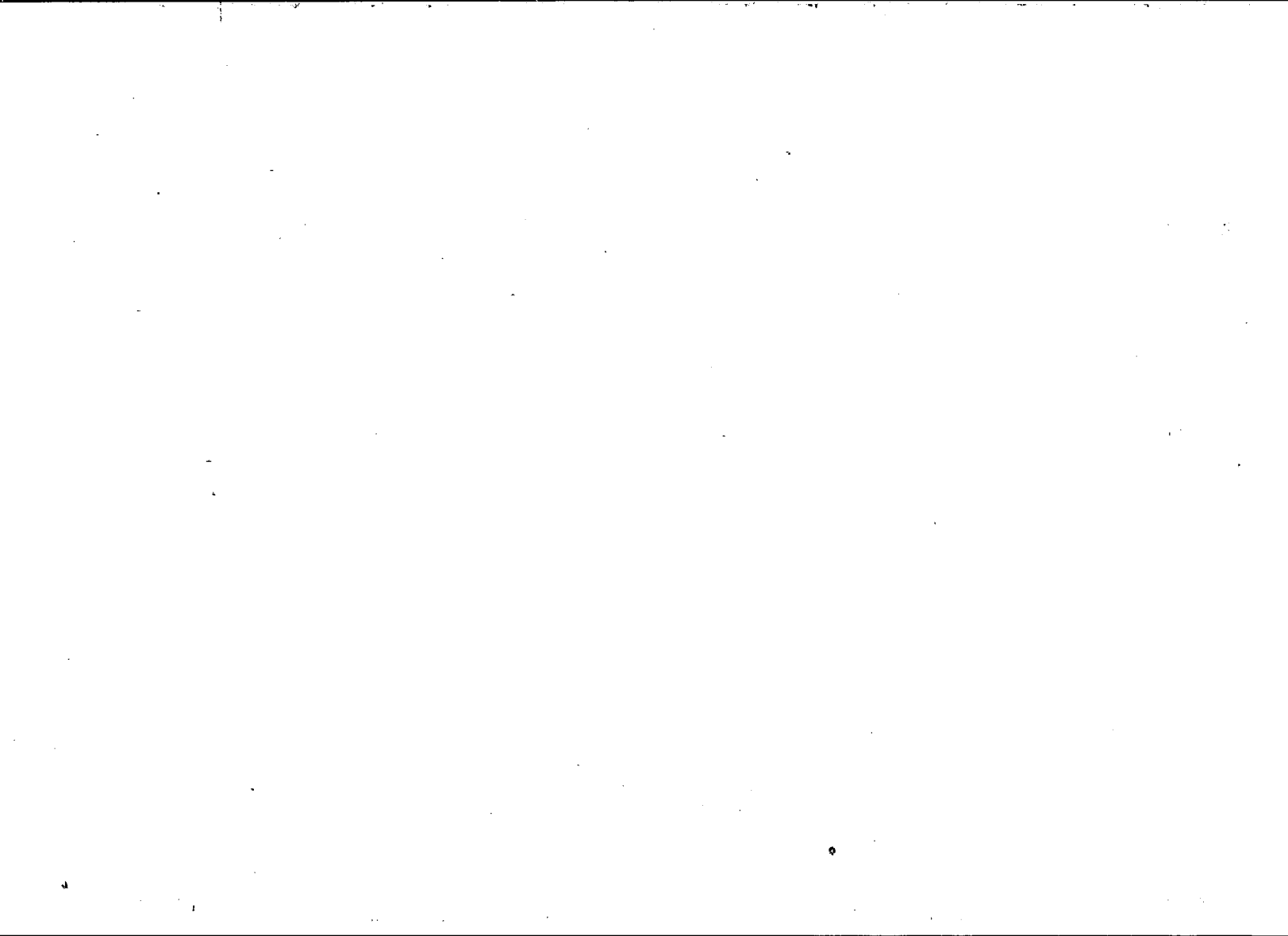
Description of work:

S?DD. Interconnected 1 egress
window each bedroom, fireplace

NOTE: If construction does not commence within one (1) year of date of issuance, or if construction ceases
for a period of six (6) months, this permit is void.

Estimated Cost of Work: \$ 1,000.00

William J. Colby
CONSTRUCTION OFFICIAL *WJC*





FIRE SUBCODE TECHNICAL SECTION



PERMIT NO. 7-1489
DATE ISSUED 89-111
REVISION DATE _____
Block 45 Lot 7
Subdivision _____

A. IDENTIFICATION

APPLICANT - Complete unshaded areas only

When changing contractors, notify this office

Owner Fredrich F Rosemary Chatterman
Address 106 Grove
Bay Head NJ 08742
Tel. () 899-1695
Work Site Address SAME

Contractor Joe Chadwick
Address 445 W. LAKE AVE.
Bay Head NJ 08742
Tel. () _____
Lic. No. _____
Federal Emp. No. _____

CERTIFICATION IN LIEU OF OATH:

(Complete for Minor Work and Small Job Only)

I hereby certify that the proposed work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.

Saul Oshur
AGENT SIGNATURE

B. TECHNICAL SITE DATA

B1. SPRINKLERS

TYPE: ☐ Wet ☐ Dry ☐ Other _____
Area Sprinkled: ☐ Full ☐ Partial (specify in comments)
No. of Heads: _____ No. of Spare Heads: _____
☐ Valves Supervised - Method: _____
Water Supply - Source: _____ Size: _____
FD Connection Location: _____
Estimated Cost of Work: \$ _____

FEE

B3. ALARM

TYPE: ☒ Manual ☒ Automatic
Supervision Type: ☐ Local ☐ Central
☐ Proprietary ☐ Remote Location
Estimated Cost of Work: \$ _____

FEE

B4. STAND PIPES

Pipe Size: _____ Pump Size: _____
Water Source: _____ Size: _____
FD Connection Location: _____
Hose Station: ☐ Yes ☐ No
Estimated Cost of Work: \$ _____

B2. SPECIAL SUPPRESSION SYSTEMS

TYPE: ☐ Dry Chemical ☐ CO₂
☐ Halon ☐ Foam
☐ Other _____
Manual Pull: ☐ Yes ☐ No
Locations: _____
Estimated Cost of Work: \$ _____

B5. OTHER

S.D. Interconnect \$ 15.00
1 Extinguishers \$ _____
Extinguishers \$ 30.00
Fire Place \$ _____
Subtotal \$ _____

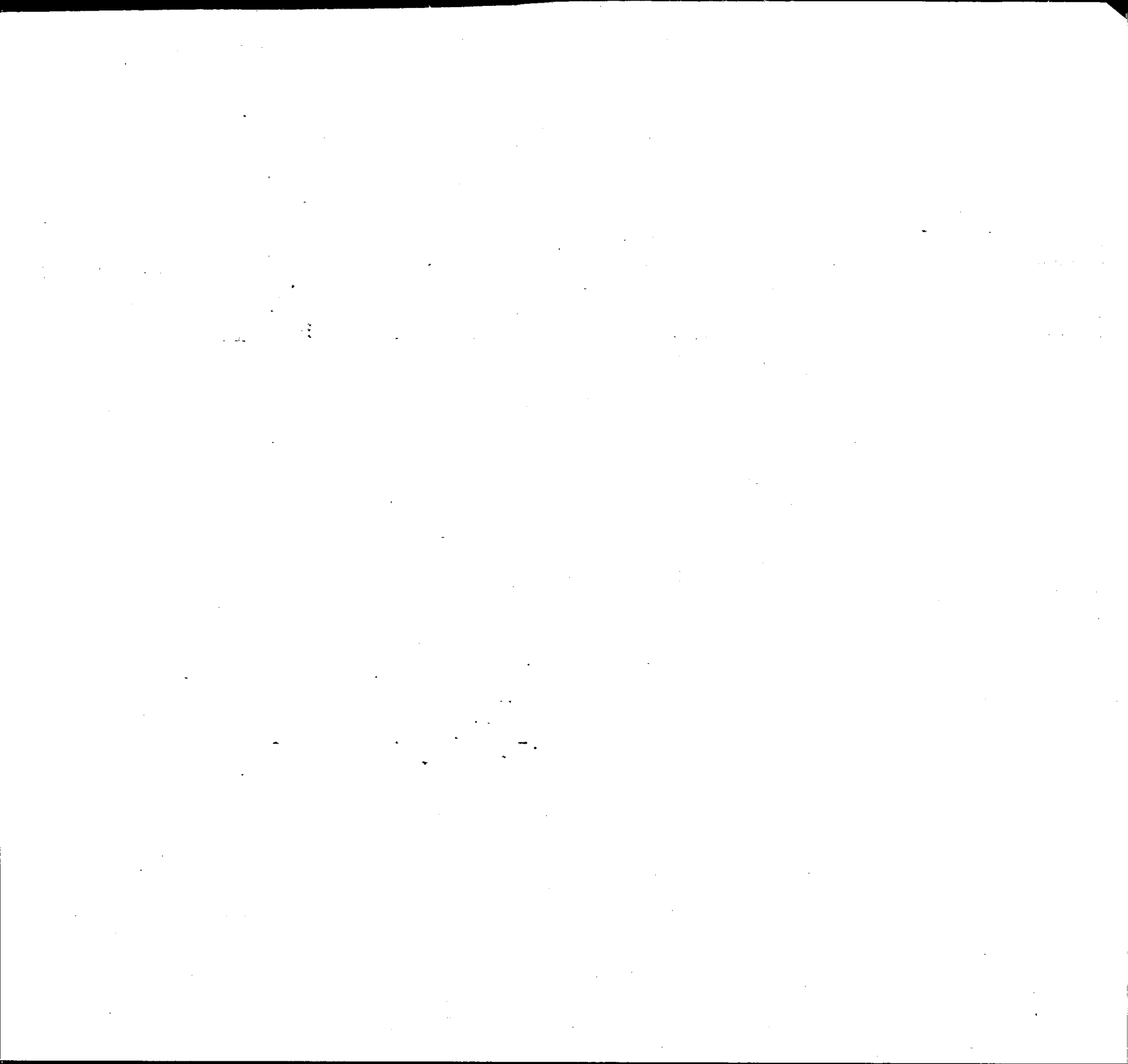
Minimum Fire Protection Fee (If Applicable)
Total Fire Protection Fee (Greater of Minimum or Subtotal)
\$ 45.00

C. FIRE PROTECTION CHARACTERISTICS

USE GROUP _____ Present _____ Proposed _____
Heating Systems - Location: _____
Type: ☐ Gas ☐ Oil ☐ Electrical ☐ Solar ☐ Other _____
Fuel Storage Tank - Location: _____ Fuel Type: _____ Capacity: _____
Total Estimated Cost of Fire Protection Work: \$ _____

D. COMMENTS

☐ Partial Releases ☐ Prototype Processing





FIRE SUBCODE TECHNICAL SECTION



PERMIT NO. 7-14-89
DATE ISSUED 89-111
REVISION DATE _____
Block 45 Lot 7
Subdivision _____

A. IDENTIFICATION

APPLICANT - Complete unshaded areas only

When changing contractors, notify this office

Owner Friedrich F Rossmann Chartered
Address 106 Grove
Rm. Head NJ 08792
Tel. () 981-1694
Work Site Address SAJME

Contractor Jac Chabwick
Address 445 W. LAKE HAVEN
Rm. Head NJ 08792
Tel. () _____
Lic. No. _____
Federal Emp. No. _____

CERTIFICATION IN LIEU OF OATH:

(Complete for Minor Work and Small Job Only)

I hereby certify that the proposed work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.

Paul C. Cline
AGENT SIGNATURE

B. TECHNICAL SITE DATA

B1. SPRINKLERS

TYPE: ☐ Wet ☐ Dry ☐ Other _____
Area Sprinkled: ☐ Full ☐ Partial (specify in comments)
No. of Heads: _____ No. of Spare Heads: _____
☐ Valves Supervised - Method: _____
Water Supply - Source: _____ Size: _____
FD Connection Location: _____
Estimated Cost of Work: \$ _____

FEE

B2. SPECIAL SUPPRESSION SYSTEMS

TYPE: ☐ Dry Chemical ☐ CO₂
☐ Halon ☐ Foam
☐ Other _____
Manual Pull: ☐ Yes ☐ No
Locations: _____

Estimated Cost of Work: \$ _____

B3. ALARM

TYPE: ☒ Manual ☒ Automatic
Supervision Type: ☐ Local ☐ Central
☐ Proprietary ☐ Remote Location
Estimated Cost of Work: \$ _____

FEE

B4. STAND PIPES

Pipe Size: _____ Pump Size: _____
Water Source: _____ Size: _____
FD Connection Location: _____
Hose Station: ☐ Yes ☐ No
Estimated Cost of Work: \$ _____

B5. OTHER

S.D. Interconnect
1 Brass Jumper
Sub. Jumper
Fire Place
Subtotal \$ _____
Minimum Fire Protection Fee (If Applicable) \$ _____
Total Fire Protection Fee (Greater of Minimum or Subtotal) \$ 45.00

C. FIRE PROTECTION CHARACTERISTICS

USE GROUP _____ Present _____ Proposed _____
Heating Systems - Location: _____
Type: ☐ Gas ☐ Oil ☐ Electrical ☐ Solar ☐ Other _____
Fuel Storage Tank - Location: _____ Fuel Type: _____ Capacity: _____
Total Estimated Cost of Fire Protection Work: \$ _____

D. COMMENTS

☐ Partial Releases ☐ Prototype Processing

PLAN REVIEW AND INSPECTION – FIRE

DATE _____

JOB CONDITION/COMMENTS[illegible]

JOB SUMMARY

- ☐ No Plans Required
☐ Plan Review Approved

Date: _____

Approved By: _____

INSPECTIONS FINAL

- ☐ CO ☐ CCO ☐ CA

Date: _____

Inspected By: _____

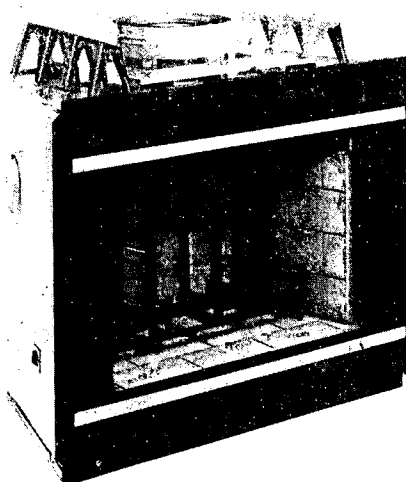
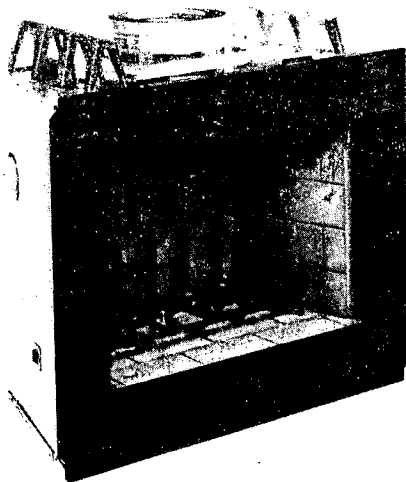
INSPECTIONS

Type	Failure Date			Approval Date
☐ Fire Suppression Test				
☐ Fire Alarm Test				
☐ Smoke Test				
☐ TCO				
☐ Other				
☐ Other				
☐ Other				
☐ Other				

Installation Instructions

*For Superior's
HCE Series
Models
HCE-3550
HCE-4050
And
HCE-4550*

*And Hearthstar
N Series
Models
35B-N
40B-N
And
45B-N*



*Standard HCE Includes Both
Black And Brass Trim Covers*

This installation manual will enable you to obtain a safe, efficient and dependable installation of your fireplace system. Please read and understand these instructions before beginning your installation.

Do not alter or modify the fireplace or its components under any circumstances. Any modification or alteration of the fireplace system, including but not limited to the fireplace, chimney components and accessories, may void the warranty, listings and approvals of this system and could result in an unsafe and potentially dangerous installation.

