CITY OF PORITLAND BILLIAND BILLIAN			mis n must A certificate of occupancy must be procured by owner before this building or part thereof is occupied.	VG 3 THIS CARD
Please Read Application And Notes, if Any, Attached	is is to certify that Brooks Kevin F & /Applicans permission to install a Metalbestos Chimne 153 Hope Ave	on or persons, m or estatutes of N ne and or the tenance and u of buildings	n per ding	ith Dept. leal Board er Department Name PENALTY FOR REMOVING 3 THIS CARD.

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 to schedule your inspections as agreed upon

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you ar inspection procedure and additional fees from Work Order Release" will be incurred if the below.	n a "Stop Work Order" and "Stop
Pre-construction Meeting: Must be so receipt of this permit. Jay Reynolds, Development also be contacted at this time, before any site we single family additions or alterations.	ent Review Coordinator at 874-8632 must
Footing/Building Location Inspection;	Prior to pouring concrete
Re-Bar Schedule Inspection:	Prior to pouring concrete
Foundation Inspection:	Prior to placing ANY backfill
Framing/Rough Plumbing/Electrical:	Prior-to any insulating or drywalling
use	or to any occupancy of the structure or . NOTE: There is a \$75.00 fee per pection at this point.
Certificate of Occupancy is not required for certa you if your project requires a Certificate of Occu inspection If any of the inspections do not occur,	pancy. All projects DO require a final
phase, REGARDLESS OF THE NOTICE OR	1 0
CERIFICATE OF OCCUPANICES M	
BEFORE THE SPACE MAY BE OCCUPIED) <u>((164</u>
Signature of Applicant/Designee	Date Color
Signature of Inspections Official	Date
CBL: 3923 23 Building Permit #:	40740

	101 Tel: (207) 874-8703		04-0740 JUN 0		
Location of Construction:	Owner Name:	1	wner Address:	Phone:	
153 Hope Ave	Brooks Kevin		72 Bramblewood Digary OF PORTLAND		
Business Name:	Contractor Name		ontractor Address:	Dione	
Lessee/Buyer's Name	Applicant Phone:		Portland	Zone:	
Lessee buyer's Name	Phone:		HVAC	Zone:	
Past Use:	Proposed Use:	Po	ermit Fee: Cost of Work:	CEO District:	
Single Family Home Single Family Metalbestos Cl		Home / install a Thimney	, I _ Applioved	0.00 5 NSPECTION: Use Group Type: fee	
Proposed Project Description:				11 -	
install a Metalbestos Chim	nney	Si	gnature:	Signature	
		PE	PEDESTRIAN/ACTIVITIES DIST		
		A	ction: Approved Appro	oved w/Conditions Denied	
		Si	ignature:	Date:	
Permit Taken By: ldobson	Date Applied For: 06/04/2004		Zoning Approval		
		Special Zone or Reviews	Zoning Appeal	Historic Preservation	
1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.		Shoreland	Variance	Not in District or Landma	
2. Building permits do not include plumbing, septic or electrical work.		Wetland	Miscellaneous	Does Not Require Review	
3. Building permits are void if work is not started within six (6) months of the date of issuance.		1 / 1 / 1		I —	
		☐ Flood Zone	Conditional Use	Requires Review	
	of the date of issuance. y invalidate a building	☐ Flood 2ond	☐ Conditional Use ☐ Interpretation	Requires Review Approved	
within six (6) months False information may permit and stop all wo	of the date of issuance. y invalidate a building ork				
within six (6) months False information may permit and stop all wo	of the date of issuance. y invalidate a building ork RMITISSUED	Subdivision	☐ Interpretation	Approved	
within six (6) months False information may permit and stop all wo	of the date of issuance. y invalidate a building ork	Subdivision Site Plan	☐ Interpretation ☐ Approved	Approved w/Conditions	
within six (6) months False information may permit and stop all wo	of the date of issuance. y invalidate a building ork FMITISSUED JUN 0 4 2004	Subdivision Site Plan Maj Minor MM	☐ Interpretation ☐ Approved ☐ Denied ☐ Date:	☐ Approved ☐ Approved w/Conditions ☐ Denied	

shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

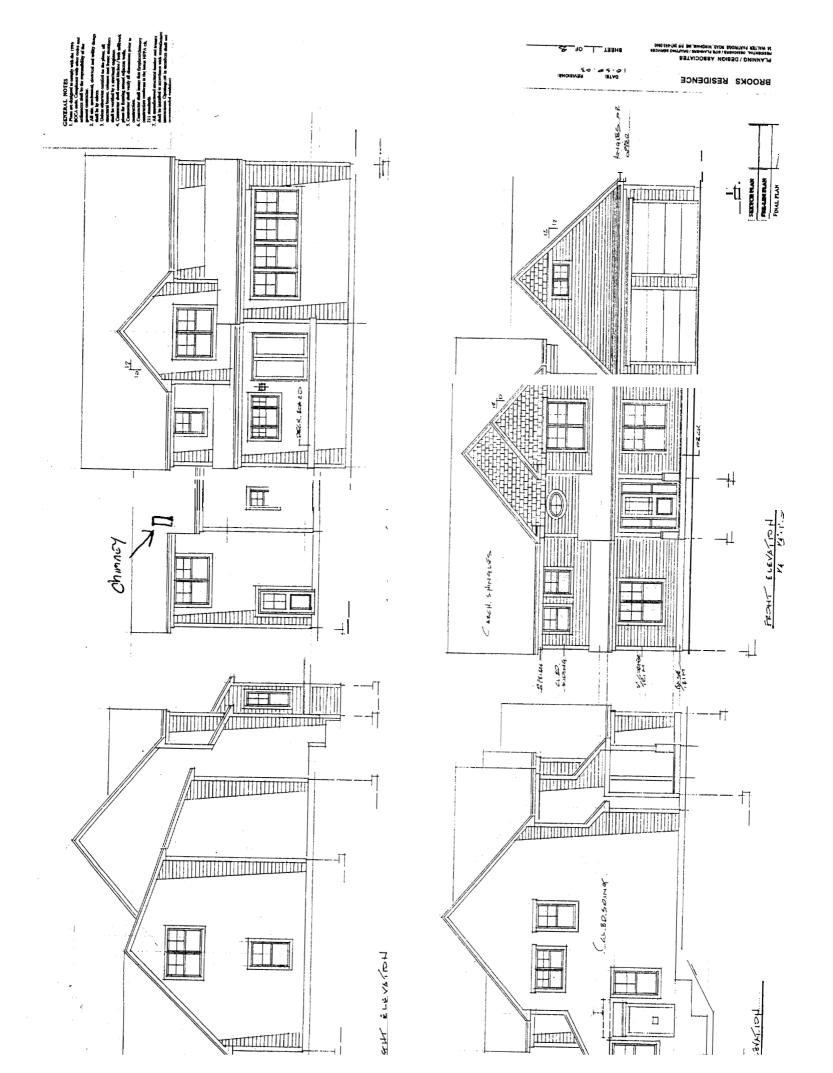
City of Portland, Maine - Building or Use Permit				Permit No:	Date Applied For:	CBL:
389 Congress Street, C	4101 Tel	: (207) 874-8703, Fax : (2	207) 874-8716	6 04-0740	06/04/2004	392 B023001
Location of Construction: (Owner Name:		Owner Address: P		Phone:		
153 Hope Ave	Brooks Kevin F &		72 Bramblewood Dr			
Business Name:		Contractor Name:		Contractor Address:		Phone
		Applicant		Portland		
Lessee/Buyer's Name		Phone:		Permit Type: HVAC		
•				d Project Descriptions a Metalbestos Chir		
Dept: Zoning	Status:	Approved	Reviewer:	Tammy Munson	Approval E	Date: 06/04/2004
Note:						Ok to Issue:
Dept: Building Note:	Status:	Approved with Conditions	Reviewer:	Tammy Munson	Approval D	Oate: 06/04/2004 Ok to Issue:
1) A 2" air space must	be maintain	ed between the chimney and	d combustibles			
2) The chimney must to	erminate atle	east 2' above any roof surfa	ce located with	in 10 horizontally	of the chimney.	

