



TEMP/GUARD® INSTALLATION AND MAINTENANCE INSTRUCTIONS

1700° TEMP/GUARD CHIMNEY SIZES 14" - 16" - 18"



This symbol on the nameplate means this product is listed by Underwriters Laboratories Inc. Listing No. MH 8251 Tested to 103

A MAJOR CAUSE OF CHIMNEY RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIAL. * MINIMUM CLEARANCE FOR 14", 16" & 18" TEMP/GUARD IS TWO (2) INCHES. IT IS OF UTMOST IMPORTANCE THAT THIS CHIMNEY IS INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

*Combustible material is defined as material made of, or surfaced with, wood, compressed paper, plant fibers, plastic, or other material that will ignite and burn, whether flame proofed or not, or whether plastered or unplastered.

The Metal-Fab Temp/Guard Chimney is intended for use on any residential and building heating appliance burning gas, liquid or solid fuels such as fireplace stoves, furnaces, ranges, room heaters, or as defined in columns I and II, Table 5.2.2.1, NFPA 211. Contact Local Building or Fire Officials about restrictions and Installation Inspection in your area.

WARNING: Metal-Fab Temp/Guard Chimney is not designed for use on products that operate at continuous temperatures in excess of 1,000°F.

IMPORTANT: FOR OIL OR COAL BURNING APPLIANCES, OUTSIDE THE ENVELOPE OF THE BUILDING, USE ONLY PIPE WITH STAINLESS STEEL CASING, ALSO USE FLASHING OR STORM COLLARS CONSTRUCTED OF STAINLESS STEEL OR ALUMINUM.

OPERATIONAL PRECAUTIONS

- Maintain 2" minimum clearance to combustibles for 14", 16" & 18" diameters. (Refer to **WARNING** above). Use only U.L. Listed products and **INSTALL ONLY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.**
- **Formation of Creosote and Soot and the need for removal.**

When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to create creosote. The creosote vapors condense in the relatively cool chimney flue of the slow burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire. The chimney should be inspected at least once every two (2) months 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.
- Do not use fireplace for food grill. Grease from foods can collect in chimney causing fireplace to become a potential fire hazard.
- On airtight stoves, open dampers and let equipment burn hot for 15 to 20 minutes. This should be done every time fuel is added. This lessens the chance of creosote buildup.
- Some chemical chimney cleaners can be harmful to the chimney. These cause accelerated oxidation or corrosion. If chemical cleaners are used, they must be non-corrosive in nature. If brush is used, it must be of proper size with plastic bristles.
- The 14TG, 16TG and 18TG chimney system is to be installed through a chase and not intended to pass through attic areas that require insulation shields.
- Except for installation in one- and two-family dwellings, a factory-built chimney that extends through any zone above that on which the connected appliance is located is to be provided with an enclosure having a fire resistance rating equal to or greater than that of the floor or roof assemblies through which it passes.
- Enclose exterior mounted chimneys below the roof line in geographical areas experiencing sustained low ambient temperatures to help reduce or limit condensation, creosote and poor draft.

CHIMNEY ASSEMBLY

The 14TG, 16TG and 18TG chimney system is designed for quick and easy installation. The flue and casing assemble at each joint using a male to female slip fit. Each joint is secured together with four (4) sheet metal screws at the casing (See FIG. 1).

MASONRY FIREPLACE CHIMNEY, AND CHIMNEY EXTENSION

An anchor plate (TGAP) is used to attach Metal-Fab 1700°F Chimney to a masonry fireplace or chimney. Maximum support height of 50 ft.

1. Where the transition is to be made, apply a bed of mortar approximately 3/4 inches deep and approximately one (1) inch larger than the anchor plate. (See TG Chimney Catalog for anchor plate dimensions).
2. Insert four (4) 1/4-20 x 2" anchor bolts, head down into the mortar bed. J-style anchor bolts are preferred. An alternate method would be to allow the mortar bed to cure. Then, drill four (4) holes, matching the holes in the anchor plate and insert four (4) each 1/4-20 metal anchors. The anchor plate would then be attached by four (4) each 1/4-20 bolts.
3. Before the mortar sets, place the anchor plate over the bolts and press down into the mortar. Loosely secure using a washer and nut on each bolt.
4. Use a level to check the installation, assuring that the TG chimney connection (TGAP) is level.
5. When the mortar has set up, tighten the nuts onto the bolts. Proceed to stack Metal-Fab chimney pipe (TG) on the anchor plate (See FIG. 2 and TABLE 1 for framing dimensions).
6. See "Flashing Instructions" and "Termination" sections.