The name Superior is used synonymously with the name Hearthstar throughout this installation manual.

**PLEASE RETAIN THIS MANUAL FOR
FUTURE REFERENCE.**

**IMPORTANT! TO ASSURE PROPER ALIGN-
MENT OF GLASS DOORS: INSTALL THIS FIRE-
PLACE IN A SQUARE AND PLUMB CONDITION,
USING SHIMS AS NECESSARY AT SIDES AND/
OR BOTTOM.**



IMPORTANT!

PLEASE READ AND UNDERSTAND THESE RULES TO FOLLOW FOR SAFETY

1. Before starting your fireplace installation, read these installation instructions carefully to be sure you understand them completely and in entirety. Failure to follow them could cause a fireplace malfunction resulting in serious injury and/or property damage.

2. Always check your local building codes. The installation must comply with all local, regional, state and national codes and regulations.

3. Superior Models HCE-3550 and HCE-4050 and Hearthstar Models 35B-N and 40B-N must be installed with the Model TF8 (8" (203mm) inside diameter) Thru-Flow Chimney System only. Superior Model HCE-4550 and Hearthstar Model 45B-N fireplace must be installed with either Superior Model TF8 (8" (203mm) inside diameter) or Model TF10 (10" (250mm) inside diameter) Thru-Flow Chimney System. These systems are intended for use as residential type appliances. The chimney system must always vent to the outside of the building.

4. To ensure a safe fireplace system and to prevent the build-up of soot and creosote, inspect and clean the fireplace and chimney prior to use and periodically during the heating season.

5. Use solid fuel only. DO NOT use artificial logs, chemical chimney cleaners or flame colorants in your fireplace.

6. DO NOT use charcoal or coal under any circumstances.

7. NEVER use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or any liquids to start or "freshen up" a fire in this fireplace. Keep any flammable liquids a safe distance from the fireplace.

8. NEVER leave children unattended when there is a fire burning in the fireplace.

9. Always keep flue damper open when heat is present in the fireplace.

10. Before servicing, allow the fireplace to cool. Always shut off any electricity or gas to the fireplace while working on it. This will prevent any possible electrical shock or burns.

11. This fireplace is not intended to heat an entire home or be used as a primary heat source. It is designed to ensure homeowner comfort by providing supplemental heat to the room.

12. Always ensure an adequate supply of replacement combustion air from the outside of the house is accessible to the fire to support normal combustion. Fireplaces consume large volumes of air during the normal combustion process. In the event the home is tightly sealed with modern energy efficient features, Superior's optional combustion air kit may not provide all the air required to support combustion. Superior is not responsible for any smoking or related problems that may result from the lack of adequate combustion air. It is the responsibility of the builder/contractor to ensure that adequate combustion air has been provided for the fireplace.

13. DO NOT use a fireplace insert or any other products not specified by Superior herein for use with this fireplace.

14. Superior Fireplace Company does not warranty "smoke free" operation nor are we responsible for inadequate system draft caused by mechanical systems, general construction conditions, inadequate chimney heights, adverse wind conditions and/or unusual environmental factors or conditions beyond our control.

15. Never, under any circumstances, install a fireplace, chimney component or any accessories, supplied by Superior Fireplace Company, that has

visible or suspected physical damage as a result of handling or transportation. These items should be inspected by a Superior distributor or qualified factory representative to ensure safe condition. When in doubt, consult your Superior distributor.

TOOLS AND BUILDING SUPPLIES NORMALLY REQUIRED

Tools should Include:

- Phillips screwdriver
- Hammer
- Saw and/or sabersaw
- Level
- Measuring tape
- Plumb line
- Electric drill and bits
- Pliers
- Square

Building supplies:

- Framing materials
- Wall finishing materials
- Caulking materials (non-combustible)
- Fireplace surround and hearth extension materials (non-combustible)

TYPICAL INSTALLATION

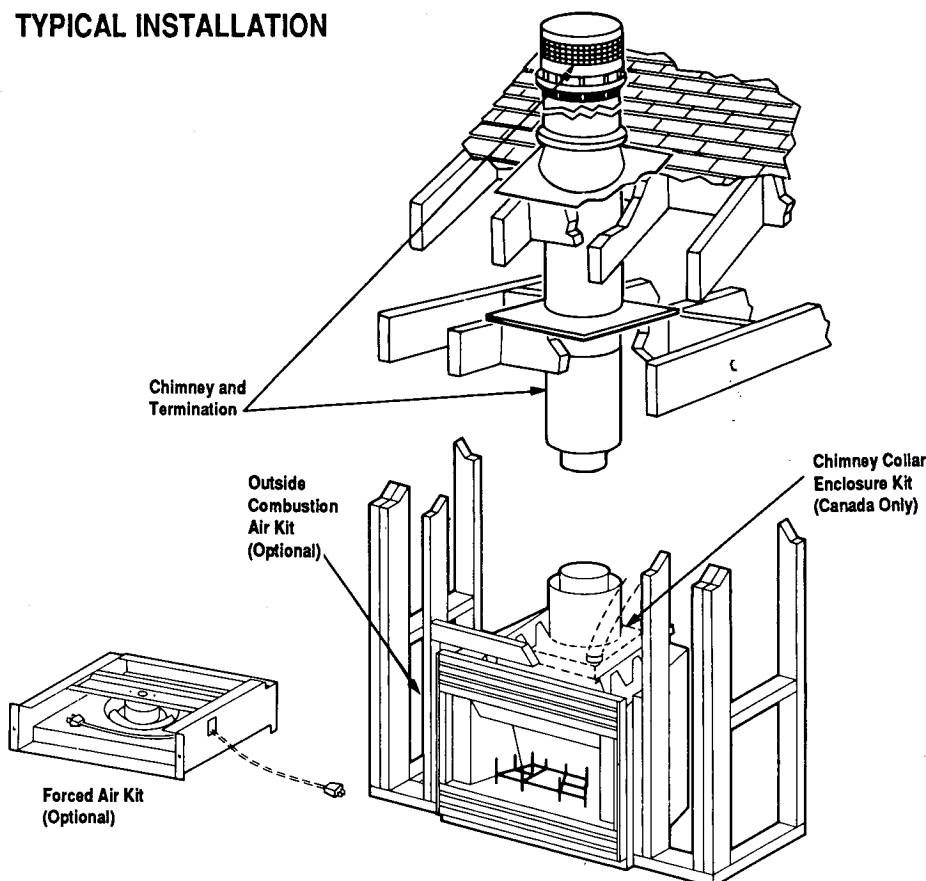


Figure 1

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

PRECAUTIONS

Note: These fireplace systems are not difficult to install. However, in the interest of safety, it is recommended that the installer be a qualified or certified "tradesman" familiar with commonly accepted fireplace installation and safety techniques as well as prevailing local codes.

The most important areas of concern dealing with the installation of factory-built fireplaces are clearances to combustible materials, proper assembly of component parts, height of the chimney system, the proper use of accessories supplied by Superior and the techniques employed in using finishing materials applied to the wall surrounding the fireplace, hearth extensions and wall shields. Each of these topics will be covered in thorough detail throughout this manual. Please give each your special attention as you progress with your installation.

IMPORTANT: WHEN INSTALLING THESE FIREPLACE SYSTEMS IN CANADA, THE REQUIRED MINIMUM AIR SPACE TO COMBUSTIBLE MATERIALS FROM THE CHIMNEY IS 2" (51MM). THE CHIMNEY COLLAR ENCLOSURE KIT, MODEL CCEK, MUST BE INSTALLED PER THE WARNOCK HERSEY INTERNATIONAL, INC. LISTING. THIS IS NOT A U.L. LISTED INSTALLATION.

WHEN INSTALLING SUPERIOR'S TF8 SERIES CHIMNEY SYSTEM ON MODELS HCE-4550 AND 45B-N IN CANADA OR THE U.S., THE MINIMUM AIR SPACE TO COMBUSTIBLES FOR THE CHIMNEY SYSTEM IS 2" (51MM).

INTRODUCTION

General Information

The HCE and B-N Series are wood burning appliances featuring a self contained heat circulating system. A steel bar grate is also included with all models to properly position the fire. An outside combustion air kit, Model AK-4, decorative glass doors and a forced air kit, Model FAK-1500, are available as optional equipment.

Note: Illustrations shown reflect "typical" installations with nominal dimensions and are for design and framing reference only. Actual installations may vary due to individual design preferences. However, always maintain minimum clearances to combustible materials and do not violate any specific installation requirements.

The HCE and B-N Series fireplaces have been tested and listed by Underwriters Laboratories, Inc. and Warnock Hersey International, Inc. to U.L. 127 standard for U. S. installations and U.L.C. S610 standard for Canadian installations. These units are intended for installation in residential homes and buildings of conventional construction, not in mobile homes.

These fireplace systems are designed for installation in accordance with the National Fire Protection Standard for chimneys, fireplaces and solid fuel burning appliances; NFPA 211 and in accordance with codes such as the BOCA Basic/National Codes, the Standard Mechanical Code, Uniform Building Codes and/or the Canadian National Code.

FAILURE TO USE PARTS MANUFACTURED BY SUPERIOR FIREPLACE COMPANY OR VARIATIONS IN TECHNIQUES AND CONSTRUCTION MATERIALS DESCRIBED IN THIS MANUAL MAY CREATE A FIRE HAZARD AND VOID SUPERIOR'S LIMITED WARRANTY.

The HCE and B-N systems consist of six basic "sub-systems":

1. The Fireplace
2. The Chimney and Termination
3. Optional Glass Doors And Trim Kits
4. The Optional Forced Air Kit
5. The Optional Combustion Air Kit
6. Chimney Collar Enclosure Kit (Canada Only)

CLEARANCES AND HEIGHT REQUIREMENTS

The fireplace may be placed on or near normal construction materials*. The combustion air kit, firestop spacer and roof flashings (not chase flashings) may be placed directly on or against normal construction materials.* The chimney requires a minimum 1" (25mm)** (See **Note) air space to combustibles. A combustible mantle may be installed 12" above the opening of the fireplace as per NFPA 211, Section 7-3.3.3. In Canada the minimum is 18" (457mm) above the opening.

The fireplace and chimney system must be enclosed when installed in or passing through a living area where combustibles or people may come in contact with it. This is important to prevent possible personal injury or fire hazard.

*Construction Materials:

- framing materials
- plywood
- particle board
- flooring
- millboard
- dry wall
- paneling
- etc.

For questions, please call your distributor or Superior Fireplace Company. Special restrictions apply to the front and facing of the fireplace and nearby walls (See pages 15, 16 and 17).

****Note: 2" (51mm) when installing in Canada and 2" when installing TF8 chimney on Models HCE-4550 and 45B-N fireplaces.**

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

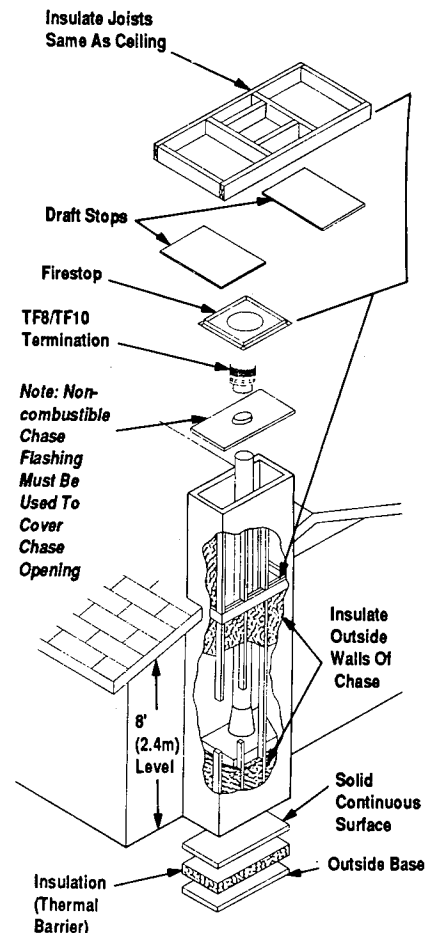


Figure 2

WARNING: THE FIREPLACE MUST NOT BE PLACED DIRECTLY AGAINST INSULATION OR VAPOR BARRIERS. INSULATION OR VAPOR BARRIERS MUST FIRST BE COVERED WITH GYPSUM BOARD, PLYWOOD, PARTICLE BOARD OR OTHER MATERIAL TO ASSURE INSULATION AND VAPOR BARRIERS REMAIN IN PLACE.

WARNING: DO NOT PACK OR FILL REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIAL. NO MATERIAL OF ANY KIND ALLOWED IN THESE AREAS.

Notes:

1. Do Not Insulate The Chase Cavity With Blown Or Fill Type Insulation Materials.

2. Local Codes May Not Require Firestopping At The Ceiling Levels For Outside Chase Installations; But It Is Recommended For Safety And The Reduction Of Heat Loss.

CHIMNEY SYSTEM

Superior manufactured fireplace Models HCE-3550, HCE-4050, 35B-N and 40B-N are designed and code listed for use with Superior's TF8 Thru-Flow Chimney System. Models HCE-4550 and 45B-N are designed and code listed for use with Superior's TF8 and TF10 Thru-Flow Chimney Systems. Always use Superior's Thru-Flow chimney components with these fireplaces. Do not modify or alter these components as this may cause a potential serious hazard and void Superior's Limited Warranty.

CHIMNEY HEIGHT

The total height of your HCE or B-N fireplace system from the surface the fireplace rests on to the chimney top must not exceed 80' (24.38m) and must also meet minimum height requirements. Refer to the minimum system height chart.

MINIMUM SYSTEM HEIGHT

Opening Width Flue Type	35"/40" (TF8)	45" (TF8)	45" (TF10)
Vertical Installation	12'0" (3.67m)	16'8" (5.98m)	15'0" (4.57m)
One Offset	12'0" (3.67m)	16'8" (5.98m)	15'0" (4.57m)
Two Offsets	25'0" (7.62m)	25'0" (7.62m)	25'0" (7.62m)

CHASE ENCLOSURE

A chase is a vertical box-like structure constructed to surround the fireplace and chimney. Refer to Figure 2 for a typical chase configuration. A chase should be constructed and insulated just like any outside wall. The base of the chase should also be insulated between the solid continuous floor beneath the fireplace and the chase bottom. As with all chimney installations, avoid overhead obstructions such as trees, power lines, etc.

ASSEMBLY OUTLINE Before You Start

Check your inventory list to be sure you have all the necessary parts supplied in good useable condition. Check also for any concealed damage.

Check the operation of the damper. The flue damper handle extends down from the inside top of the fireplace; push in to close, pull out to open - takes firm pressure to lock closed.

LOCATION OF FIREPLACE

Carefully select the proper location for heat circulation, aesthetics, chimney obstructions and clearance to side wall(s). With proper pre-planning, a slight adjustment of a few inches can save considerable time and expense later during construction and assembly.

Carefully consider the position of the fireplace opening with respect to the location of adjacent or nearby stairwells, bath or kitchen exhaust fans and/or return air registers for forced air furnaces/air conditioners that could cause a smoking fireplace condition if the house is tightly insulated.

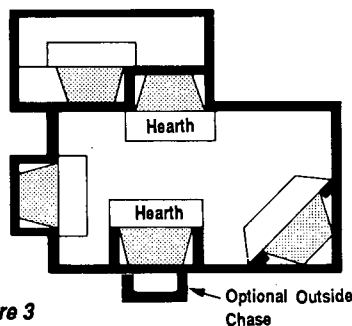


Figure 3

If there is a continuous perpendicular side wall closer than 15" (381mm) for the HCE-3550, HCE-4050, 35B-N or 40B-N and 18" (457mm) for the HCE-4550 or 45B-N from the nearest side of the fireplace opening, it must be protected with a metal wall shield, Model WS40, manufactured by Superior or one constructed of 40" x 40" x 1/2" (1016 mm x 1016mm x 13mm) millboard or a durable non-combustible material with equal or greater insulating value (see page 16). A continuous perpendicular side wall cannot be closer than 8" (203mm) from the fireplace opening under any circumstances, even if protected.