Signage/Awning Permit Application

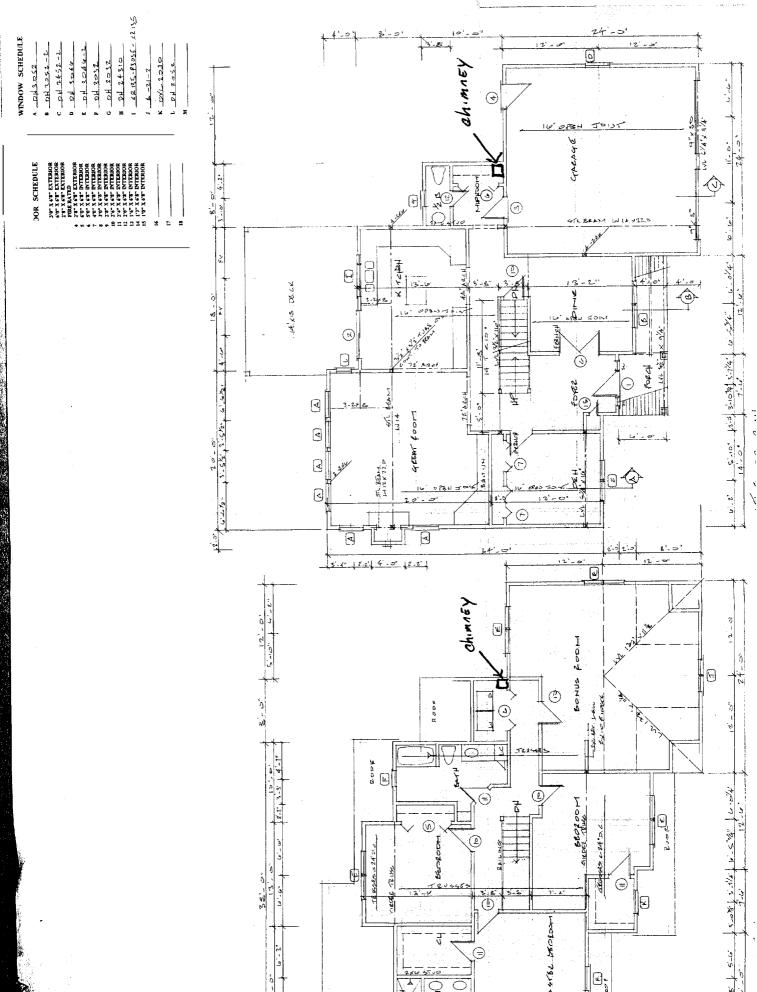
Ifyou or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: 153 Hope AVE Doctland
Total Square Footage of Proposed Structure Square Footage of Lot
2,887 sq Ft 392 B 23 38,974 sq Pt
Owner: Lot# 23 KEVII. Brooks Telephone: 878-8330
Applicant name, address & telephone: Revin Reack: Total s.f. of signage x \$2.00 per s.f. plus \$30.00/\$65.00 for H.D. signage = Total
Current use:
If the location is currently vacant, what was prior use: DEPT. OF BUILDING INSPECTION CITY OF DOSTLAND, ME
Approximately how long has it been vacant:
Proposed use: Project description: METaIfESTOS Chimney
Contractor's name, address & telephone: Whom should we contact when the permit is ready: Mailing address: Ne will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A STOP WORK ORDER will be issued and a \$100.00 fee if any work starts before the permit is picked up. PHONE:
IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT. WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APROVE THIS PERMIT. If hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall hove the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.
Signature of applicant: Kurin 15 mech Date: 6/3/04

This is NOT a permit, you may not commence ANY work until the permit is issued.



BROOKS RESIDENCE DATE: REVISIONS:



STATE OF MAINE CHIMNEY OR FIREPLACE DISCLOSURE

Dear Consumer: State law, specifically 32 M.R.S.A., Chapter 33, requires chimney or fireplace installers, as of January 1, 1992, to provide you with this <u>Disclosure</u> prior to the installation work being done on your chimney or fireplace. The purpose of this <u>Disclosure</u> is to help you, as a consumer, make an informed decision as to the abilities of the installer and under what requirements the installation must comply. It is important to note that the State of Maine does not require registration or licensure of chimney or fireplace installers; however, it is just as important to realize that many fires are caused each year by improperly constructed fireplaces and chimneys. For further information about this law, call the Division of Licensing & Registration & 624-8629 or write to the Division & #35 State House Station, Augusta, Maine 04333.

INSTALLER INFORMATIO Name of Installer Marris Construction Name of Installer (if incorporated) Legal Address____ (Street and No.) (City or Town) Business Telephone 207 / Home Telephone 20) 1224 Years of experience doing fireplace or chimney installations Mailing Address (Street and No.) (City or Town) 04103 (State) (Zip Code) Home Telephone 207 / 878 / 8330 Business Telephone 2071 867 Installer, please give a brief description of installation being offered. the installer, hereby attest that the preceding information provided is true to the best of my knowledge. I also understand that if I fail to conform with the standards as outlined in NFPA 211 that I shall be subject to penalties as outlined under Title 32, Chapter 33, Oil and Solid Fuel Board. Signature