NOTE: Existing masonry flues may be extended with TG pipe by using an anchor plate, following steps 1 through 6 above, provided that (See FIG. 3):

- a) The existing masonry chimney is structurally sound, and;
- b) The flue extension is properly sized so that the appliance attached to the flue drafts properly.

NOTE: The TG flue size for a height less than 15 feet should be at least 1/8 the area of the fireplace opening. The TG flue size for a height over 15 feet should be at least 1/10 the area of the fireplace opening. (For sizing of TG flue, See Metal-Fab literature L1372.)

TABLE 1	
14", 16" & 18" DIAMETER FRAMING DIMENSIONS	
FOR FLOOR, CEILING & ROOF OPENINGS	
14"	21" x 21"
16"	23" x 23"
18"	25" x 25"

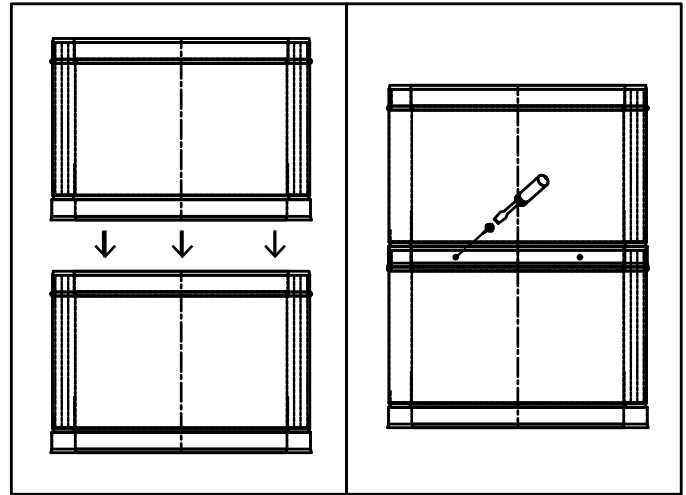
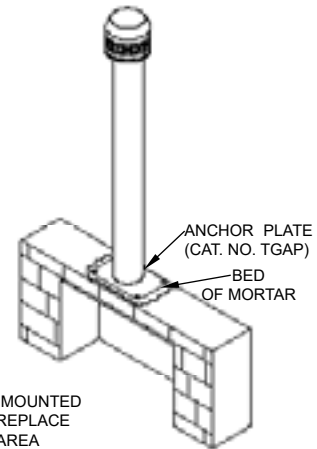


FIG. 1



NOTE:
ANCHOR PLATE MOUNTED AT MASONRY FIREPLACE FLUE OPENING AREA WITH BOLT, NUTS, AND WASHERS

FIG. 2

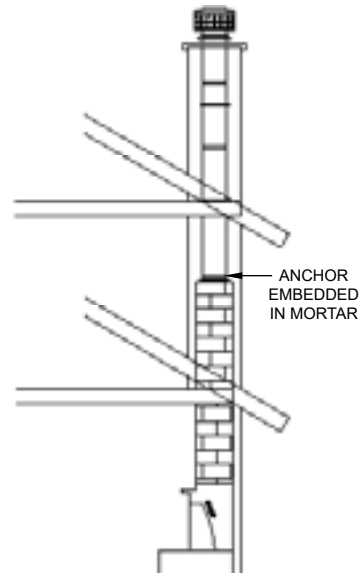
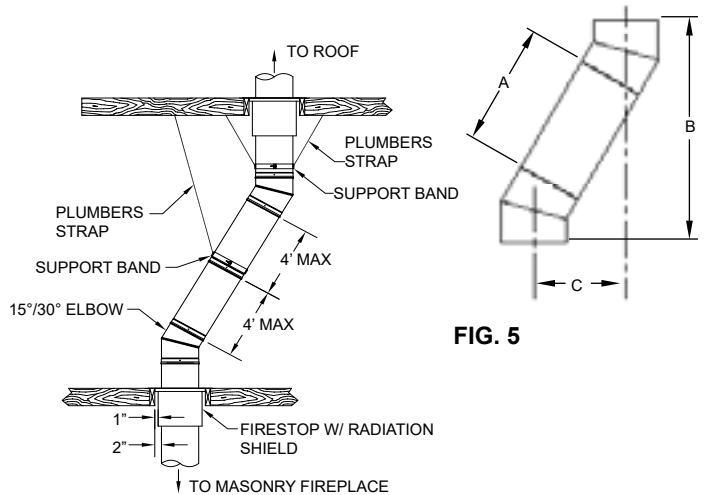