ASSEMBLY STEPS

Note: The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.

1. Position firebox prior to framing or into prepared framing.
2. Install the chimney collar enclosure kit (Canada only)
3. Install the chimney system.
4. Install optional outside combustion air kit.
5. Field wire main power supply to fireplace for fan kit. (Electrical connections should only be performed by an experienced, licensed/certified tradesman.)

6. Remove the four (4) black louvers and two (2) antique brass trim louvers from the protective container and snap onto the fireplace.

7. Plumb gas line if a decorative gas appliance will be used. (Gas connections should only be performed by an experienced, licensed/certified tradesman.)

8. Complete finish wall material, surround and hearth extension to your individual taste.

9. Assemble and attach optional glass door assembly.

Study the three dimensional illustration (Figure 1) to get a general idea of each element of your fireplace system.

INSTALLING THE FIREPLACE

The fireplace may be installed directly on a combustible floor or raised on a platform of an appropriate height. Do not place fireplace on carpeting, vinyl or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces. Be sure fireplace rests on a solid continuous floor or platform with appropriate framing for support and so that no cold air can enter room from under the fireplace.

The fireplace may be positioned and then the framing built around it, or the framing may be constructed and the fireplace positioned into the opening.

Usually, no special floor support is needed for the fireplace, however, to be certain:

1. Estimate the total weight of the fireplace system and surround materials such as brick, stone, etc., to be installed. Shipping weights for the fireplace and chimney may be found in the Suggested List Prices.
2. Measure the square footage of the floor space to be occupied by the system, surrounds and hearth extensions.
3. Note the floor construction, i.e. 2 x 6's, 2 x 8's or 2 x 10's (51 x 152mm, 51 x 203mm or 51 x 250mm), single or double joists, type and thickness of floor boards.
4. Use this information and consult your local building code to determine if you need additional support.

CAUTION: DO NOT BLOCK THE HEAT CIRCULATING AIR INLETS AND OUTLETS. DOING SO MAY RESULT IN A POTENTIAL FIRE HAZARD.

If you plan to raise the fireplace and hearth extension, build the platform assembly then position fireplace and hearth extension on top. Secure the platform to the floor to prevent possible shifting.

TO INSTALL:

Step 1. Slide the fireplace into prepared framing or position fireplace in its final position and frame later.

Step 2. Insert the metal safety strips, packaged with the fireplace, beneath the fireplace as illustrated (Figures 4 and 5). The safety strips should overlap for continual coverage of the floor.

Note: Safety strips are not required when fireplace rests on a non-combustible surface.

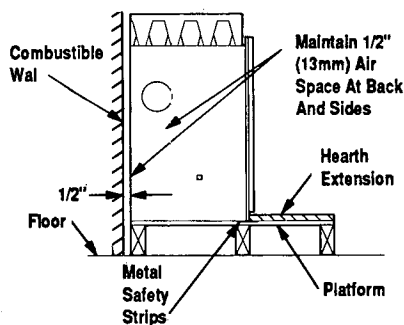


Figure 4

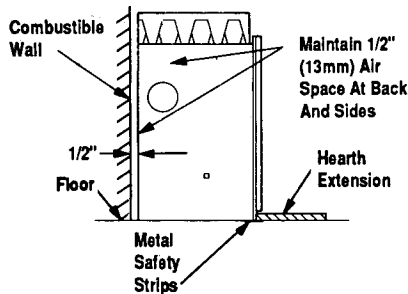


Figure 5

Note: Install the hearth extension only as illustrated.

The safety strips should extend from front and sides of the fireplace 2" (51mm). In the event a wooden support is used to elevate the fireplace above the floor, a "Z" type safety strip should be fabricated and used to protect the front surface of the wood support as well as the floor beneath the hearth extension (Figures 6 and 7). The safety strips should be tacked down to prevent possible movement.

Note: The "Z" type safety strip is not supplied by Superior.

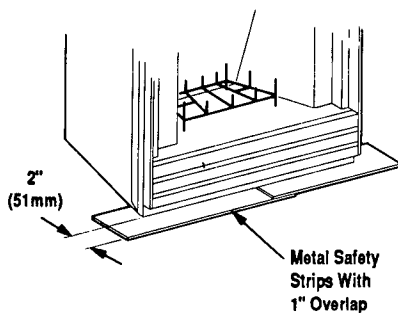


Figure 6

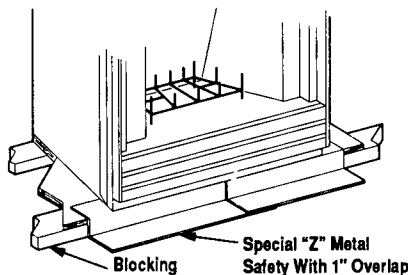


Figure 7

Step 3. Refer to fireplace drawings and specifications on pages 6 and 7 for framing dimensions and details. Framing header may be positioned directly on the fireplace top spacers.

IMPORTANT: UNDER NO CIRCUMSTANCES CAN THE FIREPLACE TOP SPACERS BE REMOVED OR MODIFIED. DO NOT NOTCH THE HEADER TO FIT LOWER THAN THE FIREPLACE TOP SPACERS.

Step 4. Fireplace may be anchored to floor. Bend down four (4) anchor tabs located at the base of the fireplace and secure to the floor by nailing with 8d nails (Figure 8).

Step 5. Fireplace should be secured to side framing members using nailing flanges. Use 8d nails (Figure 9).

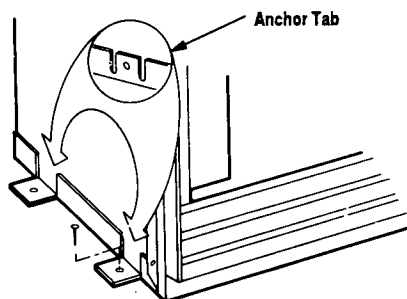


Figure 8

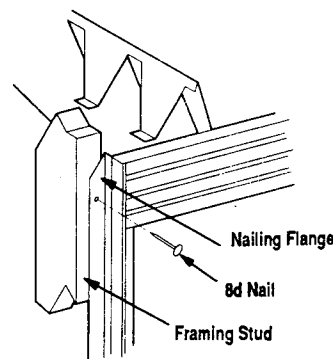


Figure 9

Note: The nailing flange and the area directly behind the nailing flange is exempt from the clearances described on the fireplace clearance label.

FOR CANADIAN INSTALLATIONS, PROCEED WITH STEPS 6-9.

Note: W.H.I. listed only. This is not a U.L. listed installation.

Step 6. Attach the chimney collar enclosure kit, Model CCEK, around chimney collar with the screws provided (Figure 10).

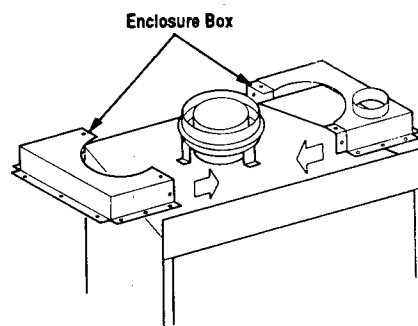


Figure 10

Step 7. Connect the 4" (102mm) Class 1 duct provided to the collar on the chimney collar enclosure with the screws provided in the hardware kit.

Step 8. Route the Class 1 duct out the back wall or side wall, up through the ceiling or floor joists to an outside wall. The duct should be located above snow level.

Note: If the fireplace is installed against an inside wall, the Class 1 duct may be extended into a ventilated attic space at least 18" (457mm) above the attic floor. Secure the duct hood to a vertical post with the inlet positioned downward. Ensure nothing blocks the hood opening. This duct must never terminate higher than the chimney.

Step 9. Cut or frame hole through the outside wall for the installation of the duct inlet hood. A 4 1/2" (114mm) diameter hole is sufficient. Feed the loose end of the flexible duct through the hole cut for the inlet hood and attach to collar on inlet hood using two (2) screws. Insert hood into opening. Secure in place with nails driven through holes in hood flange. Seal with non-combustible waterproof silicon type caulking. If additional duct is needed, use Class 1 metallic duct.

INSTALLING THE CHIMNEY SYSTEM

Step 1. Check flue damper for proper operation. When the damper is in the fully closed position, the damper control lever is pushed all the way to the rear of the firebox. When the damper is in the fully open position the damper control lever is pulled all the way to the front of the firebox.

Step 2. Using standard construction framing techniques, construct opening for chimney route up through the ceiling(s) and roof or through an outside chase.

Framing must maintain adequate minimum air space clearance at all times.

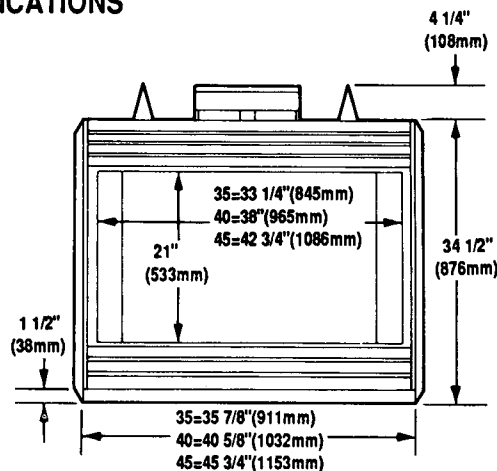
CAUTION: ALLOW MINIMUM 1" (25MM) (SEE **NOTE) CHIMNEY AIR SPACE TO COMBUSTIBLE FRAMING MEMBERS THROUGHOUT VERTICAL OR OFFSET CHIMNEY INSTALLATION.**

A minimum 1"*** (See **Note) air space must be reserved for all combustible materials extending for any continuous length surrounding the chimney.

Reference *Figures 19 and 20* and charts *Framing Dimensions for Ceiling and Roof*, which specify minimum ceiling and roof dimensions.

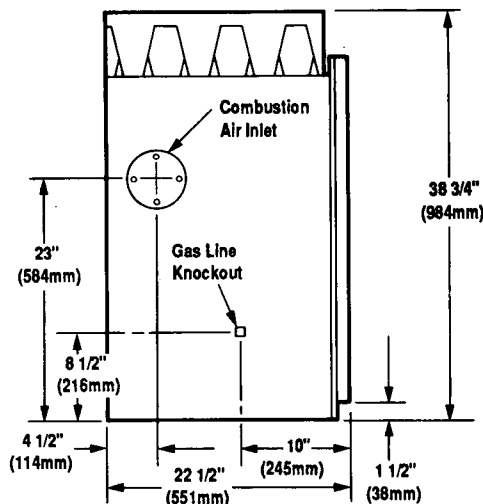
In new construction, to determine chimney center line, use plumb line from roof or ceiling above fireplace to center of flue collar on fireplace.

FIREPLACE SPECIFICATIONS



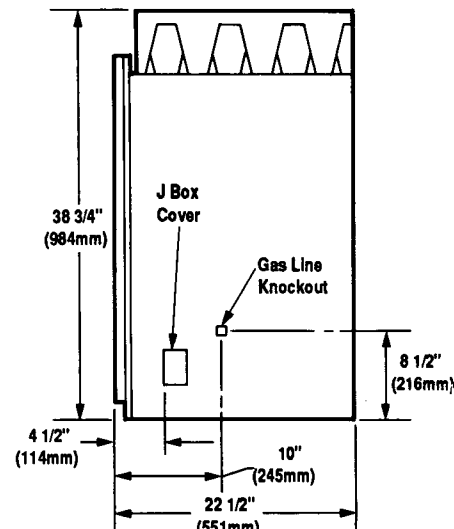
Front View

Figure 11



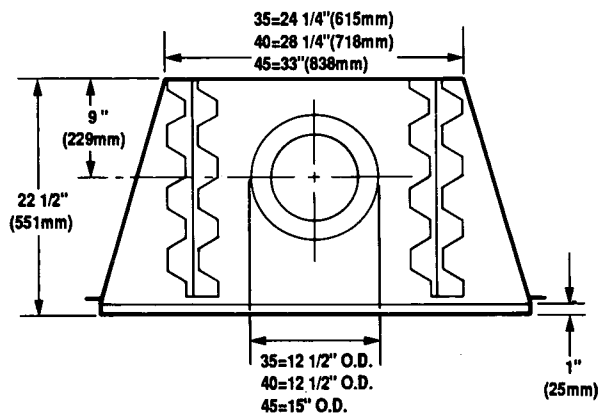
Left Side

Figure 12



Right Side

Figure 13



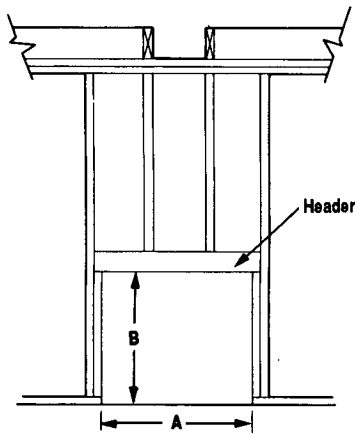
Top View

Figure 14

****Note: 2" (51mm) when installing in Canada and 2" when installing TF8 chimney on Models HCE-4550 and 45B-N fireplaces.**

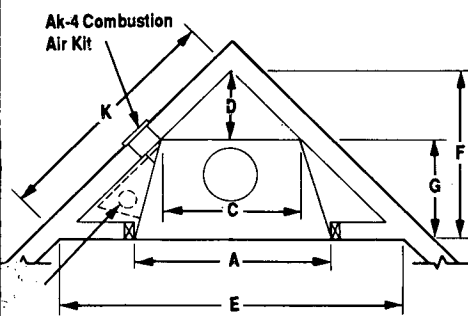
NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

FIREPLACE SPECIFICATIONS



Fireplace Framing

Figure 15



Corner Installation

Figure 16

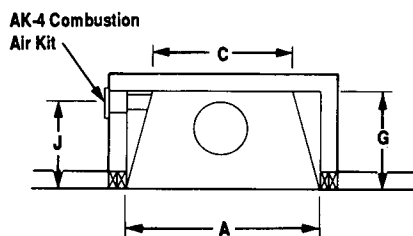


Figure 17

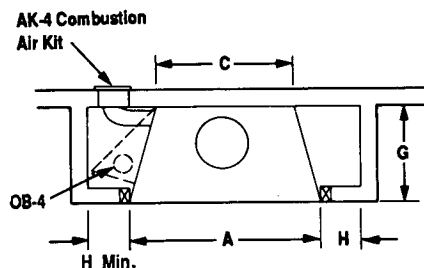


Figure 18

FIREPLACE FRAMING DIMENSIONS

	Fireplace Opening Width		
	33"	38"	43"
A	36" (914mm)	40 3/4" (1035mm)	45 1/2" (1156mm)
B	39" (991mm)	39" (991mm)	39" (991mm)
C	23 1/2" (597mm)	28 1/4" (718mm)	33" (838mm)
D	12 1/2" (318mm)	14 1/2" (368mm)	17 1/2" (465mm)
E	68 " (1727mm)	72" (1829mm)	78" (1981mm)
F	33 7/8" (861mm)	35 7/8" (911mm)	38 7/8" (988mm)
G	21 3/8" (543mm)	21 3/8" (543mm)	21 3/8" (543mm)
J	18" (457mm)	18" (457mm)	18" (457mm)
K	48 " (1219mm)	51 " (1295mm)	55 " (1397mm)

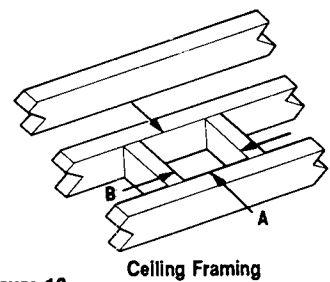


Figure 19

Ceiling Framing

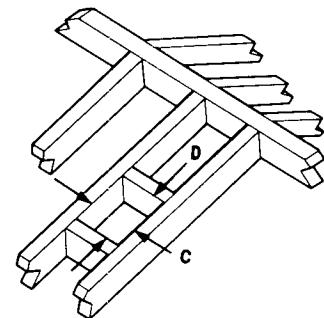


Figure 20

Roof Framing

FRAMING DIMENSIONS FOR ROOF

Pitch	TF8 at 1"		TF8 at 2"	
	C	D*	C	D*
0/12	14 1/2" (368mm)	14 1/2" (368mm)	16 1/2" (419mm)	16 1/2" (419mm)
6/12	14 1/2" (368mm)	17" (432mm)	16 1/2" (419mm)	19" (483mm)
12/12	14 1/2" (368mm)	21 1/2" (546mm)	16 1/2" (419mm)	23 1/2" (579mm)

Pitch	TF10 at 1"		TF10 at 2"	
	C	D*	C	D*
0/12	17" (432mm)	17" (432mm)	19" (483mm)	19" (483mm)
6/12	17" (432mm)	19" (483mm)	19" (483mm)	21" (533mm)
12/12	17" (432mm)	24" (619mm)	19" (483mm)	26" (660mm)

*Perpendicular to roof ridge

FRAMING DIMENSION FOR CEILING

Flue Type	Ceiling Opening	
	A	B
TF8, Vertical	14 1/2" (368mm)	14 1/2" (368mm)
TF8, Vertical at 2"	16 1/2" (419mm)	16 1/2" (419mm)
TF10, Vertical	17" (432mm)	17" (432mm)
TF10, Vertical at 2"	19" (438mm)	19" (438mm)
TF8 Offset 30°	14 1/2" (368mm)	25" (635mm)
TF8 Offset 30° at 2"	16 1/2" (419mm)	27" (686mm)
TF10 Offset 30°	17" (432mm)	26" (660mm)
TF10 Offset 30° at 2"	19" (438mm)	28" (711mm)

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

For remodeling, plumb to center of flue collar from ceiling above, drive nail through ceiling from below to mark position, then mark and cut to passage from above ceiling (around nail) (Figure 21). Then plumb from ceiling or roof level directly above hole which has just been completed.