		INSTALLATION STANDARDS
Ple	ase check the type of unit(s)	that will be installed:
	Factory-Built Chimney a	and Chimney Units.
	Tanana haile shina aa aa	
COD	itions of the listing and the m	nd chimney units shall be listed and shall be installed in accordance with the temperature namufacturer's instructions and all requirements of NFPA 221 for chimneys, fireplaces,
	s and solid fuel appliances.	
	Masonry Chimney.	
" بند سائدات	Masonry chimneys shall	be designed, anchored, supported and re-enforced as required by NFPA 211 for
com	meys, fireplaces, vents and so	nd ruet appulances.
1 2	Metal Chinney.	
		constructed in accordance with NFPA 211, and shall apply good engineering practices
is no	cessary for:	
	1. Strength to resist stress	
ž,	2. Adequate anchoring an	
72	3. Durability	
unitari Santari	4. Security against leakag	
ر. د من کشده افغار در	5. Allowances for therma	l expansion
]	Factory Built Fireplace.	
		all be listed and shall be installed in accordance with the terms of its listing and all
pplic	able sections of NFPA 211.	
J ***	Masonry Fireplace.	
. ".;	Masonry fireplaces shall m	neet the requirements of NFPA 211, Chapter 7 and all other pertinent sections.
3	Other	
	The second second	
ime	Please list on separate shee by liners, etc.	et of paper if making repairs of pre-existing chimneys, such as repair or replacement of
التنبيب	or marcia, car.	그 사람이 그 이 이 아니라 보다 한 사람들은 살이 살아보다 다른 이 사고 싶다는 이 이 상에 가는 그리고 하는 것이다.

CONSUMER CHECKLIST

- 1. Have you asked for references to be provided by the installer?
- 2 Is the installer familiar with the NFPA 211 codes and does the installer carry a code book?
- 3. If the installation is a pre-fabricated or fireplace, is its manufacturer registered with the Maine Cil. & Solid Fuel Bd.
- 4. Does the installer provide any type of written guarantee for the product installation being proposed?
- 5. Has the installer provided you with a written contract? 10 M.R.S.A. Chapter 219-A requires written contracts for any home remodeling or construction with an estimated cost in excess of \$1,400.
- 6. Have you asked the local fire department or code enforcement officials to inspect the installation during and after completion?

Metalbestos Chimney Systems (USA Only - See separate instructions for Canada)



Installation Instructions

Covering - General Installation Instructions & Owner's Maintenance Guide

A MAJOR CAUSE OF CHIMNEY-RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF THE UTMOST

IMPORTANCE THAT THIS CHIMNEY BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

METALBESTOS CHIMNEY SYSTEMS-MODELS, PART NAMES AND **NUMBERS**

Metalbestos Chimney S stems (MCS) consist of the following Models · UT (Uftra Temp), ST (Sure Temp), GT (Galva Temp), SG Plus and SSII The complete part number is prefixed with the ID size, in inches, followed

by one or two letters identifying the system to which it belongs, followed by the actual part identifier.

All accessory parts for the Metalbestos Chimney System (all models) include a letter "T" in the prefix and may be used with all Models unless oth-

All Model SSI chimney sections (straight lengths, tees, elbows) also contain the letter "T in the prefix.

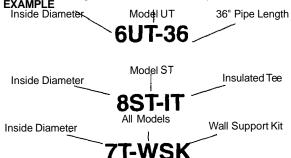
All Model UT, ST and GT chimney sections (straight lengths, tees, elbows) contain the letter "T in the prefix.

All Model UT, ST and GT chimney sections (straight lengths, tees, elbows) contain the letters "UT, "ST", and "GT, respectively in the prefix.

All Model SG Plus chimney sections (straight lengths, tees, elbows) contain the letters "GP" in the prefix.

Fig. 1, 2, and 3 show the names and locations of commonly used chimney parts. These figures use only the last portion of the part number. The complete part number is prefixed with I.D. size, followed by chimney model and

IMPORTANT Chimney sizes 5", 6", 7" and 8" are Type HT and carry a " T in the part number. Larger sizes use an "S" in the part number. FOR EXAMPLE



NOTE: Use only Metalbestos Chimney System Listed components and accessories. Do not use pipe by itself or attempt to fabricate your own support or accessories.

CAUTION: IF YOU ARE BURNING COAL

Some types of coal in certain designs of stoves may, in rare instances, cause corrosion of the inner parts of the Metalbestos Chimney System. Inspect and clean your chimney frequently to keep it free of coal, ash and soot deposits. Also see "Sizes and Applications" section.

If damage to the flue is observed, contact your Selkirk Metalbestos dealer or Department C. Selkirk Metalbestos, P.O. Box 372, Nampa. Idaho 83653-

0372, with a description of your chimney problem.

The Metalbestos Chimney System is not recommended if you are burning ocean driftwood. The salt in this wood may cause product failure.

MINIMUM CLEARANCE

Where installed within buildings, the Metalbestos Chimney System may be

SPECIAL WARNING ON CELLULOSE INSULATION
Cellulose insulation in direct contact with a hot chimney can ignite and smolder, and can set fire to ordinary wood framing materials. The AIR SPACE ONLY precaution applies to all blown-in or loose fill insulations, but is especially applicable to cellulose insulation, which may be made from old newspapers or other cellulose materials. The Attic Insulation Shieldor a Suitable enclosure with appropriate fire stops must be used to keep all insulation the proper distance away from the chimney.

