

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

Sheet **GS**

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 Systems (MCS) consist of the following Models - UT (Ultra 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 otherwise indicated.

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

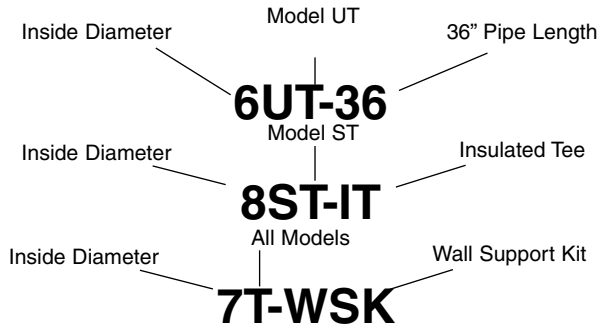
All Model UT, ST and GT chimney sections (straight lengths, tees, elbows) contain the letters "UT", "ST", and "GT", respectively in the prefix.

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 part number.

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 Shield or a suitable enclosure with appropriate fire stops must be used to keep all insulation the proper distance away from the chimney.

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 page.

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 maintain the proper minimum airspace.

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 outlet.

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:

	Sheet
Finish or Ceiling Supports*, Connectors	S-1
Fire Stops, Attic Insulation Shields*	S-2
Round Top*, Flashing, Spark Arrester	S-3
Roof Support Package*, Anchor Plate*	S-4
Insulated Tee*, Wall Support Kit*	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 complete 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.