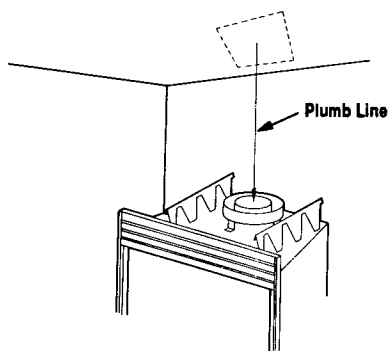


Figure 21

Step 3. Position appropriate firestop spacer at ceiling and nail temporarily with two (2) 8d nails. Use flat firestop spacer, Model 8FS* for TF8 system and Model 10FS* for the TF10 system, if chimney penetrates ceiling vertically. If chimney penetrates ceiling at 30° angle (offset chimney), use 30° firestop spacer, Model 8FS30* for TF8 and Model 10FS30* for TF10 system. Use one nail on opposite sides to hold firestop spacer in position. Nail permanently, using at least two (2) more 8d nails, after chimney sections have been assembled through the firestop spacer and after any necessary adjustments have been made. Firestop spacer must be secured by at least four (4) 8d nails when completely installed.

***Note:** Use Models 8FS-2, 8FS30-2, 10FS-2 or 10FS30-2 to maintain 2" (51mm) clearance. Models 8FS-2 and 8FS30-2 must be used when installing TF8 chimney on HCE-4550.

Note: If there is a room above ceiling level, firestop spacer must be installed on the bottom side of the ceiling. If an attic is above ceiling level, firestop spacer must be installed on top side of ceiling joist (Figures 22 and 23).

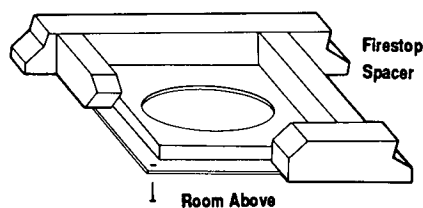
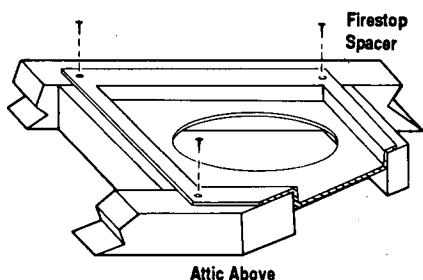


Figure 22



8 Figure 23

Step 4. Note: Chimney sections are constructed with a unique locking tab design, which ensures an immediate, tight assembly between sections. Plan your chimney requirements carefully before assembly as chimney is difficult to disassemble after installation. If disassembled, the tabs might become damaged. Be certain tabs are properly formed to ensure locking tabs engage properly.

The TF8 and TF10 chimney systems are two piece chimneys, which snap together from the fireplace up. Start with the inner flue section. With the hemmed end down, snap lock it into the matching collar on top of the fireplace. At all subsequent joints, the upper flue section fits into the preceding flue section. Each piece snaps together by means of locking tabs (9 locking tabs per joint). Check each piece by pulling up slightly from the top to ensure proper engagement before installing succeeding sections. If the flue has been installed correctly, it will not separate when you test it. Also, the inner flue joint where each section is joined should be tight and flat without gaps (Figure 24).

Outer pipe section installs in just the opposite way; the hemmed end goes UP and each new section goes OVER the outside of the previous section installed (Figure 25).

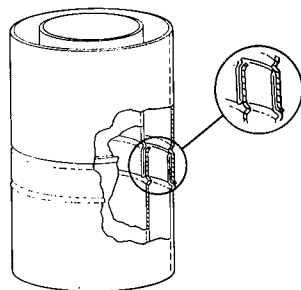


Figure 24

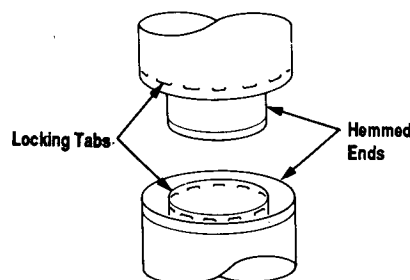


Figure 25

Note: Assemble one component of chimney at a time (inner section first, then outer section last) before proceeding with the next complete section.

Continue to assemble the chimney up through framed opening. Assemble just enough to penetrate the roof flashing openings (Figure 26). Always maintain 1" (25mm)** (See ****Note**) minimum air space to combustible materials and always check each chimney joint (inner and outer) to ensure proper engagement. Check vertical alignment of chimney so that it projects from the roof in true vertical position.

Superior chimney sections should not be screwed together and it is not required for additional reinforcement.

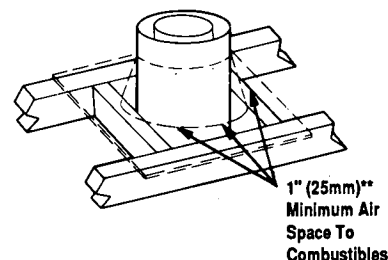


Figure 26

Step 5. The height of vertical chimney pipe supported only by the fireplace must not exceed 30' (9.1m). Chimney heights above 30' (9.1m) must be supported by a Model 8-S4 or Model 10-S4 unitized stabilizer installed at 30' (9.1m) intervals.

Note: The Model 8-S4 and Model 10-S4 add 2 1/2" (64mm) net effective height to the total chimney system.

Install the Model 8-S4 or 10-S4 stabilizer by fitting inner section down into respective section of proceeding flue pipe and locking outer stabilizer section into place over the outer chimney pipe. Position for proper clearance through framed opening and nail straps securely (under tension in "shear") into place on framing. Use 8d nails. Attach successive lengths of chimney pipe directly to stabilizer using same techniques as described in Step 4.

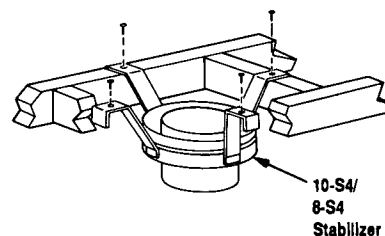


Figure 27

****Note:** 2" (51mm) when installing in Canada and 2" when installing TF8 chimney on Models HCE-4550 and 45B-N fireplaces.

Note: Do not apply excessive pressure to any subsequent chimney sections following the stabilizer when installing. Ensure each subsequent chimney section is securely attached by testing as noted in Step 4.

Step 6. Select proper Superior roof flashing based on pitch of roof. Use chart below for selection:

Roof Pitch	TF8	TF10
Flat to 6/12	8-F6	10-F6
6/12 to 12/12	8-F12	10-F12

Next, slide roof flashing over extended chimney section that previously has been installed above the roof opening in Step 4. Slide flashing all the way down until the flashing base rests flat on the roof. Again, check the vertical position of the chimney and the 1" (25mm)** (See **Note**) minimum air space to combustibles.

Step 7. Secure flashing by nailing along the perimeter into roof using 8d nails. If shingled roof, slide upper end and sides of roof flashing under shingles (trim if necessary), seal the top and both sides of the flashing to the roof with roof caulking. Cover nail heads with roof caulking (Figure 28).

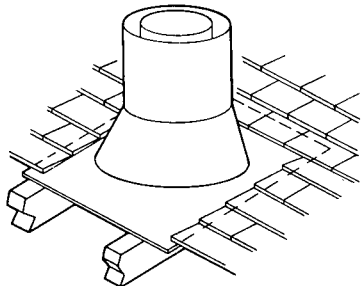


Figure 28

Step 8. The standard Superior roof flashing assemblies include a storm collar. Slide storm collar over outer chimney, align with top surface of flashing, insert tab in slot, pull tight and bend tab back over slot. Seal storm collar to outer chimney with roof caulking or mastic around entire circumference of pipe. Also add extra roof caulking where storm collar meets flashing and to the tab/slot area to seal completely against water penetration (Figure 29). Check all joints very carefully to ensure no water intrusion can take place.

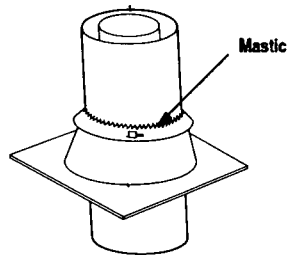


Figure 29

Step 9. Superior locking bands, Models 8LB or 10LB, may be required if the chimney extends too high above the roof flashing. As a general rule, if the chimney extends more than 6' (1.8m) above the roof flashing, the use of locking bands is advisable to strengthen the chimney assembly. Align the locking band at the chimney joint. Locking bands wrap around pipe joints equally covering the joints of both pipe sections. Use nut provided and TIGHTEN snugly. Do not over-tighten as this might damage chimney section (Figure 30).

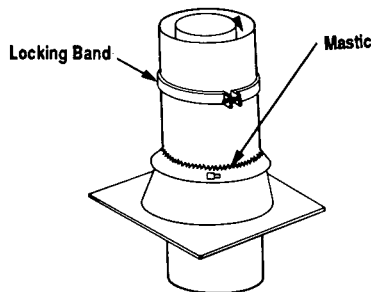


Figure 30

Note: If chimney extends more than 8' (2.4m) above roof surface, guy wires are also recommended. Use three (3) guy wires, attach to locking band assembly, extend and secure to roof in a triangular pattern (Figure 31). Guy wires are not supplied by Superior.

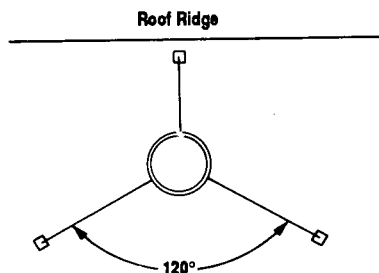


Figure 31

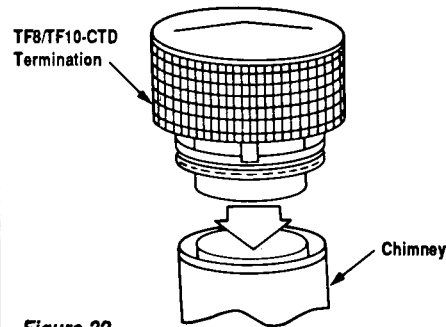


Figure 32

Step 10. Using a CTD Round Termination:

- 1) Hold CTD over top of last chimney section (Figure 32).
- 2) Center inner slip section in inner flue pipe-slip down.
- 3) Center outer locking section over outer flue pipe. Push down until locking tabs are firmly engaged.
- 4) Pull up slightly on CTD to ensure locking joint has firmly engaged.

Note: Special galvanized over-dipped CTD terminations (P/N 031110 for 8" and P/N 031102 for 10") and CTD terminations (P/N 031111 for 8" and P/N 031112 for 10") are available for installations susceptible to corrosive environments. Contact your distributor or Superior Customer Service for pricing and availability.

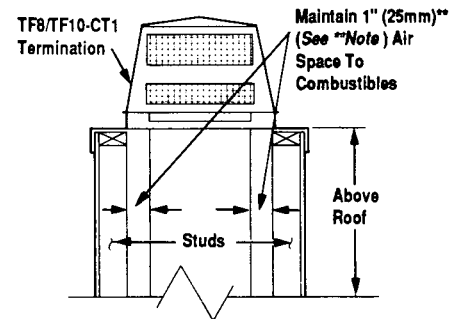


Figure 33

Using a CT1 Chase Termination

Refer to specific installation instructions included with CT1 chase termination for clearance statements and installation details.

****Note:** 2" (51mm) when installing in Canada and 2" when installing TF8 chimney on Models HCE-4550 and 45B-N fireplaces.

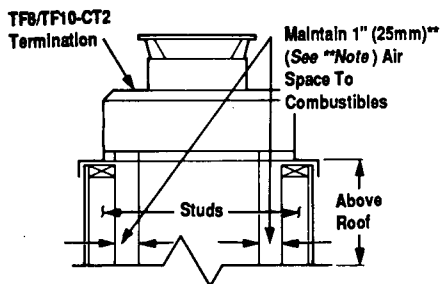


Figure 34

Using a CT2 Chaise Termination

Refer to specific installation instructions included with the CT2 chaise termination for clearance statements and installation details.

Using a CTD T Chaise Termination

Refer to specific installation instructions included with the CTD T chaise termination for details.

Note: It is recommended that all exterior exposed related metal fireplace components; such as terminations, flashings, storm collars and/or flue be painted with a premium quality, high temperature, rust preventative paint designed for metal. This is especially important when installations are made in abnormally adverse or corrosive environments; such as near lakes, oceans or in areas with consistently high humidity conditions. Consult the paint manufacturers instructions for proper preparation and application.

TEN FOOT RULE SUMMARY

The minimum chimney height above the roof and/or to adjacent walls and buildings is specified by all major building codes.

If the horizontal distance from the peak of the roof is less than 10' (3m), the top of the chimney must be at least 2' (610mm) above the peak of the roof.

If the horizontal distance from the chimney edge to the peak of the roof is more than 10' (3m) a chimney height reference point is established on the roof surface 10' (3m) horizontally from the chimney edge. The top of the chimney must be at least 2' (610mm) above this reference point. In all cases, the chimney cannot be less than 3' (914mm) above the roof at the edge of the chimney.

****Note:** 2" (51mm) when installing in Canada and 2" when installing TF8 chimney on Models HCE-4550 and 45B-N fireplaces.