SELKIRK **METALBESTOS**

∧ WARNING

Failure to follow the installation instructions could cause FIRE, CARBON MONOXIDE POISONING, OR DEATH. If you are unsure of installation requirements, call the Phone Number listed on the instructions or sizing handbook.

fully enclosed at 2 inches minimum AIR SPACE clearance to combustibles, including framing lumber, drywall, plaster, plywood and other building materials classed as combustible. For support framing, see table on back

AIR SPACE ONLY

The minimum clearance to Metalbestos Chimney System pipe means AIR SPACE ONLY. The 2 inch clearance to pipe, and the spaces around supports must not be filled with any type of insulation. In attics with blown-in or batt insulation, the chimney must either be fully enclosed or an Attic Insulation Shield must **be** used to create and maintainthe proper minimum

SIZES AND APPLICATIONS

The Metalbestos Chimney System is made in 5",6",7",8",10".12.and 14" sizes. The four smaller sizes conform to UL-103 Type HT requirements. All seven sizes comply fully with the requirements of the 9th Edition of UL Standard 103. Chimneys installed in accordance with these instructions will comply with national safety standards such as NFPA 31, 54 or 211. The Metalbestos Chimney System may be used for gas, wood and liquid fuel-fired stoves, fireplace stoves, central furnaces, floor furnaces, steam and hot water boilers, unit heaters and water heaters. It may also be used for masonry fireplaces.

These Metalbestos Chimney Systems are designed for gravity venting only. They are usable on any appliance having a power burner (such as oil furnace) if that appliance operates with neutral or negative draft at its out-

Non-residential appliances which may cause positive pressure in the chimney should use a Selkirk Metalbestos Model PS or IPS system.

The Metalbestos Chimney Systems, sizes 10", 12", 14", are ideal for venting gas (natural and LP), #2 oil, and open front wood burning appliances.

DETAIL INSTRUCTION SHEETS

Details for the installation of all chimney parts must be observed by referring to other instructions as follows:

Finish or Ceiling Supports', Connectors	Sheet
Finish of Ceiling Supports, Connectors	.5-1
Fire Stops, Attic Insulation Shields'	
Round Top', Flashing, Spark Arrester	.Š-3
Roof Support Package', Anchor Plate'	.S-4
Insulated Tee', Wall Support Kit' Insulated Elbow', Interior Resupport'	.S-5
Insulated Elbow', Interior Resupport'	.S-5
Firestop / Joist Shield'	.S-7
Support Box*	. S-9

'If 'you are installing any of these parts in packages marked', you should receive the proper instructions in the package. You may also request a comolete set of instructions from your dealer.

This sheet of general instructions is furnished with all UL listed chimney

supports It covers important safety precautions in the installation. operation and maintenance of your appliance and chimney Anyone installing a chimney should review this sheet as well as those furnished with the other parts of the chimney system Selkirk Metalbestos chimney parts LISTED and produced under the Factory Inspection and Follow-Up program of Underwriters' Laboratories, Inc carry the LISTING MARK illustrated here



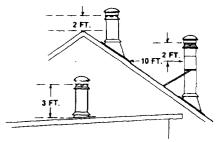


FIG. 4 RULES FOR CHIMNEY
HEIGHT ABOVE THE ROOF

CHOOSINGYOUR HEATING APPLIANCE

There are three important rules for selecting a woodburning stove, fire-place or heater.

FIRST Look for a label or nameplate attached to the appliance which bears the mark or name of a well-known safety testing organization. or laboratory.

SECOND Don't buy a solid fuel heating appliance which is bigger than necessary.

THIRD Look or ask for complete installation, operating and maintenance instructions for the appliance. If you can't get these, buy one that gives you all these very important details.

'Such as Underwriters' Laboratories, Inc. or Intertek Testing Services.

APPLIANCE SAFETY

Be sure to follow all details of the instructions for your solid fuel burning appliance. You should give preference to the purchase of an appliance which either has a label or includes detailed instructions showing all required clearances to floor and walls. If necessary, these clearances may be reduced by use of a tested and "Listed" (by UL, for example) protection system, or by one of the methods described in NFPA Standard 211.

For the chimney connector, the appliance instructions take precedence over the 18 inch clearance shown in these instructions (or in building codes). The 18 inch minimum clearance dimension applies only if there is no other information for the connector.