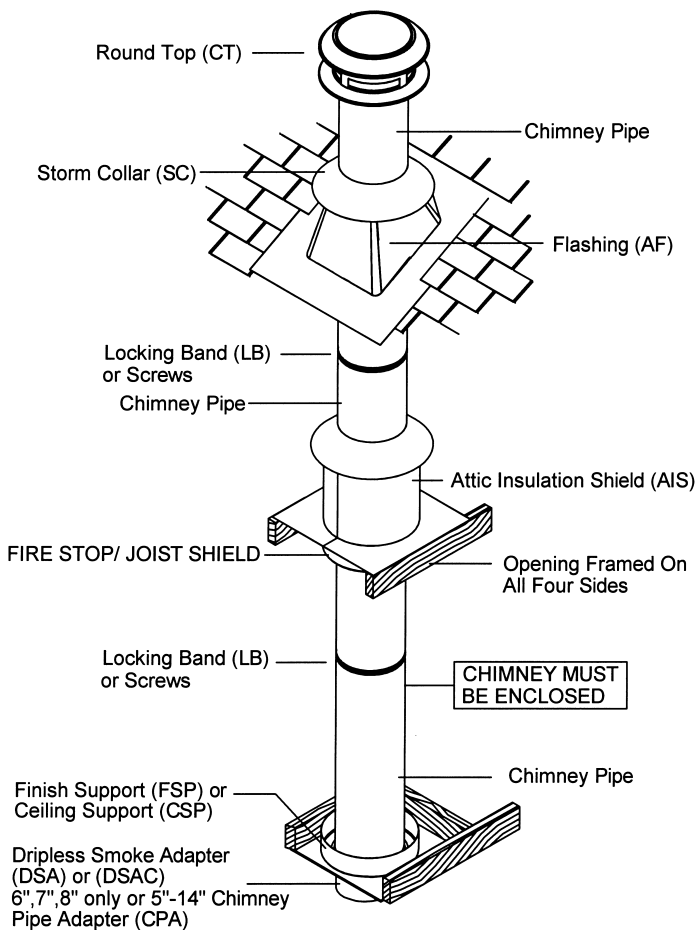


FIG. 1 VERTICAL CHIMNEY THROUGH ONE STORY AND ATTIC

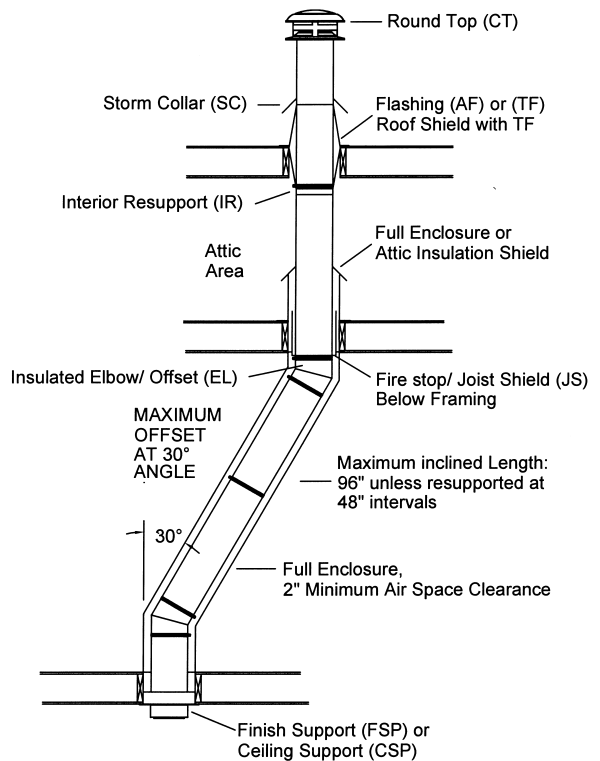


FIG. 3 THIRTY DEGREE OFFSET WITH ENCLOSURE AT 2" CLEARANCE (ONLY ONE SUCH OFFSET IS ALLOWED.)

WHEN INSTALLING YOUR CHIMNEY AND WOODBURNING STOVE OR FIREPLACE SYSTEM, REMEMBER . . . SAFETY FIRST

You may well have a basic knowledge of carpentry and the use of hand tools. However it is important that you also review the rules of safety on the following pages. If you have any doubt about your ability to complete your installation in a workmanlike manner, you should arrange for a professional installation.

RULES FOR SAFETY DURING INSTALLATION

1. Read all installation sheets. Look for them in the cartons, ask your dealer for a complete set. or download from www.Selkirkinc.com. Keep the instructions handy and save them for future reference.
2. Check your local building or fire code for all requirements affecting the fuel-burning appliance and its chimney.
3. Obtain a building permit for both the appliance and the chimney. Contact local building or fire officials about restrictions and installation inspection in your area.
4. Be very careful around electrical wiring and be sure it is secured at least 2 inches away from any part of the chimney. If wiring must be relocated, hire a professional electrician.
5. Be sure that ladders are in good condition and always rest on a level firm surface.
6. Wear cut resistant gloves when handling sheet metal parts with sharp edges.
7. Be sure that electrically powered tools are properly grounded.

CHIMNEY HEIGHT AND SIZE

These instructions contain a "Selector Chart" so you can pick the exact combination of length increments. A chimney for one or more gas appliances must conform to size and height recommendations in the "Metalbestos Gas Vent and Chimney Sizing Handbook." Heights above the roof as given in the next paragraph are minimum; greater heights may be needed for reasons given.

Before beginning installation of the chimney, be sure that the selected size is adequate for the appliance and the selected height of the Chimney Round Top termination is high enough to conform to building code requirements. Chimneys are required to extend at least 3 feet above the highest point where they pass through the roof of a building, and at least two feet higher than any portion of a building within 10 feet. (National Fire Protection Association Standards Nos. 31, 54, and 211.) See Fig. 4.