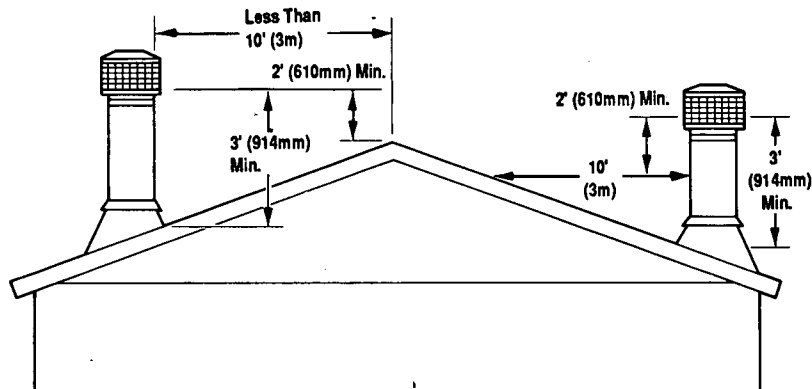


Figure 35

The 2' in 10' rule is necessary in the interest of safety but does not ensure smoke-free operation. Trees, buildings, adjoining roof lines, adverse wind conditions, etc., may require a taller chimney should the fireplace not draft properly (Figure 35).

MULTIPLE TERMINATIONS

If more than one termination is located in the same chase or within the same general proximity, we suggest they should be separated in distance at least 24" (610mm) horizontally from flue center to flue center and stacked or staggered vertically at least 18" (457mm) apart, from the termination of one smoke exit to the termination of another smoke exit (Figure 36).

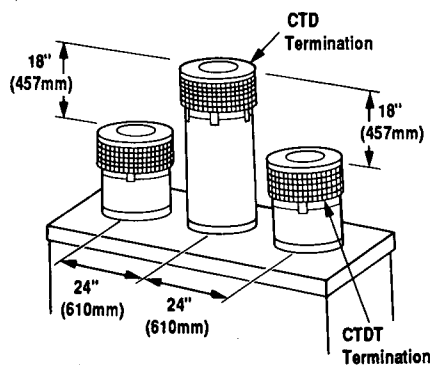


Figure 36

This suggestion is provided in the interest of better operation. If the terminations are located too close to each other, smoke may migrate from one flue into the other.

TF8 AND TF10 CHIMNEY COMPONENT CALCULATIONS

The minimum installed height of the HCE-3550, HCE-4050, 35B-N and 40B-N Series fireplace systems is 12'0" (3.67m). The minimum installed height of the HCE-4550 and 45B-N Series fireplace systems (including fireplace and chimney components) is 15'0" (4.57m). The maximum height for all systems is 80'0" (24.38m).

To determine the number of chimney sections and chimney components required, follow these steps:

1. Determine total vertical height of the fireplace installation. This dimension is the distance from the surface the fireplace sets on to the point where smoke exits from the termination.

2. Determine the number of chimney components required, except chimney sections. This would include firestop spacers, stabilizers, roof flashing, etc.

3. The effective heights of the components are:

The Fireplace = 38" (965mm)

CTD Termination = 4" (102mm)

CT1 Termination = 12" to 18" (305mm to 457mm)

CT2 Termination = 15" to 23" (381mm to 584mm)

CTDT Termination = 12" to 18" (305mm to 457mm)

SS Starter Section = 19" (483mm)

S4 Stabilizer * = 2 1/2" (64mm)*

* Required for every 30' (9.1m) of vertical chimney and/or 10' of offset chimney.

4. Determine amount of chimney height required by subtracting total combined height of all preselected components (fireplace and chimney components from total desired height.)

Reference Vertical Elevation Chart and determine the number of chimney sections (quantity and length) required.

VERTICAL ELEVATION CHART - TF10 SYSTEM

Height Of Flue Only			Number TF-10 Flue Lengths			Height Of Flue Only			Number TF-10 Flue Lengths			Height Of Flue Only			Number TF-10 Flue Lengths			Height Of Flue Only			Number TF-10 Flue Lengths		
Inches	Feet		12"	18"	36"	Inches	Feet		12"	18"	36"	Inches	Feet		12"	18"	36"	Inches	Feet		12"	18"	36"
10 1/2"	0' 10 1/2"	1				242 1/4"	20' 2 1/4"	1	7			476 1/4"	39' 8 1/4"	1	13			711 1/4"	59' 3 3/4"	2	1		20
16 1/2"	1' 4 1/2"		1			245 1/4"	20' 5 1/4"	2	1	6		483 1/4"	40' 3 3/4"		14			717 1/4"	59' 9 1/4"	1	1		20
21 3/4"	1' 9 3/4"	2		1		252 1/4"	21' 0 1/4"	1	1	7		486 1/4"	40' 6 1/4"	2	1	13			725 1/4"	60' 5 1/4"			21
27 3/4"	2' 3 3/4"	1	1			258 1/4"	21' 6 1/4"		1	7		494 1/4"	41' 2 1/4"	1		14			728 1/4"	60' 8 1/4"	2	1	20
33 3/4"	2' 9 3/4"			2		263 1/4"	21' 11 1/4"	2	1	7		500 1/4"	41' 8 1/4"		1	14			735 1/4"	61' 3 3/4"	1		21
34 1/2"	2' 10 1/2"				1	269 1/4"	22' 5 1/4"	1		7		504 1/4"	42' 0 1/4"	2		14			741 1/4"	61' 9 1/4"		1	21
38 1/4"	3' 2 1/4"	2	1			276 1/4"	23' 0 1/4"		1	8		510 1/4"	42' 6 1/4"	1	1	14			746 1/4"	62' 2 1/4"	2		21
43 3/4"	3' 7 3/4"	1	2			279 1/4"	23' 3 3/4"	2		7		518 1/4"	43' 2 1/4"		1	15			752 1/4"	62' 8 1/4"	1	1	21
51 3/4"	4' 3 3/4"			1		287 1/4"	23' 11 1/4"	1		8		521 1/4"	43' 5 1/4"	2	1	14			759 1/4"	63' 3 3/4"			22
56 1/4"	4' 8 1/4"	2			1	293 1/4"	24' 5 1/4"		1	8		528 1/4"	44' 0 1/4"	1		15			762 1/4"	63' 6 1/4"	2	1	21
62 1/4"	5' 2 1/4"	1	1			297 1/4"	24' 9 1/4"	2		8		534 1/4"	44' 6 1/4"		1	15			770 1/4"	64' 2 1/4"	1		22
68 1/4"	5' 8 1/4"		2	1		303 1/4"	25' 3 3/4"	1	1	8		539 1/4"	44' 11 1/4"	2		15			776 1/4"	64' 8 1/4"		1	22
69 1/2"	5' 9 1/2"				2	311 1/4"	25' 11 1/4"			9		545 1/4"	45' 5 1/4"	1	1	15			780 1/4"	65' 0 1/4"	2	1	22
80 1/4"	6' 8 1/4"	1	1		2	314 1/4"	26' 2 1/4"	2	1	8		552 1/4"	46' 0 1/4"			16			786 1/4"	65' 6 1/4"			23
86 1/4"	7' 2 1/4"			2		321 1/4"	26' 9 1/4"	1		9		555 1/4"	46' 3 3/4"	2	1	15			794 1/4"	66' 2 1/4"			23
90 1/4"	7' 6 1/4"	2	1		2	327 1/4"	27' 3 3/4"		1	9		563 1/4"	46' 11 1/4"	1		16			797 1/4"	66' 5 1/4"	2	1	22
96 1/4"	8' 0 1/4"	1			2	332 1/4"	27' 8 1/4"	2		9		569 1/4"	47' 5 1/4"		1	16			804 1/4"	67' 0 1/4"	1		23
103 1/4"	8' 7 1/4"			1	3	338 1/4"	28' 2 1/4"	1	1	9		573 1/4"	47' 9 1/4"	2		16			810 1/4"	67' 6 1/4"		1	23
107 1/4"	8' 11 1/4"	2			2	345 1/4"	28' 9 1/4"			10		579 1/4"	48' 3 3/4"	1	1	16			815 1/4"	67' 11 1/4"	2		23
114 1/4"	9' 6 1/4"	1	1		3	348 1/4"	29' 0 1/4"	2	1	9		587 1/4"	48' 11 1/4"			17			821 1/4"	68' 5 1/4"	1	1	23
120 1/4"	10' 0 1/4"				3	356 1/4"	29' 8 1/4"	1		10		590 1/4"	49' 2 1/4"	2	1	16			828 1/4"	69' 0 1/4"			24
124 1/4"	10' 4 1/4"	2	1		3	362 1/4"	30' 2 1/4"		1	10		597 1/4"	49' 9 1/4"	1		17			831 1/4"	69' 3 3/4"	2	1	23
130 1/4"	10' 10 1/4"	1			3	366 1/4"	30' 6 1/4"	2		10		603 1/4"	50' 3 3/4"		1	17			839 1/4"	69' 11 1/4"	1		24
138 1/4"	11' 6 1/4"			1	4	372 1/4"	31' 0 1/4"	1	1	10		608 1/4"	50' 8 1/4"	2		17			845 1/4"	70' 5 1/4"		1	24
141 1/4"	11' 9 1/4"	2			3	380 1/4"	31' 8 1/4"			11		614 1/4"	51' 2 1/4"	1	1	17			849 1/4"	70' 9 1/4"	2		24
149 1/4"	12' 5 1/4"	1	1		4	382 1/4"	31' 10 1/4"	2	1	10		621 1/4"	51' 9 1/4"			18			855 1/4"	71' 3 3/4"	1	1	24
155 1/4"	12' 11 1/4"				4	390 1/4"	32' 6 1/4"	1		11		624 1/4"	52' 0 1/4"	2	1	17			863 1/4"	71' 11 1/4"			25
159 1/4"	13' 3 1/4"	2	1		4	396 1/4"	33' 0 1/4"		1	11		632 1/4"	52' 8 1/4"	1	1	18			866 1/4"	72' 2 1/4"	2	1	24
165 1/4"	13' 9 1/4"				4	401 1/4"	33' 5 1/4"	2		11		638 1/4"	53' 2 1/4"			18			873 1/4"	72' 8 1/4"			25
173 1/4"	14' 5 1/4"	2	1		5	407 1/4"	33' 11 1/4"	1	1	11		642 1/4"	53' 6 1/4"	2	1	18			879 1/4"	73' 3 3/4"	1	1	25
176 1/4"	14' 8 1/4"				4	414 1/4"	34' 6 1/4"			12		648 1/4"	54' 0 1/4"	1	1	18			884 1/4"	73' 8 1/4"	2		25
183 1/4"	15' 3 1/4"	1			5	417 1/4"	34' 9 1/4"	2	1	11		656 1/4"	54' 8 1/4"			19			890 1/4"	74' 2 1/4"	1	1	25
189 1/4"	15' 9 1/4"				5	425 1/4"	35' 5 1/4"	1		12		659 1/4"	54' 11 1/4"	2	1	18			897 1/4"	74' 9 1/4"			26
194 1/4"	16' 2 1/4"	2	1		5	431 1/4"	35' 11 1/4"		1	12		666 1/4"	55' 6 1/4"	1		19			900 1/4"	75' 0 1/4"	2	1	25
200 1/4"	16' 8 1/4"	1			5	435 1/4"	36' 3 3/4"	2		12		672 1/4"	56' 0 1/4"		1	19			908 1/4"	75' 8 1/4"	1		26
207 1/4"	17' 3 3/4"			1	6	441 1/4"	36' 9 1/4"	1	1	12		677 1/4"	56' 4 1/4"	2		19			914 1/4"	76' 2 1/4"		1	26
210 1/4"	17' 6 1/4"	2			5	449 1/4"	37' 5 1/4"			13		683 1/4"	56' 10 1/4"	1	1	19			918 1/4"	76' 6 1/4"	2		26
218 1/4"	18' 2 1/4"	1	1		6	452 1/4"	37' 8 1/4"	2	1	12		690 1/4"	57' 6 1/4"			20							
224 1/4"	18' 8 1/4"				6	459 1/4"	38' 3 3/4"	1		13		693 1/4"	57' 9 1/4"	2	1	19							
228 1/4"	19' 0 1/4"	2	1		6	465 1/4"	38' 9 1/4"		1	13		701 1/4"	58' 5 1/4"	1		20							
234 1/4"	19' 6 1/4"	1			6	470 1/4"	39' 2 1/4"	2		13		707 1/4"	58' 11 1/4"		1	20							