When protecting walls or ceilings from the heat of a connector, be sure to leave at least a 1 inch ventilated air space between the protection material and combustible construction. It is ineffective and possibly dangerous to apply ordinary brick, or any similar dense material directly to a wood framed wall for the purpose of reducing safe clearances.

EACH SOLID FUEL APPLIANCE SHOULD HAVE ITS OWN CHIMNEY

- Stoves of air-tight or controlled combustion design may be difficult to operate if some other appliance is connected to the same chimney.
- Open front, freestanding or built-infireplaces may need all the draft produced by a minimum height of chimney. Interconnecting them or their chimney with another appliance may be prohibited by their instructions and may cause smoking problems.
- Never connect a gas-burning appliance into a chimney for any woodburning stove, heater or fireplace. This is extremely dangerous because a chimney blocked with creosote (or anything else) may cause the connected gas appliance to produce poisonous carbon monoxide.
- For these and other reasons, don't ever inter-connect your solid fuel appliance with anything else, not even another solid fuel appliance. There are simply too many things that can go wrong if you do.

GENERAL INSTALLATION INSTRUCTIONS

- A correct easily-maintained chimney installation has five important parts:
- 1. Proper support, both vertical and lateral, with access for inspection and maintenance.
- $2. \ A dequate \ clearance \ to \ combustible \ materials \ for \ single \ wall \ connector \ or \ smoke \ pipe.$
- 3. AIR SPACE clearance of 2 inches for insulated chimney parts.
- 4. All vertical intermediate ceiling or floor penetrations completely framed and firestopped with specified chimney parts.
- 5. All connector and chimney joints completely secured against unlocking with three screws or with locking bands. See diagram for screw location.

PROPER SUPPORT

Vertical chimneys may be supported in these ways:

- 1. Ceiling Support with all chimney stacked above. See sheet S-1.
- 2. Roof Support, with one or more lengths suspended below and with total height limits depending on factors such as roof pitch and height. See sheet s-4.

- 3. Appliance Support, with the Metalbestos Chimney System starting at the appliance outlet. This is permissible if this method is shown in the appliance instructions, or with masonry fireplaces.
- 4. Wall Support with Insulated Tee. See Sheet S-5.
- 5. Support Box. See Sheet S-9.
- 6. Proper lateral support is **also** necessary and may be **provided** by wall bands, firestops, roof braces and/or all the supports listed above. Maximum spacing between components providing lateral support is 8 ft (See sheets S-2, S-3, and S-5).

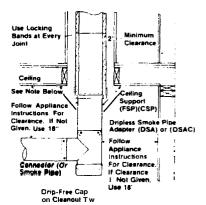
Because of thermal expansion problems, only one of these support methods should be used for a vertical installation. For example: **Do Not** use both a ceiling support and a roof support for the same chimney. If additional vertical support is needed, use an Interior Resupport(IR). (See Sheet S-5).

OBSERVE CLEARANCE TO COMBUSTIBLE MATERIAL AND SLOPE FOR CONNECTOR OR SMOKE PIPE

The connector or smoke pipe is the sheet metal pipe between the appliance and the chimney. Different types of fuels and appliances have different connector clearances to combustible walls and ceilings. These clearances will be shown in the appliance instructions.

Whatever clearances and connector arrangements are shown in the appliance instructions, these must be followed rather than the arbitrary 18 inch dimension. This is important if tests have shown that more than 18 inches clearance is necessary, or if the location of the stove or heater necessitates more clearance. See Fig. 5.

Combustible materials include such things as framing lumber, plywood, drywall (sheet rock, plaster board, lath and plaster, gypsum board) and also furniture and curtains. Building insulation of any kind, including batts, foams, boards and especially loose fill cellulose fiber, must also be kept



NOTE:

The purpose of the diagonal arrows is to show that the 18 inch clearance OOES NOT APPLY to the vertical connector entering a Finish Support. This support is actually tested with a ban vertical connector and must pass the UL tests with very holigases entering the bare single wall pipe.

FIG. 5 CONNECTOR CLEARANCES

away from the chimney in the same manner as combustible materials.

Passing a bare smoke pipe or connector of a wood burning appliance through a combustible stud wall is not recommended, as the entire inside of the wall must be cut away to get 18 inch clearance (usually at least a 40 inch circle). Wherever possible, locate the Metalbestos Chimney to avoid penetrating a wall with a single wall connector. Besides following the appliance instructions for connectors, other rules for solid fuel appliance connectors are:

- 1. Never enclose vertical single wall pipe, even at 18 inches clearance.
- 2. Never run it through ceilings or floors, or windows.
- 3. Don't use single wall pipe outdoors.
- 4. Always secure all single wall pipe joints with at least 3 screws.
- 5. Obtain proper attachment parts for the appliance end and for the entry to the chimney. See the Metalbestos Chimney System catalog for the proper size Dripless Smoke Pipe Adapter (DSA) or (DSAC), or Chimney Pipe Adaptor (CPA).
- Locate and support the connector to avoid accidental contact or damage.
- 7. Caps or plugs for tees should be secured against falling out and designed so they can't leak creosote or rain.
- 8. Heavy weight single wall pipe lasts longer. Use 24 gauge if possible.
- 9. Porcelain enamel is the best high temperature protective finish but requires careful handling and may be difficult to assemble securely except in a vertical position and could produce noxious odors if overheated.