FIG. 3

ELBOW INSTALLATION

- 15° (TGA15) and 30° (TGA30) elbows are provided to allow chimneys to avoid framing member or roof peaks. A maximum of 30° from the vertical is allowed, and a total of four elbows (two pair) for each chimney installation. Maintain 2" clearance to combustibles for 14", 16" and 18" diameters.
- Attach the elbow to the chimney pipe or other support part. Using the offset chart, add chimney sections between elbows. A support band or plumbers strap is required every 4 foot interval between elbows to support the load as shown in FIG. 4. Attach the upper elbow to bring chimney back to vertical. See Table 2 and FIG. 5 for offset combinations.



FLASHING INSTALLATION

- Continue the TG chimney to the roof. Cut the roof opening, centered over the chimney. A 2" airspace around the chimney is required as it penetrates the roof (See FIG. 6 and TABLE 1 for construction and framing dimensions).
- Install the next TG chimney section through the roof and install the flashing (TGF) around the chimney and centered over the roof penetration opening.

NOTE: If your roof is already shingled, be sure to slide the upper edge under the shingles to prevent leakage.

- Install a radiation shield (TGRSH) over the chimney section and center the radiation shield within the joist area. Bend straps of radiation shield over the top edge of flashing to position in place. Apply a bead of caulk around the pipe at the top edge of the flashing screen. Wrap the Storm Collar around the pipe and imbed the edge of caulk to prevent leakage around pipe. Bend the flashing strap around the tab to tighten around the chimney (See FIG. 6).
- Continue to install pipe sections until proper termination height is reached. See termination section.