VERTICAL ELEVATION CHART - TF8 SYSTEM

Height of Flue Only			Number of TF8 Flue Lengths				Height of Flue Only			Number of TF8 Flue Lengths				Height of Flue Only			Number of TF8 Flue Lengths				Height of Flue Only			Number of TF8 Flue Lengths					
Inches	Feet		12"	18"	36"	48"	Inches	Feet		12"	18"	36"	48"	Inches	Feet		12"	18"	36"	48"	Inches	Feet		12"	18"	36"	48"		
10½	0'10½"	1	—	—	—	191¼	15'11¼"	—	1	1	3	337¼	31' 5¼"	—	1	1	7	563¼	46'11¼"	—	1	1	11	749¼	62' 5¼"	—	1	1	15
16½	1' 4½"	—	1	—	—	197¼	16' 5¼"	1	—	—	4	383¼	31'11¼"	1	—	—	8	569¼	47' 5¼"	1	—	—	12	755¼	62'11¼"	1	—	—	16
21¾	1' 9¾"	2	—	—	—	203¼	16'11¼"	—	1	—	4	339¼	32' 5¼"	—	1	—	8	575¼	47'11¼"	—	1	—	12	761¼	63' 5¼"	—	1	—	16
27¾	2' 3¾"	1	1	—	—	207¼	17' 3¾"	2	—	—	4	339¼	32' 9¾"	2	—	—	9	579¼	48' 3¾"	2	—	—	12	765¼	63' 9¾"	2	—	—	16
33¾	2' 9¾"	—	2	—	—	213¾	17' 9¾"	1	1	—	4	399¾	33' 3¾"	1	1	—	8	585¾	48' 9¾"	1	1	—	12	771¼	64' 3¾"	1	1	—	16
34¾	2'10½"	—	—	1	—	221¼	18' 5¼"	—	—	1	4	407¼	33'11¼"	—	—	1	8	593¼	49' 5¼"	—	—	1	12	779¼	64'11¼"	—	—	—	16
38¾	3' 2¼"	2	1	—	—	224¾	18' 8¼"	2	1	—	4	410¾	34' 2¼"	2	1	—	8	596¾	48' 8¼"	2	1	—	12	782¼	65' 2¼"	2	1	—	16
43¾	3' 7¾"	1	2	—	—	233¾	19' 5¼"	—	—	—	5	419¾	34'11¼"	—	—	—	9	605¾	50' 5¼"	—	—	—	13	791¼	65'11¼"	—	—	—	17
46¾	3'10½"	—	—	—	1	237¾	19' 9¾"	—	1	1	4	423¾	35' 3¾"	—	1	1	8	609¾	50' 9¾"	—	1	—	12	795¾	65' 3¾"	—	1	1	16
51¾	4' 3¾"	—	1	1	—	243¾	20' 3¾"	1	—	—	5	429¾	35' 9¾"	1	—	—	9	615¾	51' 3¾"	1	—	—	13	801¾	66' 0¾"	1	—	—	17
57¾	4' 9¾"	1	—	—	1	249¾	20' 9¾"	—	1	—	5	435¾	36' 3¾"	—	1	—	9	621¾	51' 9¾"	—	1	—	13	807¾	67' 3¾"	—	1	—	17
63¾	5' 3¾"	—	1	—	1	254¾	21' 2¼"	2	—	—	5	439¾	36' 7¼"	2	—	—	9	626¾	52' 2¼"	2	—	—	13	812¾	67' 8¼"	2	—	—	17
68¾	5' 8¾"	2	—	—	1	260¾	21' 8¾"	1	1	—	5	446¾	37' 2¾"	1	1	—	9	632¾	52' 8¾"	1	1	—	13	818¾	68' 2¾"	1	1	—	17
74¾	6' 2¾"	1	1	—	—	267¾	21' 3¾"	—	1	1	5	435¾	37' 9¾"	—	1	1	9	639¾	53' 3¾"	—	1	—	13	825¾	68' 9¾"	—	—	1	17
81¾	6' 9¾"	—	—	1	1	270¾	22' 6¾"	2	1	—	5	456¾	38' 0¾"	2	1	—	9	642¾	53' 6¾"	2	1	—	13	828¾	69' 0¾"	2	1	—	17
84¾	7' 0¾"	2	1	—	1	279¾	22' 3¾"	—	—	—	6	456¾	38' 9¾"	—	—	10	651¾	54' 3¾"	—	—	—	14	837¾	69' 9¾"	—	—	—	18	
93¾	7' 9¾"	—	—	—	2	284¾	23' 8¾"	—	1	1	6	470¾	39' 2¾"	—	1	—	9	656¾	54' 8¾"	—	1	1	13	842¾	70' 2¾"	—	1	1	17
98¾	8' 2¾"	—	1	1	1	290¾	24' 2¾"	1	—	—	6	476¾	39' 8¾"	1	—	10	662¾	55' 2¾"	1	—	—	14	848¾	70' 8¾"	1	—	—	18	
104¾	8' 8¾"	1	—	—	2	296¾	24' 8¾"	—	1	1	6	482¾	40' 2¾"	—	1	—	10	668¾	55' 8¾"	—	1	—	14	854¾	71' 2¾"	—	1	—	18
110¾	9' 2¾"	—	1	—	2	300¾	25' 0¾"	2	—	—	6	486¾	40' 6¾"	2	—	10	672¾	56' 0¾"	2	—	—	14	858¾	71' 6¾"	2	—	—	18	
114¾	9' 6¾"	2	—	—	2	306¾	25' 6¾"	1	1	—	6	492¾	41' 0¾"	1	1	—	10	678¾	56' 6¾"	1	1	—	14	864¾	72' 0¾"	1	1	—	18
120¾	10' 0¾"	1	1	—	2	314¾	26' 2¾"	—	—	1	6	500¾	41' 8¾"	—	1	10	686¾	57' 2¾"	—	1	14	872¾	72' 8¾"	—	—	1	18		
128¾	10' 8¾"	—	—	1	2	317¾	26' 5¾"	2	1	—	6	503¾	41'11¼"	2	1	—	10	689¾	57' 5¾"	2	1	—	14	875¾	72'11¼"	2	1	—	18
131¾	10'11¼"	2	1	—	2	326¾	27' 2¾"	—	—	—	7	512¾	42' 8¾"	—	—	11	698¾	58' 2¾"	—	—	—	14	884¾	73' 8¾"	—	—	—	19	
140¾	11' 8¾"	—	—	—	3	330¾	27' 6¾"	—	1	1	6	516¾	43' 0¾"	—	1	10	702¾	58' 6¾"	—	1	14	888¾	74' 0¾"	—	1	1	18		
144¾	12' 0¾"	—	1	1	2	336¾	28' 0¾"	1	—	7	7	522¾	43' 6¾"	1	—	11	705¾	58' 9¾"	1	—	15	894¾	74' 6¾"	1	—	—	19		
150¾	12' 6¾"	1	—	—	3	324¾	28' 6¾"	—	1	—	7	528¾	44' 0¾"	—	1	11	714¾	59' 6¾"	—	1	—	15	900¾	75' 0¾"	—	1	—	10	
156¾	13' 0¾"	—	1	—	—	347¾	28'11¼"	2	—	—	7	533¾	44' 5¼"	2	—	11	719¾	59'11¼"	2	—	—	15	905¾	75' 5¼"	2	—	—	19	
161¾	13' 5¼"	2	—	—	3	353¾	29' 5¼"	1	1	—	7	539¾	44'11¼"	1	1	11	725¾	60' 5¼"	1	1	—	15	911¾	75'11¼"	1	1	—	19	
167¾	13'11¼"	1	1	—	3	360¾	30' 0¾"	—	—	1	7	546¾	45' 6¾"	—	1	11	732¾	61' 3¾"	—	—	1	15	918¾	76' 0¾"	—	—	1	19	
174¾	14' 6¾"	—	—	1	3	363¾	30' 3¾"	2	1	—	7	549¾	45' 9¾"	2	1	11	735¾	61' 3¾"	2	1	—	15	921¾	76' 3¾"	2	1	—	19	
177¾	14' 9¾"	2	1	—	3	372¾	31' 0¾"	—	—	—	8	558¾	46' 6¾"	—	—	12	744¾	62' 0¾"	—	—	—	16	930¾	77' 6¾"	—	—	—	20	
186¾	15' 6¾"	—	—	—	4																								

TF8 OFFSET ELEVATION CHART (WITH TF8-SS STARTER SECTION)

A Inches	B Inches	TF10-30 10" Offset Elbow	TF8-E30 8" Return Elbow	TF8-SS Starter Section	TF8-12" Flue	TF8-18" Flue	TF8-36" Flue	TF8-48" Flue	A Inches	B Inches	TF10-30 10" Offset Elbow	TF8-E30 8" Return Elbow	TF8-SS Starter Section	TF8-12" Flue	TF8-18" Flue	TF8-36" Flue	TF8-48" Flue
13 1/4	32 1/2	1	1	1	—	—	—	—	45 1/4	87	1	1	1	—	1	—	1
19	41	1	1	1	1	—	—	—	47 1/2	91	1	1	1	—	2	1	—
22	46 1/4	1	1	1	—	1	—	—	48 1/4	92 1/4	1	1	1	—	—	2	—
24 1/2	50 1/4	1	1	1	2	—	—	—	49 1/4	94 1/4	1	1	1	2	1	1	—
27 1/4	56	1	1	1	1	1	—	—	52	98 1/4	1	1	1	1	4	—	—
30 1/4	61	1	1	1	—	2	—	—	53 1/4	101 1/4	1	1	1	1	—	2	—
31	62 1/2	1	1	1	—	—	1	—	54 1/4	102 1/4	1	1	1	—	—	1	1
32 1/2	65	1	1	1	2	1	—	—	55 1/4	105 1/4	1	1	1	—	3	1	—
35 1/4	70 1/4	1	1	1	1	2	—	—	56 1/4	106 1/4	1	1	1	—	1	2	—
36 1/4	71 1/2	1	1	1	1	—	1	—	58 1/4	110 1/4	1	1	1	2	—	2	—
37	72 1/4	1	1	1	—	—	—	1	59 1/4	111 1/4	1	1	1	1	—	1	1
38 1/2	75 1/2	1	1	1	—	3	—	—	60 1/4	113	1	1	1	—	—	—	2
39 1/4	76 1/4	1	1	1	—	1	1	—	61 1/4	115 1/4	1	1	1	1	1	2	—
41 1/2	80 1/2	1	1	1	2	—	1	—	64 1/4	120 1/4	1	1	1	—	2	2	—
42 1/4	81 1/4	1	1	1	1	—	—	1	65 1/4	122 1/4	1	1	1	1	—	—	2
44 1/2	85 1/4	1	1	1	1	1	1	—	67	124 1/4	1	1	1	2	1	2	—

TF8 OR TF10 OFFSET ELEVATION CHART

Inches A	Inches B	mm A	mm B	TF10-30 Offset Elbow	TF10-E30 Return Elbow	TF10-12" Flue	TF10-18" Flue	TF10-36" Flue
4	15	102	381	1	1			
9 1/4	24	235	610	1	1	1		
12 1/4	29 1/4	318	743	1	1		1	
14 1/2	33 1/4	368	845	1	1	2		
17 1/2	38 1/2	445	978	1	1	1	1	
20 1/2	43 1/2	521	1105	1	1		2	
21 1/4	45	540	1143	1	1			1
22 1/4	47 1/2	578	1207	1	1	2	1	
25 1/4	52 1/4	654	1340	1	1	1	2	
26 1/2	54	673	1372	1	1	1		1
28 1/4	58	730	1473	1	1		3	
29 1/2	59 1/4	749	1511	1	1		1	1
34 1/4	68 1/4	883	1734	1	1	1	1	1
38 1/2	74 1/4	978	1899	1	1			2
42 1/4	81 1/4	1073	2064	1	1	1	4	
43 1/4	83 1/4	1111	2127	1	1	1		2
46	87 1/4	1168	2229	1	1		3	1
46 1/4	89	1187	2261	1	1		1	2
49	93	1245	2362	1	1	2		2
52	98 1/4	1321	2496	1	1	1	1	2
55	103 1/4	1397	2623	1	1		2	2
55 1/4	104 1/4	1416	2661	1	1			3
57 1/4	107 1/4	1454	2724	1	1	2	1	2
61	113 1/4	1549	2889	1	1	1		3

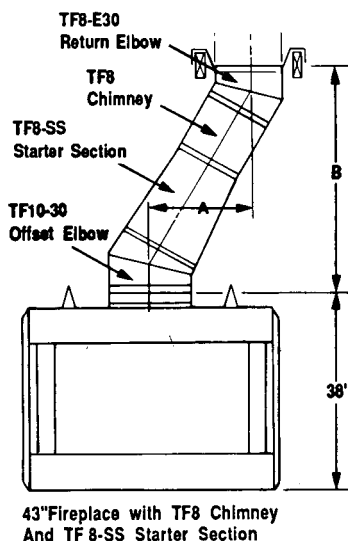


Figure 37

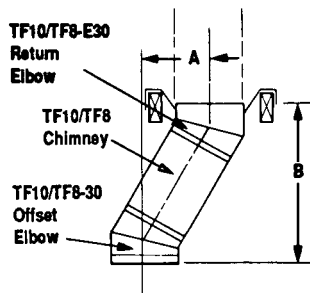


Figure 38

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

SPECIAL OFFSET INSTRUCTIONS

To clear any overhead obstructions, you may offset your chimney system using Superior 30° offset and return elbows. Use two elbows - an offset elbow to initiate the offset and a return elbow to terminate it.

The offset and return elbows may be attached together, or a section or sections of chimney may be used between, but do not exceed 20' (6.1m) in total length between elbows. When offsetting directly off Model HCE-4550 or 45B-N, always use a TF10-30 offset elbow. The TF8-SS starter section may then be used as a transition to the TF8 chimney system. If sections of pipe exceed 10' (3m) between elbows, a chimney stabilizer must be used at the midpoint. The stabilizer support straps must be attached under tension (in shear) to structural framing members above. When two sets of elbows are used, the maximum combined length of chimney used between elbows cannot exceed 20' (6.1m) (Figure 40). Example: If $C_1 = 10'$ (3m) then C_2 cannot exceed 10' (3m). A 30° offset elbow, angling in any direction, may be the first component used off the top of the fireplace flue collar.

Maximum offset of chimney system in the U.S. is 30°. In Canada, the maximum offset is 45°. Refer to the Canadian installation addendum for specific information and application. Two offsets must not be assembled to form a 60° offset. However, two sets of offset and return elbows may be used on a single flue system, provided the total height of the system exceeds 25' (7.5m).

Return elbow support straps must be securely attached under tension (in shear) to structural framing members above. Do not substitute a TF8-30 or TF10-30 offset elbow in place of a TF8-E30 or TF10-E30 return elbow.

OFFSET CALCULATIONS

1. Use Offset Chart to determine amount of horizontal offset (A) and height (B) for various chimney section assemblies.
2. Use "Height of Flue Only" column in The Vertical Elevation Chart to determine combinations of chimney used above return elbow to achieve desired heights. Reference Components Effective Height Chart in vertical elevation chart section.
3. Use Elevation Chart as job estimator only. Add necessary firestop spacers and stabilizers as required. Firestop spacers must be used as shown in Figures 22 and 23 and stabilizers as shown in Figure 27.

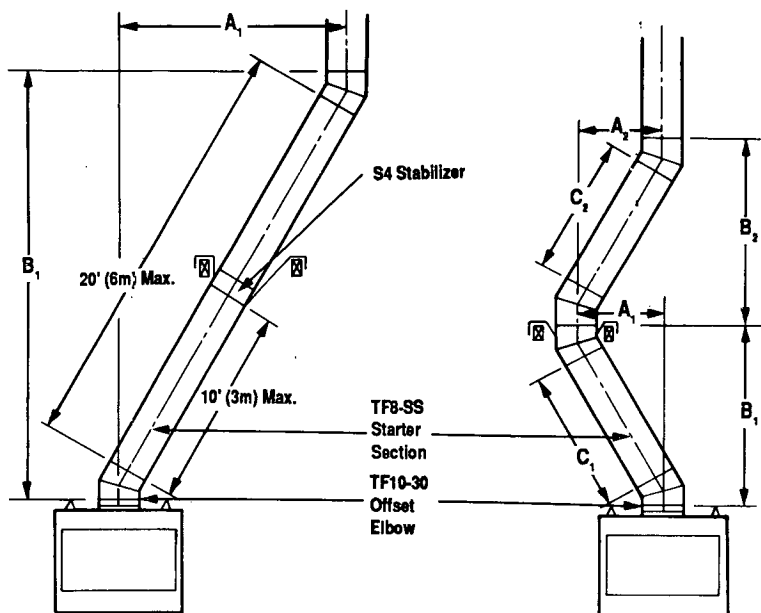


Figure 39

TO INSTALL OFFSETS

First, review Chimney Offset Elevation Chart and Figures 37 and 38 on page 12 for reference.

Step 1. Select desired chimney system; TF8 (203mm) for HCE-3550, HCE-4050, 35B-N and 40B-N, TF8 or TF10 (203 mm or 259mm) for HCE-4550 and 45B-N. Determine the offset distance where chimney is to pass through the first ceiling-dimension "A". To find this point on your ceiling, first determine the center point for a vertical chimney following the instructions for vertical installation.

Measure height to the ceiling from the top of fire-place-dimension "B". Use Offset Elevation Chart to find dimension "A". Mark point where you will drive your nail to show the center point for your offset ceiling cut.

Step 2. Proceed by using the Straight Up Installation Instructions for cutting and framing ceiling and roof openings.

Note: See Framing and Dimension Chart for the sizes of the ceiling and roof openings. The size of the roof opening varies with the degree of pitch of the roof.

Figure 40

OFFSET ELBOW ASSEMBLY

Offset elbows install the same as chimney sections. First, snap the inner section INTO the preceding inner section of flue. Check connection by pulling up slightly to ensure a tight fit. Next, the outer sections snap lock OVER the preceding outer section of chimney. Again, check outer section by pulling up slightly to ensure proper connection is made.

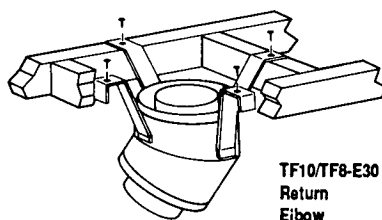


Figure 42

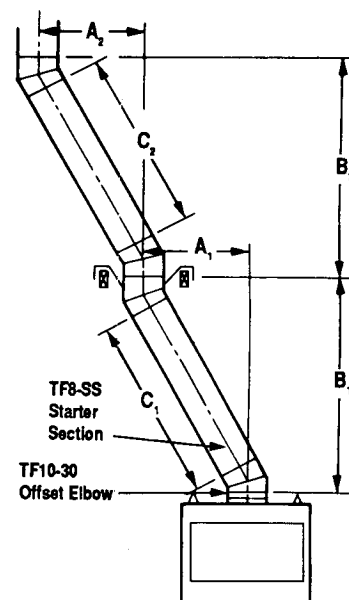


Figure 41

RETURN ELBOW ASSEMBLY

Return elbows install the same way as round terminations and stabilizers:

Step 1. Hold return elbow over top of last chimney section.

Step 2. Center inner slip section into inner flue pipe-slip down.

Step 3. Center outer-locking section over outer chimney pipe. Push down until locking joint has firmly engaged.

Step 4. Pull up slightly on return elbow to ensure locking joint has firmly engaged.

Step 5. Secure support straps to framing members by nailing under tension in shear.

Note: The return elbow assembly performs the same function as a stabilizer. Consider this when determining the need for a stabilizer.