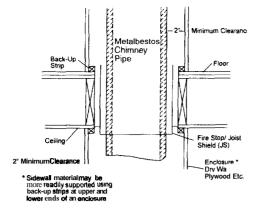
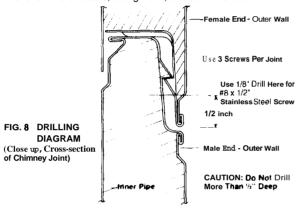


FIG 7 FIRE STOP/ JOIST WIELD (JS) WITH FULL ENCLOSLRE

installing either the 3 screws or the Locking Band, the joint should be securely twist locked together. The diagram, Fig. 8, illustrates these points.

Screws or locking bands are needed to prevent accidental disengagement during chimney cleaning, and to reinforce the chimney whenever it is outdoors, along walls, or above the roof.



Warning: The chimney pipe and its fittings must be assembled with metal-to-metal joints as furnished. Do not use tape or any sealing compound (such as tar, mastic, putty or silicone) at the outer joints. Sealers in the joints may cause the insulation to accumulate moisture and will cause corrosion or freezing failures.

CAUTION: DO NOT USE METALBESTOS CHIMNEY SYSTEM

PIPE WITH DAMAGED ENDS

Both the inner and outer pipe must join properly to avoid leakage and accidental disengagement. Slight eccentricity of the inner pipe will not affect operation provided that the joint goes together completely. Minor dents or irregularity of the outer pipe will not have any perceptible effect on temperature safety.

CHIMNEY OPERATION AND MAINTENANCE

The need for chimney maintenance depends on the kind of appliance and how it is operated. Gas and oil-burning appliances may need very little, but wood and coal-burning appliances may need a great deal of chimney maintenance. Open front fireplaces without doors usually dilute their smoke with large amounts of air. Thus the buildup of chimney deposits is generally very low. "Air tight" or controlled draft wood stoves and heaters produce dense smoke if they are loaded for long duration or overnight fires, and can rapidly produce heavy, thick creosote deposits. It is possible, by having a short duration daily hot fire, to burn off these deposits or prevent them from building up to dangerous levels. This takes skillful operation and an appreciation of how to get the correct temperature.

CREOSOTE AND SOOT FORMATION AND NEED FOR REMOVAL

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The

Should be in the relatively cool chittley line of a slowburning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire.

With coal which can burn with a smoky fire. this smoke also condenses in the chimney to form soot.

The chimney should be inspected at least once every 2 weeks during the heating season to determine if a creosote or soot buildup has

If creosote or soot has accumulated, it should be removed to reduce the risk of chimney fire.

Creosote causes many problems. Some are visible while others are not. It can make trouble if:

- 1. It runs down the outside of the pipe to damage the finish on the metal.
- 2. It drips out of joints, damaging floors or furnishings.
- 3. It plugs up the chimney to cause poor combustion, smoking, soiling walls and indoor air pollution.
- 4. It catches fire in the chimney to cause possible chimney damage and damage to your home.

If you see deposits more than 1/16 inch thick, clean all of the chimney parts mechanically. This means using brushes, scraping or equivalent. Don't start a chimney fire! With only slight deposits, try a hot fire to see if the black deposits change to light ash or fall down the chimney. You can hear the sound of falling deposits when temperature conditions are right. Afterwards reinspect the chimney and the inside of the appliance for deposits. Do not use chemical cleaners, they may corrode the inside of the chimney. They may or may not prevent or remove creosote. When they are used together with a hot fire, it is probably the fire that is doing the work.

Depending on the rate of buildup, as you learn what is going on in the chimney, you can adjust your cleaning schedule.

If you have any doubts about your ability to clean the chimney, or if the deposits are very heavy and hard to remove, call a professional chimney sweep. Do not try to burn them off.

It doesn't matter how careful you are with loading, fuel wood selection or draft control, you should observe the above precautions with any wood stove or chimney installation.

CHIMNEY FIRES AND WHAT TO DO ABOUTTHEM

Your Metalbestos Chimney System is not intended or designed for use as a combustion or fire chamber. It is very easy to overfire your woodburning appliance with kindling, scrap lumber, brush or any fast burning fuel. This can produce flames and high temperatures all the way up the chimney, and may cause chimney damage.