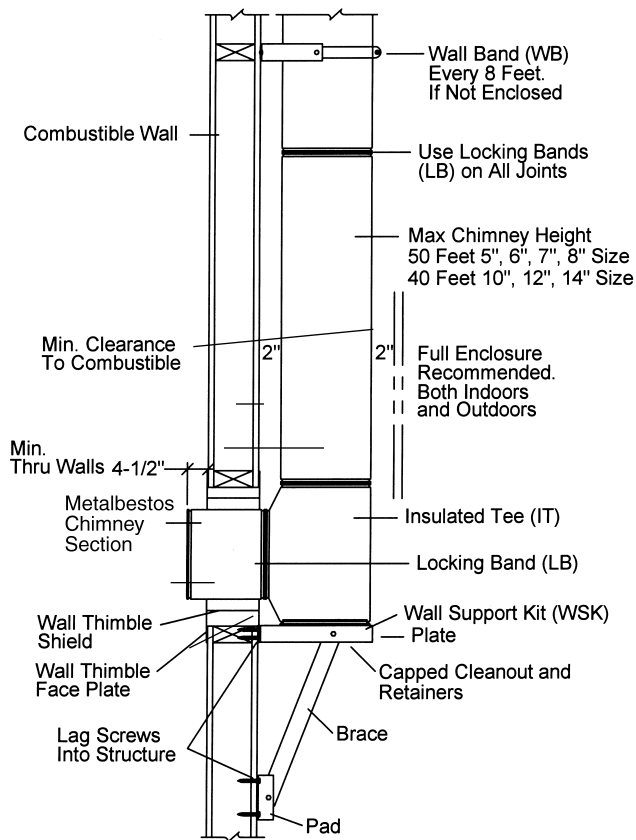


FIG. 2 INSULATED TEE THROUGH COMBUSTIBLE WALL

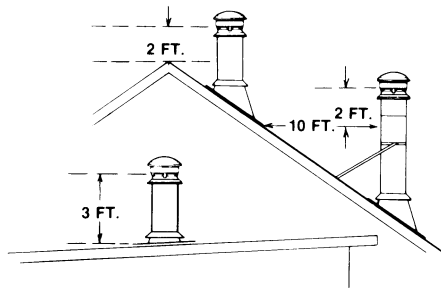


FIG. 4 RULES FOR CHIMNEY HEIGHT ABOVE THE ROOF

CHOOSING YOUR HEATING APPLIANCE

There are three important rules for selecting a woodburning stove, fireplace 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-in fireplaces 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 wood-burning 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. Adequate 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).

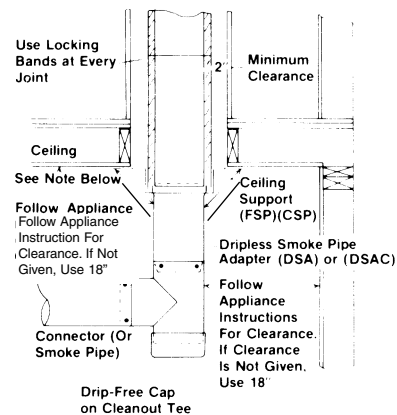
Because of thermal expansion problems, only one of these support methods should be used for a vertical installation. For example: **Do Not** use both a ceiling support and a roof support for the same chimney.

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



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

FIG. 5 CONNECTOR CLEARANCES

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).
6. 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.
10. Galvanized steel pipe is no better than plain black or painted steel

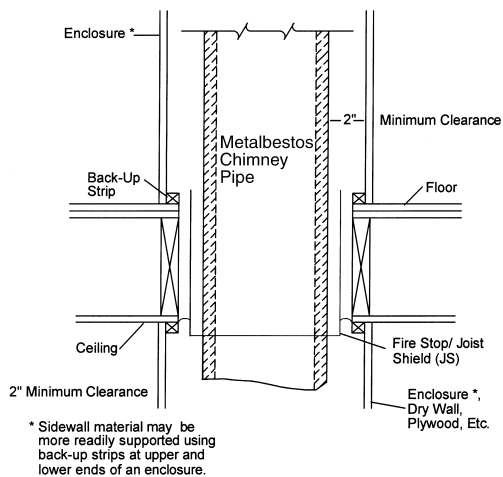


FIG. 7 FIRE STOP/JOIST SHIELD (JS) WITH FULL ENCLOSURE

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.

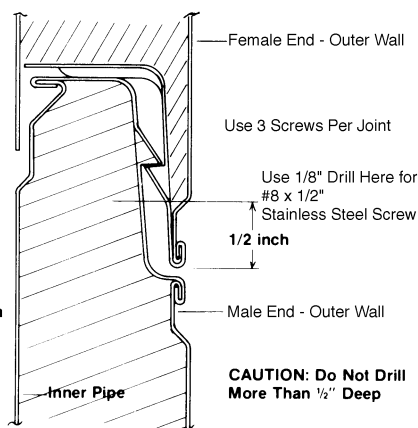


FIG. 8 DRILLING DIAGRAM (Close up, Cross-section of Chimney Joint)

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 creosote vapors condense in the relatively cool chimney flue of a

slow-burning 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 occurred.

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 ABOUT THEM

Your Metalbestos Chimney System is not intended or designed for use as a combustion or fire chamber. It is very easy to overfire your wood-burning 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 replaced.
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.