Note: Do not apply excessive pressure to any subsequent chimney section following return elbow assembly when installing. Ensure that each subsequent chimney section is securely attached by testing as noted above.

TF8 AND TF10-OR15 OFFSET/RETURN ELBOWS

Primarily used when fireplace penetrates a 6" (152mm) thick wall. Refer to installation instructions packed with TF8-OR15 and TF10-OR15 for proper usage.

CHIMNEY OFFSET 30° THROUGH FLOOR OR CEILING

It may be necessary to assemble the chimney at 30° when passing through the floor or ceiling area. Use appropriate 30° angled firestop spacer as shown in *Figures 43 and 44*. Support the chimney at floor or ceiling penetration with a stabilizer if distance of chimney below ceiling is 10' (3m) or more. Maintain 1" (25mm)** (See **Note**) minimum air space to combustibles from chimney sections.

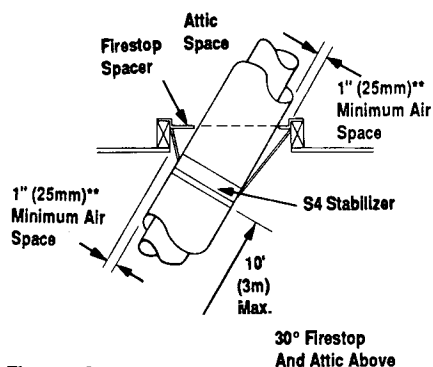


Figure 43

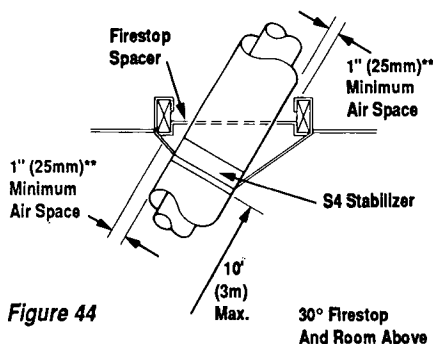


Figure 44

ACCESSORIES

Optional Glass Doors And Trim Kits

If glass doors are to be installed on this system, refer to specific installation instructions packed with the glass doors. Superior glass doors, Model numbers 38-GD, 43-GD, 33GD-AB, 38GD-AB, 43GD-AB, 35H-PB, 40H-PB, 45H-PB, 35GT-SPS, 40HT-SPS, 45HT-SPS, 33BF-AB, 38BF-AB, 43BF-AB, 35BFE-AB, 40BFE-AB, 45BFE-AB, 38BF, 43BF, 38BFT, 43BFT, 33BF-PB, 38BF-PB, 43BF-PB, 33BF-SPB, 38BF-SPB, 43BF-SPB, 33BFT-SPB, 38BFT-SPB and 43BFT-SPB, are for use only on these Superior and Hearthstar factory-built fireplaces. Use of other non-listed glass door on these fireplaces may constitute a potential fire hazard and are not recommended.

Optional trim kits, Models HTK-PB, HTK-SPB, HTK-AB, HTK-SPS, VTK-BFE, VTK-SPB and VTK-GDE, may be used in conjunction with the glass doors listed above. Refer to the appropriate installation instructions packaged with the trim kits for specific information on installation.

****Note: 2" (51mm) when installing in Canada and 2" when installing TF8 chimney on Models HCE-4550 and 45B-N fireplaces.**

CAUTION: DO NOT ATTEMPT TO TOUCH THE DOORS WITH YOUR HANDS WHILE THE FIREPLACE IS IN USE. ALWAYS USE DOOR HANDLES. DOORS WILL BECOME VERY HOT WHEN FIREPLACE IS IN USE.

WARNING: FIREPLACES EQUIPPED WITH DOORS SHOULD BE OPERATED ONLY WITH THE DOORS FULLY OPEN OR FULLY CLOSED.

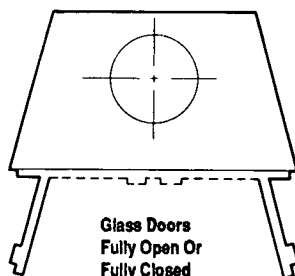


Figure 45

CAUTION: CERTAIN GLASS DOORS OVERLAP THE BLACK METAL FACING OF THE FIREPLACE. IF THE FIREPLACE HAS BEEN FACED WITH NON-COMBUSTIBLE MATERIALS, THERE MIGHT NOT BE SUFFICIENT CLEARANCE TO INSTALL THE GLASS DOORS OF YOUR CHOICE. ENSURE ADEQUATE CLEARANCE IS MAINTAINED AT ALL TIMES SO AS NOT TO INTERFERE WITH THE INSTALLATION AND OPERATION OF GLASS DOORS.

Optional Combustion Air Kit

Use combustion air kit, Model AK-4, with the HCE and B-N Series fireplaces. Refer to installation instructions packed with the AK-4 air kit for specific installation information. The outside air kit must be installed before the fireplace is framed and enclosed in the finished walls.

Outside air drawn into the fireplace supplies air to the fire for combustion. Only one combustion air duct on the left side of the fireplace is necessary if installed.

If additional length of duct is necessary, purchase locally available U.L. Class 1 aluminum ducting. The duct may extend up to 50' (15.24m) in any direction.

Note: When installing the air duct vertically, DO NOT terminate the duct closer than 3' below the chimney top.

There is a one hand operated shut-off valve located in the left side of the fireplace opening behind the screen. To open, pull out all the way. The combustion air damper should be fully open when the fireplace is in use and fully closed when the fireplace is not in operation to prevent outside air from entering your home.

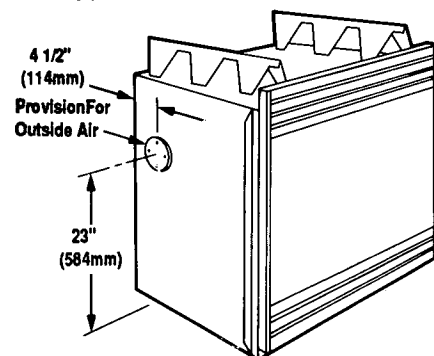


Figure 46

CAUTION: NEVER LOCATE INLET WHERE IT CAN BE BLOCKED BY SHRUBS, SNOW DRIFTS, ETC. NEVER LOCATE INLET IN GARAGE OR ANY AREA WHERE THERE IS ANOTHER FUEL BURNING APPLIANCE OR PRODUCTS EMITTING COMBUSTIBLE GASES SUCH AS PAINT, GASOLINE, ETC. IN COLD CLIMATES IT IS RECOMMENDED THE COMBUSTION AIR DUCT BE INSULATED.

Outside combustion air ducting may be run upwards or vertically through framing and ceiling joists, with the hood installed through an outside wall and 3' below the termination. Ducting may also be run downward through floor joists and under the home to a ventilated crawlspace not considered part of the living area of the home.

Note: Do not terminate combustion air kit in attic space under any circumstances.

A take-off boot adapter, Model TOB, may be used in conjunction with the AK-4 to reduce the framing dimensions when installing the fireplace diagonally in a corner (Figure 47). Refer to installation instructions packed with the TOB for specific installation information.

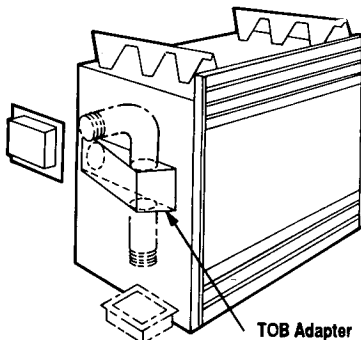


Figure 47

FORCED AIR KIT ELECTRICAL CONNECTION

If you are installing a Superior forced air kit, Model FAK-1500, see the instruction sheet provided with the kit for electrical wiring requirements. The fireplace has been pre-wired at the factory but must be connected to main power supply at the time of installation if the FAK-1500 is to be installed later. The electrical connections must be made before the fireplace is framed and enclosed in the finished walls.

CAUTION: ELECTRICAL CONNECTIONS SHOULD ONLY BE PERFORMED BY A QUALIFIED, LICENSED ELECTRICIAN. MAIN POWER MUST BE OFF WHEN CONNECTING FANS TO MAIN ELECTRICAL POWER SUPPLY OR PERFORMING SERVICE.

GAS LINE

This provision is intended for connection to a decorative gas appliance only in accordance with the latest National Fuel Gas Code, ANSI Z 223.1; or CAN 1-B149 for Canadian installations.

CAUTION: PLUMBING CONNECTIONS SHOULD ONLY BE PERFORMED BY A QUALIFIED, LICENSED PLUMBER. MAIN GAS SUPPLY MUST BE OFF WHEN PLUMBING GAS LINE TO FIREPLACE OR PERFORMING SERVICE.

If you're installing a gas line, connect it before the fireplace is framed and enclosed in the finished wall. The gas knockout is determined by a 1 1/8" (29mm) round indentation located at the bottom and slightly off center in the side refractories. **THE KNOCKOUT IS ALWAYS REMOVED FROM INSIDE THE FIREPLACE. DO NOT REMOVE THE KNOCKOUT UNLESS YOU ARE INSTALLING A GAS LINE.** If removal is attempted from the outer wrapper, side refractory damage may occur. With a medium-sized hammer, lightly tap the surface of the indentation. The refractory material is very thin in this area and is easily removed. Once a small hole has been made, continue tapping until you have reached sufficient diameter for the gas line to fit through. The entire knockout does not have to be removed. Remove insulation in the gas line channel.

Install only a 1/2" (13mm) black iron pipe through fireplace wall for connection to a decorative gas appliance inside the firebox. Outside, the iron pipe connects to a gas shut-off valve recessed flush into the wall or floor. The valve should be controlled by a removable valve key for safety.

Always plumb gas line installation per local codes. Check all connections with soap suds; leaks will bubble. **Never test any gas line connection with a match or open flame.**

IMPORTANT: RE-PACK INSULATION MATERIAL IN SQUARE HOLE AROUND GAS LINE, INTERIOR AND EXTERIOR; TO SEAL.

CAUTION: WHEN USING THE DECORATIVE GAS APPLIANCE, THE FIREPLACE DAMPER MUST BE SET IN THE FULLY OPEN POSITION.

COLD CLIMATE INSULATION

If you live in a cold climate, it is especially important to seal all cracks around the fireplace opening with non-combustible material and wherever cold air could enter the room. Surrounding materials must be caulked where it meets the black metal facing of the fireplace to avoid cold air intrusion. Use non-combustible caulking material only on fireplace facing to seal. Also, the outside air inlet duct should be wrapped with non-combustible insulation to minimize the formation of condensation. Do not place insulation materials against chimney sections.

Note: A 1" (See **Note) air space must be preserved for all combustible materials extending to any continuous length adjacent to the chimney.

It is especially important to insulate between the studs of an outside chase cavity and under the floor if the floor is above ground level. Do not place insulation directly against the fireplace or chimney system.

FIREPLACE FINISHES, HEARTH EXTENSIONS, WALL SHIELDS Framing

It is sometimes best to frame your fireplace after it is positioned and the chimney is installed. Frame enclosure for chimney and fireplace with 2 x 4's (51 x 102 mm) (or heavier) lumber.

Note: The header may rest on the two (2) metal spacers on top of the unit but the header must not be notched to fit around the spacers.

The HCE and B-N Series may sit directly on a combustible surface. A 1" (25mm)** (See **Note) air space is required between combustible framing and the chimney. In Canada, the minimum height for a combustible mantel is 18" (457mm) above the fireplace opening. Figure 48 shows typical Canadian installation. In installations other than Canada, combustible mantels and trim may be installed 12" above the fireplace opening as per NFPA 211, Section 7-3.3.3. and Figure 49. If a mantel is of a non-combustible material, it is exempt from these requirements as long as it does not interfere with the installation or operation of glass doors or block the inlets and outlets. The HCE fireplace front facings are designed to project 1" (25mm) beyond a finished wall surface.

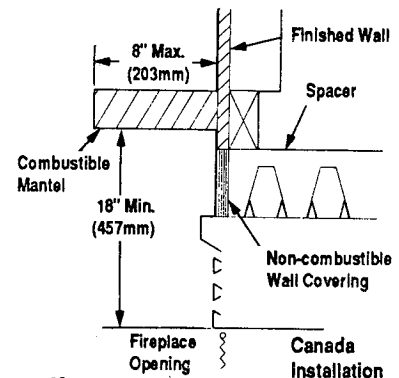


Figure 48

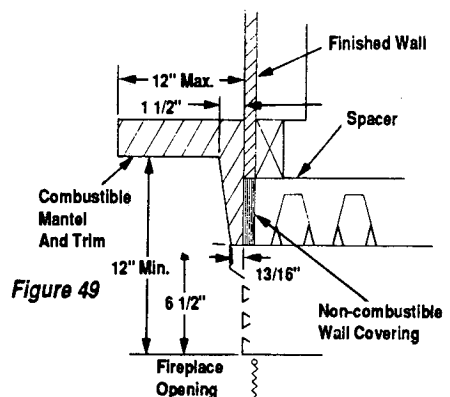


Figure 49

Typical Installation
(Refer to Figure 48 For Canada)

****Note: 2" (51mm) when installing in Canada and 2" when installing TF8 chimney on Models HCE-4550 and 45B-N fireplaces.**

HEARTH EXTENSIONS AND WALL SHIELDS

A hearth extension must be installed with all fireplaces. It is to protect the floor in front of the fireplace from both radiant heat and sparks. For Models HCE-3550, HCE-4050, 35B-N and 40B-N the hearth extension must extend 8" (203mm) beyond both sides of the fireplace opening and 16" (406mm) beyond the front. For Models HCE-4550 and 45B-N the hearth extension must extend 12" (305mm) beyond both sides of the fireplace opening and 20" (508mm) beyond the front. Use the metal hearth extension, Model HE-36, with these fireplaces or a 1/2" minimum thickness of a durable non-combustible material with an equal or greater insulating value than $K = .84 \text{ BTU-in/FT}^2\text{-HR-F}^\circ$ or a thermal resistance that equals or exceeds $R = 1.19 \text{ HR-F}^\circ\text{-FT}^2 / \text{BTU-in}$.

Note: Any non-combustible material whose K value is less than .84 or whose R value is more than 1.19 is acceptable.

If the fireplace is installed on a combustible floor, use the metal safety strips (provided) on the floor extending half under the fireplace and half under the hearth extension

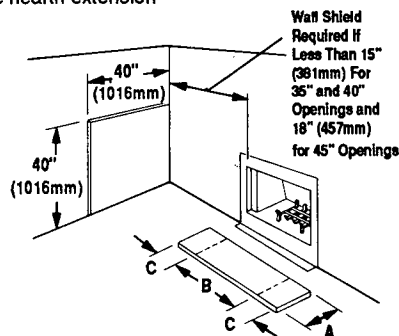


Figure 50

HEARTH EXTENSION DIMENSIONS

Opening Width	35"	40"	45"
A	16" (406mm)	16" (406mm)	20" (508mm)
B	33" (838mm)	38" (965mm)	43" (1092mm)
C	8" (203mm)	8" (203mm)	12" (305mm)

METHODS OF DETERMINING HEARTH EXTENSION EQUIVALENTS

To determine the thickness required for any material when either the K or R values are known:

$$T_M (\text{inches}) = \frac{K_M \times T_R}{.84}$$

$$\text{or } T_M = \frac{1.19}{R_M} \times T_R$$

T_M = Thickness of material in inches

K_M = K value of material

R_M = R value of material

T_R = Minimum thickness required

ALTERNATE HEARTH EXTENSION MATERIALS

MATERIAL	K	R	1/2"
Millboard	0.84	1.19	1/2"
Common Brick	5.00	0.20	3"
Micore CV230 (U.S. Gypsum Corp.)	0.43	2.33	1/4"
Ceraform 126 (John Manville)	0.27	3.70	1/4"

EXAMPLE:

Ceraform 126 is to be used on a HCE-4050 fireplace. How thick must the hearth extension be?