If you see your appliance or the smoke pipe glowing red, you are risking chimney damage, or a fire. The creosote may be burning inside the chimney. If you see flames coming out the top, you are either overfiring or there is a chimney fire.

If the fire in your heater has gotten out of control, or if you suspect a chimney fire for any reason, follow these steps:

- 1. Immediately close all dampers and/or air entrance openings to your appliance. This includes doors on Franklin type stoves. Block off fireplace openings.
- 2. Alert your family to the possible danger.
- 3. Inspect your appliance and chimney surroundings for possible fire. If in doubt, alert your fire department.
- 4. Do not continue to use your appliance until it and your chimney have been thoroughly inspected. Overheating can cause metal parts to expand, buckle and crack. If you are not certain, have a qualified heating person disassemble all parts so they can be inspected and
- 5. Do not use salt or water on the fire in your appliance. Salt is corrosive and water will cause a dangerous steam explosion. You might be able to control the fire by using ashes, sand or baking soda, since baking soda is an ingredient used for dry chemical fire extinguishers.
- 6. After a chimney fire, when it is safe to do so, check internal locations such as the attic and under the roof and keep watching for two or three hours. There may be delayed smoldering and subsequent ignition, even if the fire inside the chimney has been controlled.

Metalbestos Chimney Systems (USA Only - See separate instructions for Canada)

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Installation Instructions

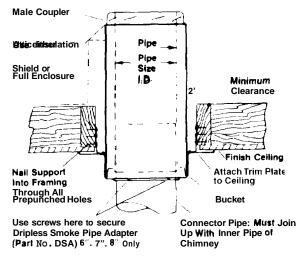
Covering - Finish Ceiling Support, Ceiling Support & Connections

Read Sheet GS for important clearance and safettly precautions before installing any of the parts descriped by this Sheet. Sheet GS is packaged with Supports.

MWARNING

Failure to follow the installation instructions could cause FIRE, CARBON MONOXIDE POISONING, OR DEATH. If you are unsure of installation requirements, call the Phone

Chimney Sizes 5", 6", 7" and 8" are Type HT.



CAUTION: Supports Must Be Installed From Below Framing As Shown Here

FIG. 2. INSTALLATION OF CEILING SUPPORT

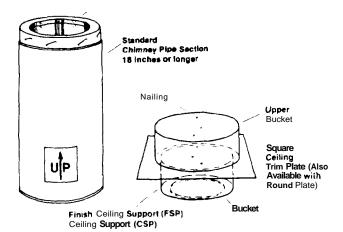
- 4. Put one 8 penny common nail part way into each of the four nailing areas of the assembly and check that the plate is level and flush to the ceiling.
- 5. Finish nailing with 8 penny nails through all prepunched holes.
- 6. Attach trim plate to ceiling or to framing at corners.

ATTACH CONNECTORS SECURELY AND OBSERVE CLEARANCE TO COMBUSTIBLE MATERIAL

The connector or smoke pipe is the sheet metal pipe between the appliance and the chimney. Different types of fuels and appliances have different connector clearances to combustible walls and ceilings. These clearances will be shown in the appliance instructions.

Whatever clearances and connector arrangements are shown in the appliance instructions, they must be followed rather than the arbitrary 18 inch dimension. This is important if tests have shown that more than 18 inches clearance is necessary, or if the location of the stove or heater necessitates more clearance. See Fig. 3.

Combustible materials include such things as framing lumber, plywood, drywall (sheet rock, plaster board, lath and plaster, gypsum board) and also furniture and curtains. Building insulation of any kind including batts, foams, boards and especially loose fill cellulose fiber, must also be kept away from the chimney in the same manner as combustible materials.



NOTE: SIZES 12' AND 14" HAVE SQUAREUPPER BUCKET FIG. 1. CEILING SUPPORT

Follow these steps to intall:

1. Frame a level square opening (all four sides), such that the inside dimensions are 6-1/4" larger than the diameter (ID) of pipe being installed. For example if a 6 Metalbestos Chimney is being installed. the framing dimensions should be 12-1/4" x 12-1/4".

Note: The support must be underneath either the framed opening or the finished ceiling. **DO NOT INSTALL SUPPORT ABOVE THE FRAMING.** See Fig. 2

- 2. Install finish ceiling material. Cut a circular opening the same diameter as the framing dimension (or square) through the ceiling inside the framed opening, making it large enough to accept the support. (With an existing ceiling, the opening should be framed after cutting the hole.)
- 3. Place the support assembly up against the ceiling opening from below.