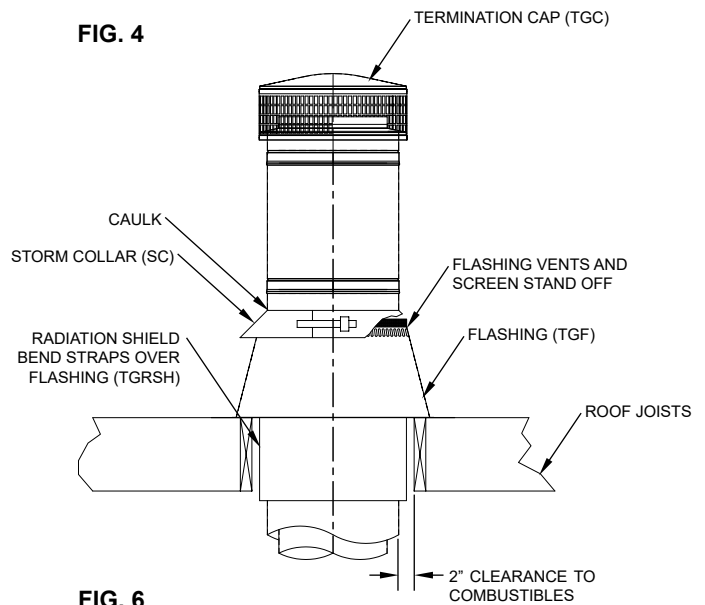


TABLE 2									
14", 16" AND 18" DIAMETER OFFSET TABLE									
		15 Angle		30 Angle					
A		14", 16" AND 18" Dia.		14" Dia.		16" Dia.		18" Dia.	
Length	No. Pcs	B	C	B	C	B	C	B	C
0"	0	24-1/4"	3-1/8"	25"	6-5/8"	26"	6-7/8"	27"	7-1/8"
12"	1	35-3/8"	6-1/8"	35"	12-3/8"	36"	12-5/8"	37"	12-7/8"
18"	1	41-1/8"	7-5/8"	40-1/8"	15-3/8"	41-1/8"	15-5/8"	42-1/8"	15-7/8"
30"	2	52-1/4"	10-5/8"	50-1/8"	21-1/8"	51-1/8"	21-3/8"	52-1/8"	21-5/8"
36"	1	58-1/2"	12-3/8"	55-3/4"	24-3/8"	56-3/4"	24-5/8"	57-3/4"	24-7/8"
42"	3	63-3/8"	13-5/8"	60-1/8"	26-7/8"	61-1/8"	27-1/8"	62-1/8"	27-3/8"
48"	1	70-1/8"	15-1/2"	66-1/8"	30-3/8"	67-1/8"	30-5/8"	68-1/8"	30-7/8"
54"	2	75-3/8"	16-7/8"	70-7/8"	33-1/8"	71-7/8"	33-3/8"	72-7/8"	33-5/8"
60"	2	81-1/4"	18-3/8"	76-1/8"	36-1/8"	77-1/8"	36-3/8"	78-1/8"	36-5/8"
72"	2	92-3/4"	21-1/2"	86-1/2"	42-1/8"	87-1/2"	42-3/8"	88-1/2"	42-5/8"
84"	2	104-3/8"	24-5/8"	96-7/8"	48-1/8"	97-7/8"	48-3/8"	98-7/8"	48-5/8"
90"	3	109-3/4"	26"	101-5/8"	50-7/8"	102-5/8"	51-1/8"	103-5/8"	51-3/8"
96"	2	116"	27-3/4"	107-1/4"	54-1/8"	108-1/4"	54-3/8"	109-1/4"	54-5/8"

TERMINATION

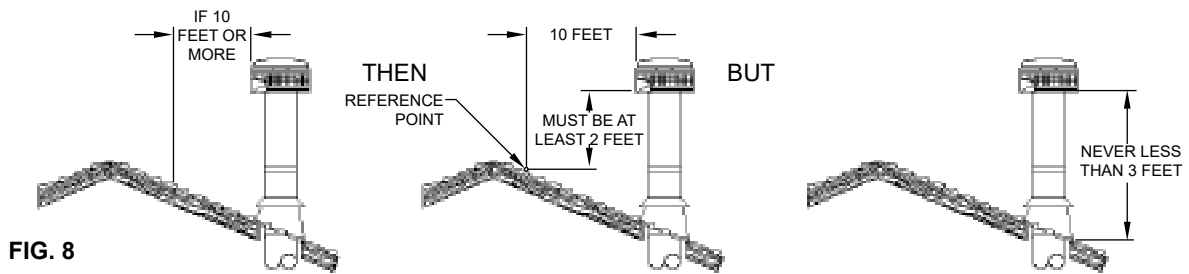
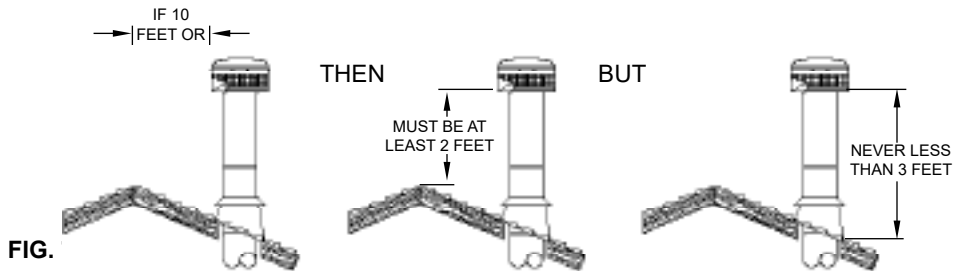
Major building codes specify a minimum chimney height above the roof top. These specifications are summarized in what is known as the "Ten Foot Rule". This rule states:

If the horizontal distance from the side of the chimney to the peak of the roof is 10 feet or less, the top of the chimney must be at least 2 feet above the peak of the roof, but never less than 3 feet in overall height above the highest point where it passes through the roof (**FIG. 7**).

If the horizontal distance from the side of the chimney to the peak of the roof is more than 10 feet, a chimney height reference point is established on the surface of the roof a distance of 10 feet from the side of the chimney in a horizontal plane. The top of the chimney must be at least 2 feet above this reference point, but never less than 3 feet in height above the highest point where it passes through the roof (**FIG. 8**).

These chimney heights are necessary in the interest of safety and do not ensure smoke free operation. Trees, buildings, adjoining roof lines, adverse wind conditions, etc., may create need for a taller chimney should smoking occur.

Additional support is required above the roof if the chimney height exceeds four (4) feet.



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