Using the formula:

Using K

$$T_M (\text{Inches}) = \frac{K_M \times T_R}{.84}$$

$$T_M (\text{inches}) = \frac{0.27 \times 1/2^{**}}{.84}$$

Answer using K

$$= 0.32 \times 1/2 = 0.16 \text{ inches or } 1/4"$$

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

Using R

$$T_M (\text{inches}) = \frac{1.19 \times T_R}{R_M}$$

$$T_M (\text{inches}) = \frac{1.19 \times 1/2^{***}}{3.70^*}$$

Answer using R

$$= 0.32 \times 1/2 = 0.16 \text{ inches or } 1/4"$$

*value taken from chart

**Min. thickness per requirements

These materials can then be covered with a decorative non-combustible material.

WARNING: THE CRACK BETWEEN THE FIREPLACE AND THE HEARTH EXTENSION MUST BE SEALED WITH A NON-COMBUSTIBLE MATERIAL.

WARNING: WHEN INSTALLING THE HEARTH EXTENSION BE CAREFUL NOT TO BLOCK THE HEAT CIRCULATING AIR INLET GRILL.

WARNING: FIREPLACE MUST BE RAISED IF HEIGHT OF HEARTH EXTENSION EXCEEDS 1 1/2" (38MM) ABOVE BOTTOM OF FIREPLACE (FIGURE 51).

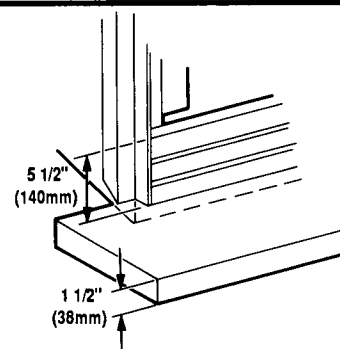


Figure 51

Secure the hearth extension to the floor to prevent possible shifting.

If a continuous perpendicular side wall is closer than 15" (381mm) to the fireplace opening on the HCE-3550, HCE-4050, 35B-N or 40B-N and 18" (457mm) to the fireplace opening on the HCE-4550 or 45B-N a wall shield is required. Use metal wall shield, Model WS40, manufactured by Superior Fireplace Company or construct a 40" x 40" x 1/2" (1016mm x 1016mm x 13mm) wall shield made of millboard or a durable non-combustible material with equal or greater insulating value than K=.84 BTU-IN./SQ.FT.-HR.-°F. In no case shall a continuous perpendicular side wall be closer to the fireplace opening than 8" (203mm).

If fireplace is installed diagonally across a 90° corner; no wall shields are required.

FINISH TO YOUR TASTE

There are a wide variety of "finished looks" for your HCE and B-N Series; from formal wall decor with elaborate mantels to rustic wood paneling to warm brick facings.

Only non-combustible materials like stone, tile, brick, etc. may overlap the black front facing but be sure not to interfere with the installation and operation of glass doors or block the upper or lower grilles. Seal all joints between the black facing and wall surrounds to prevent air intrusion. Use non-combustible caulking material only to seal the black metal facing to the surround material on the finished wall.

Note: If optional trim kits are to be installed, refer to the specific installation instructions for proper use of these accessory pieces.

Combustible materials may project beyond the sides of the fireplace opening as long as they are kept within the shaded areas illustrated in Figures 52 and 53.

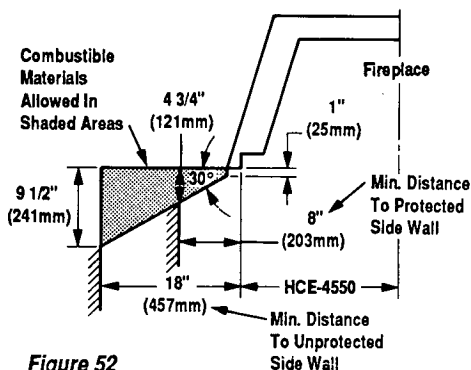


Figure 52

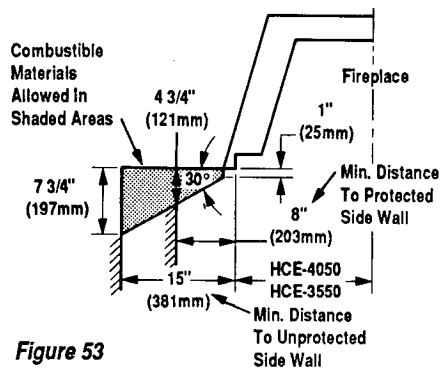


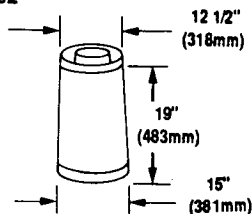
Figure 53

SUPERIOR ACCESSORY PARTS COMPONENTS LIST FOR HCE AND B-N SERIES FIREPLACES

The following accessory parts and components are to be used only with your Superior fireplace system. Separate installation instructions are packaged with all combustion air kits, glass doors, trim kits, forced air kits and chimney terminations.

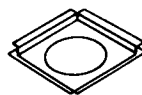
If you encounter any problems or have questions concerning the installation or application of this system, please contact your distributor or:

SUPERIOR FIREPLACE COMPANY
4325 Artesia Ave
Fullerton, California 92633
714-521-7302



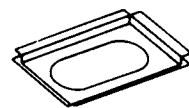
Starter Section

TF8-SS



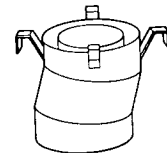
Firestop Spacer

10FS
10FS-2
8FS
8FS-2



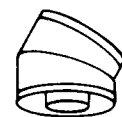
Firestop Spacer (30°)

10FS30
10FS30-2
8FS30
8FS30-2



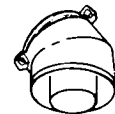
Offset/Return

TF10-OR15
TF8-OR15



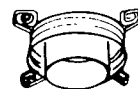
Offset Elbow

TF10-30
TF8-30



Return Elbow

TF10-E30
TF8-E30



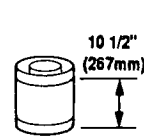
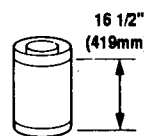
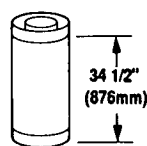
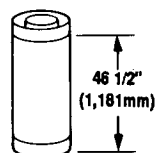
Stabilizer

TF10-S4
TF8-S4



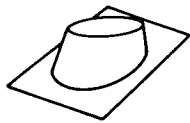
Storm Collar

10SC
8SC



O.D. = 15" (381mm)
TF10-36
TF10-18
TF10-12
I.D. = 10" (254mm)
O.D. = 12 1/2" (317mm)
TF8-48
TF8-36
TF8-18
TF8-12
I.D. = 8" (203mm)

Chimney Sections



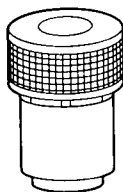
Flashing

8F6
8F12
10F6
10F12



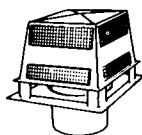
Locking Band

10LB
8LB



Chase Termination

TF10-CTDT
TF8-CTDT



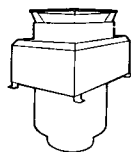
Chase Termination

TF10-CT1
TF8-CT1



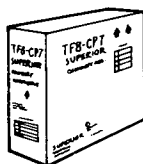
Round Termination

TF10-CTD
TF8-CTD



Chase Termination (Square)

TF10-CT2
TF8-CT2



Chimney Pack
Conventional

TF8-CP7

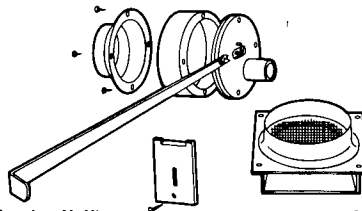
Contents:
3-TF8-36
1-8FS
1-8F6
1-TF8-CTD



Chimney Pack
Conventional

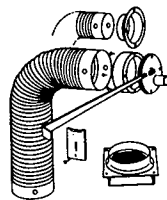
Contents:
4-TF10-36
1-10FS
1-10F6
1-TF10-CTD

TF10-CP8



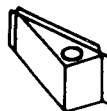
Combustion Air Kit

AK-4



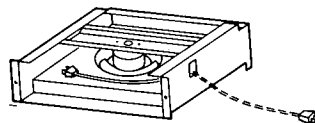
Combustion Air Kit
(Less Duct)

AK-4LD



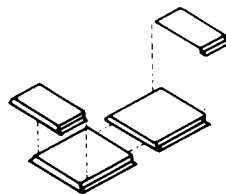
Take Off Boot

TOB



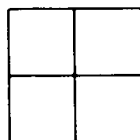
Forced Air Kit

FAK-1500



Hearth Extension

HE-36



Wall Shield

WS40



Refractory Tint Kit

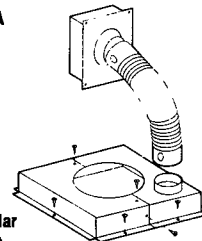
RTK



Refractory Patch Kit

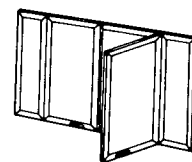
RPK

Note: Not A
U.L. Listed
Accessory



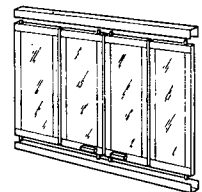
Chimney Collar
Enclosure Kit

TF8-CCEK
TF10-CCEK



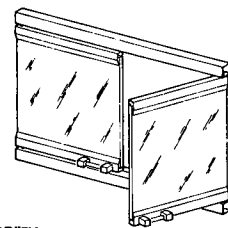
Twin Pane Glass Doors

38GD
43GD
33GD-AB
38GD-AB
43GD-AB



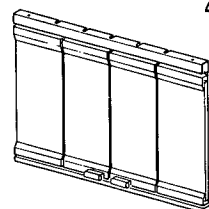
Bi-Fold "ALL-GLASS"™ Doors

35BFE-AB
40BFE-AB
45BFE-AB



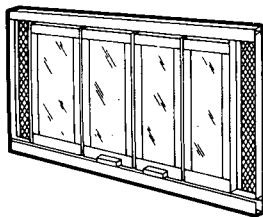
"ALL-GLASS"™

35H-PB
40H-PB
45H-PB
35GT-SPS
40HT-SPS
45HT-SPS



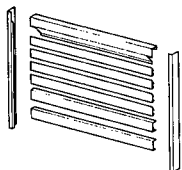
Bi-Fold

38BF 38BFT
43BF 43BFT
33GBF-PB
38BF-PB
43BF-PB
33GBF-SPB
38BF-SPB
43BF-SPB
33GBF-SPB
38BFT-SPB
43BFT-SPB
33GBF-ABR
38BF-ABR
43BF-ABR



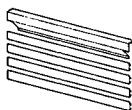
Bi-Fold (Traditional)

33BF-AB
38BF-AB
43BF-AB



Horizontal Trim Kit

35HTK-SPB
40HTK-SPB
45HTK-SPB
35HTK-SPS
40HTK-SPS
45HTK-SPS
35HTK-PB
40HTK-PB
45HTK-PB



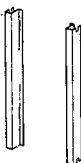
Horizontal Trim Kit

35 HTK-AB
40HTK-AB
45HTK-AB



**Vertical Trim Kit
(Bi-Fold Doors)**

VTK-BFE



**Vertical Trim Kit
(GD Doors)**

VTK-GDE

NOTE: DIAGRAMS & ILLUSTRATIONS NOT TO SCALE

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4325 Artesia Avenue
Fullerton, CA 92633

Plants in Fullerton, CA,
Union City, TN

BLOCK NO.

45

LOT NO.

7

SUBDIVISION

106 Grove

PERMIT NO.

89-111

Page 3

PRIOR APPROVALS CHECKLIST

APPROVALS	LOCAL		COUNTY		REGIONAL		STATE		COMMENTS					
	Prelim. Approval	Final Approval	Prelim. Approval	Final Approval	Prelim. Approval	Final Approval	Prelim. Approval	Final Approval						
	Init.	Date	Init.	Date	Init.	Date	Init.	Date		Init.	Date			
☐ Planning Board														
☐ Zoning Board														
☐ Sewer Authority														
☐ Water Authority														
☐ Fire Department														
☐ Police Department														
☐ Health Department														
☐ Soil Conservation														
☐ N.J. Dept. of Community Affairs														
☐ N.J. Dept. of Transportation														
☐ N.J. Dept. of Environmental Protection														
☐ Other: _____														
☐ _____														
☐ _____														
☐ _____														
☐ _____														
☐ _____														
☐ _____														
☐ _____														

SUBCODES AND SPECIAL REGULATIONS APPLICABLE:

EDITION OF CODE

- ☐ One and Two Family Dwellings _____
- ☐ Building _____
- ☐ Electrical _____
- ☐ Plumbing _____
- ☐ Fire Protection _____

EDITION OF CODE

- ☐ Mechanical _____
- ☐ Energy _____
- ☐ Barrier Free _____
- ☐ Other _____

☐ Flood Hazard _____

☐ As Built Elevation Certification _____

☐ Other _____

PERMIT CONTROL

I. PLAN REVIEW STATUS

Updated at time of receipt of drawings and when plans are approved.

- ☐ PARTIAL RELEASES
☐ PROTOTYPE PLAN - FILE LOCATION AND NO. _____

Plan Review Required	Type of Work	Plans Received By Date Receiver	Approval Date	Reviewer	Comments
☐	BUILDING				
	Footings/Foundations				
	Framing				
	Architectural				
	Other _____				
☐	PLUMBING				
☐	ELECTRICAL				
☐	FIRE PROTECTION				
☐	OTHER _____				

II. PERMIT/INSPECTION STATUS

Updated at time of permit and after final approvals.

Issue Date	Category	Revisions	Final Inspection	Comments
_____	ALL CONSTRUCTION			
_____	BUILDING			
_____	Footings/Foundations			
_____	Framing			
_____	Architectural			
_____	Other _____			
_____	PLUMBING			
_____	ELECTRICAL			
_____	FIRE PROTECTION			
_____	OTHER _____			

III. CERTIFICATES ISSUED

CERTIFICATES TO BE ISSUED:	Date Issued
☐ Temporary Certificate of Occupancy Date Expired _____	_____
☐ Temporary Certificate of Occupancy Date Expired _____	_____
☐ Certificate of Occupancy No. _____	_____
☐ Certificate of Continued Occupancy No. _____	_____
☐ Certificate of Approval No. _____	_____
☐ None	_____

IV. ON-GOING INSPECTIONS

On-going Inspections Required (See Page 1, II.D.)	Date Posted to Log and Tickler
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

V. FEE SUMMARY

Initial fee collection recorded in A; all others in section B.

A. COLLECTED AT TIME OF CONSTRUCTION PERMIT ISSUANCE

	AMOUNT
BUILDING	\$ _____
PLUMBING	_____
ELECTRICAL	_____
FIRE PROTECTION	45.00
OTHER _____	_____
SUBTOTAL	\$ _____
- LESS: 20% of subtotal (when plan review performed by state agency).	(_____)
D.C.A. TRAINING FEE .0006 x _____	= _____
CERTIFICATE OF OCCUPANCY	_____
OTHER _____	_____
OTHER _____	_____
TOTAL COLLECTED WHEN PERMIT ISSUED	\$ 45.00
DATE 7-14-89 Collected By <i>DMH</i>	

B. COLLECTED AFTER CONSTRUCTION PERMIT ISSUANCE

Date	Collected By	AMOUNT
CERTIFICATE OF OCCUPANCY	_____	_____
OTHER	_____	_____
OTHER	_____	_____
- LESS: Refunds	_____	(_____)
TOTAL COLLECTED AFTER PERMIT ISSUED		\$ _____

C. TOTAL CONSTRUCTION FEES COLLECTED

	AMOUNT
COLLECTED WITH PERMIT (VA)	\$ _____
COLLECTED AFTER PERMIT (VB)	_____
TOTAL	\$ _____