**FRAMING DIMENSIONS FOR METALBESTOS CHIMNEY SYSTEMS
TO MAINTAIN 2 INCH AIR SPACE CLEARANCE**

CHIMNEY SIZE: (Inside Diam.)	5" TYPE HT	6" TYPE HT	7" TYPE HT	8" TYPE HT	10"	12"	14"
CEILING OR FINISH SUPPORT *	11-1/4"X11-1/4"	12-1/4"X12-1/4"	13-1/4"X13-1/4"	14-1/4"X14-1/4"	16-1/4"X16-1/4"	18-1/4"X18-1/4"	20-1/4"X20-1/4"
CEILING PENETRATIONS*	11"X11"	12"X12"	13"X13"	14"X14"	16"X16"	18"X18"	20"X20"
FLOOR OPENINGS*	"	"	"	"	"	"	"
ROOF OPENINGS*	"	"	"	"	"	"	"
WALL OPENINGS*	"	"	"	"	"	"	"

*All framing dimensions may be up to 1/2" more, but not less than the above values. Check support dimensions before using.

MAXIMUM HEIGHT (OR LENGTH) OF CHIMNEY FOR SUPPORTS

SUPPORT TYPE	PART NO.	SIZE	
		5", 6", 7", 8" FEET OF CHIMNEY	10", 12", 14" FEET OF CHIMNEY
ANCHOR PLATE	AP	85	85
FINISH OR CEILING SUPPORT	FSP, CSP	50	50
INSULATED TEE	IT	50	40
WALL SUPPORT KIT	WSK	50	40
ROOF SUPPORT (A)	RSP	30	30
INTERIOR RESUPPORT	IR	18	18
SUPPORT BOX	SB	20	—

NOTE: (A) 20 feet of chimney may be suspended below a roof support with all joints securely threaded, using locking bands or screws

METALBESTOS CHIMNEY SYSTEM PARTS COVERED BY THESE INSTRUCTIONS

PART NAME	PART NO.	PART NAME	PART NO.
INSULATED CHIMNEY PIPE LENGTHS 3", 6", 9", 18", 36"	3, 6, 9, 18, 36	2/12 TO 6/12 FLASHING	AF6
INSULATED TEE	IT	6/12 TO 12/12 FLASHING	AF12
15 DEGREE INSULATED ELBOWS	EL-15	DRIPLESS SMOKE PIPE ADAPTOR WITH COUPLER (6", 7", 8")	DSAC
30 DEGREE INSULATED ELBOWS	EL-30	DRIPLESS SMOKE PIPE ADAPTOR (6", 7", 8")	DSA
WALL SUPPORT KIT (5", 6", 7", 8")	WSK	CHIMNEY PIPE ADAPTOR (5", 6", 8", 10", 12", 14")	CPA
FINISH SUPPORT (6", 7", 8")	FSP	ROOF BRACE KIT (5", 6", 7", 8")	RBK
FINISH SUPPORT ROUND (6", 7", 8")	FSPR	WALL BAND	WB
FIRE STOP/WALL SPACER (use with SSII only)	WS	LOCKING BAND	LB
ROUND TOP	CT	STORM COLLAR	SC
ANCHOR PLATE	AP	CLEANOUT TEE	CA
ROOF SUPPORT PACKAGE	RSP	ATTIC INSULATION SHIELD	AIS
FLAT & LOW PITCH FLASHING	TF	FIRESTOP / TRIM COLLAR	TCS
SUPPORT BOX	SB	CEILING SUPPORT (5", 10", 12", 14")	CSP
INTERIOR RESUPPORT	IR	FIRESTOP/ JOIST SHIELD (required with all models except SSII)	JS

CHIMNEY PIPE LENGTH SELECTOR CHART

Exact Length Ft. In.	Number of Chimney Sections			Exact Length Ft. In.	Number of Chimney Sections		
	Inches	9"	18"		Inches	9"	18"
1'6	10 1/4	1		9' 8 1/8	116 1/8	1	3
	18		1	10' 3 15/16	123 15/16		3
2'3	27	1	1	11' 10 1/2	142 1/2	1	4
3' 9/16	36 9/16			13' 3 1/4	159 1/4		4
3' 9 9/16	45 9/16	1	1	14' 9 13/16	177 13/16	1	5
4' 5 5/16	53 5/16		1	16' 2 9/16	194 9/16	1	5
5' 2 5/15	62 5/16	1	1	17' 9 1/8	213 1/8		6
5' 11 7/8	71 7/8			19' 1 7/8	229 7/8	1	6
6' 8 7/8	80 7/8	1		20' 8 7/16	248 7/16		7
7' 4 5/8	88 5/8		1	22' 1 3/16	265 3/16	1	7
8' 1 5/8	97 5/8	1	1	23' 7 3/4	283 3/4		8
8' 11 3/16	107 3/16		3	25' 1/2	300 1/2	1	8