

CHIMNEY HEIGHT

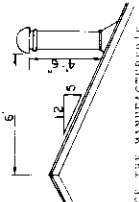
THE CHIMNEY SHOULD BE AT LEAST 3 FEET HIGH AND AT LEAST 2 FEET HIGHER THAN ANY PART OF THE BUILDING WITHIN 10 FEET, MEASURED HORIZONTALLY.

IF YOUR CHIMNEY IS 10 FEET OR MORE FROM THE ROOF RIDGE YOU MAY USE TABLE 1 DIRECTLY. IF THE RIDGE IS CLOSER THAN 10 FEET, YOU CAN CALCULATE THE PROPER HEIGHT USING THE FOLLOWING FORMULA:

$(\text{ROOF SLOPE} \times \text{DISTANCE FROM RIDGE}) + \text{MINIMUM HEIGHT REQUIRED CHIMNEY HEIGHT}$

IN THE EXAMPLE ILLUSTRATED BELOW, A CHIMNEY ON A 5/12 SLOPED ROOF, LOCATED 4 FEET FROM THE RIDGE REQUIRES:

$$(5/12 \times 4\text{ FT.}) + 2\text{ FT.} = 4\text{ FT. } 6\text{ IN. IN HEIGHT ABOVE THE ROOF}$$



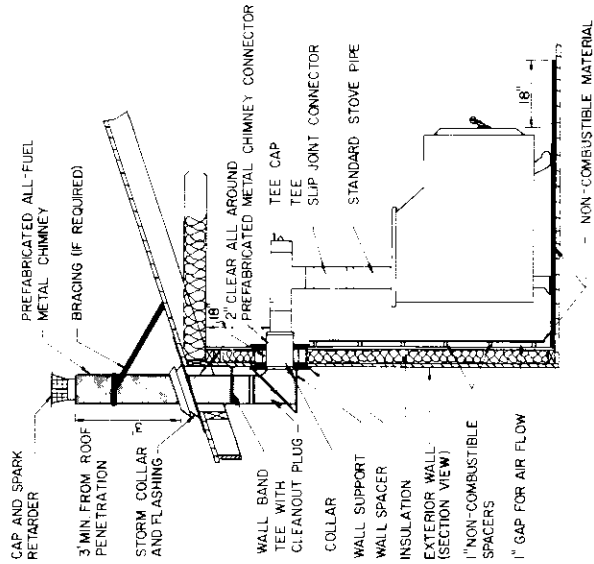
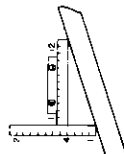
CHECK THE MANUFACTURER'S INSTRUCTIONS CAREFULLY FOR A PREFABRICATED CHIMNEY. A BRACE MAY BE NEEDED IF IT EXTENDS MORE THAN 5 FEET ABOVE THE ROOF. APPROPRIATE SECTIONS OF ROOFING MATERIALS SHOULD BE USED TO WITHSTAND PRESSURES FROM WINDS. SPECIAL CONSTRUCTION METHODS.

TABLE 1
MINIMUM CHIMNEY HEIGHTS
HEIGHT ABOVE ROOF
FOR 10 FEET OR MORE
FROM CHIMNEY

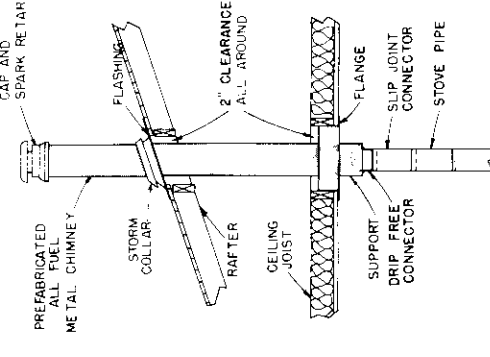
ROOF SLOPE	PLAT
1/12	3'0"
2/12	3'6"
3/12	4'0"
4/12	4'6"
5/12	5'0"
6/12	5'6"
7/12	6'0"
8/12	6'6"
10/12	7'0"
12/12	7'6"

HOW TO DETERMINE THE SLOPE OF A ROOF.

TO DETERMINE THE SLOPE OF YOUR ROOF, ALL YOU NEED IS 2 RUFFERS AND A LEVEL. MEASURE THE NUMBER OF INCHES FROM THE END OF A LEVEL RULER DOWN TO THE ROOF. IN THIS EXAMPLE, THE SLOPE IS 5/12.

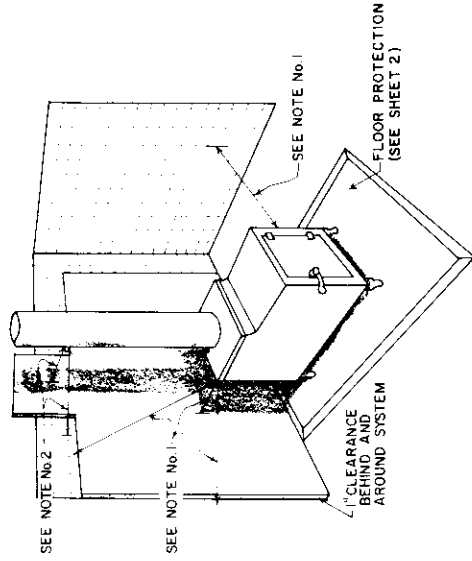


WALL INSERT

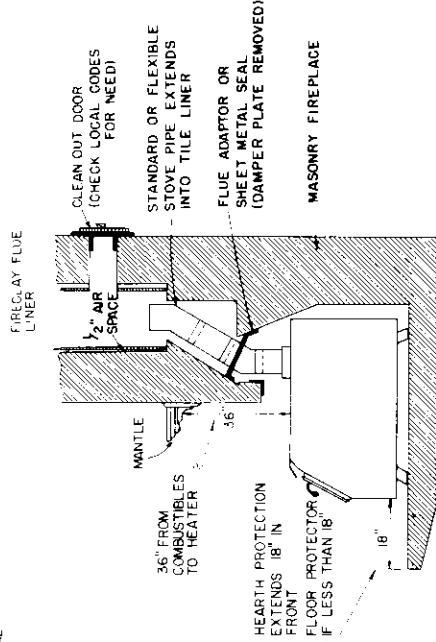


CEILING INSERT

NOTES: 1. FIRE BOX SHALL BE A MINIMUM OF 12" FROM ANY WALL SURFACE PROTECTED WITH 3/2" MASONRY OR 28 GAUGE SHEET METAL OR A MINIMUM OF 36" FROM ANY UNPROTECTED WALL SURFACE. 2. FLUE SHALL BE A MINIMUM OF 9" FROM ANY PROTECTED WALL SURFACE OR A MINIMUM OF 18" FROM ANY UNPROTECTED WALL SURFACE.



PERSPECTIVE



FIREPLACE INSERT

NOTE: DRAWINGS ARE NOT TO SCALE

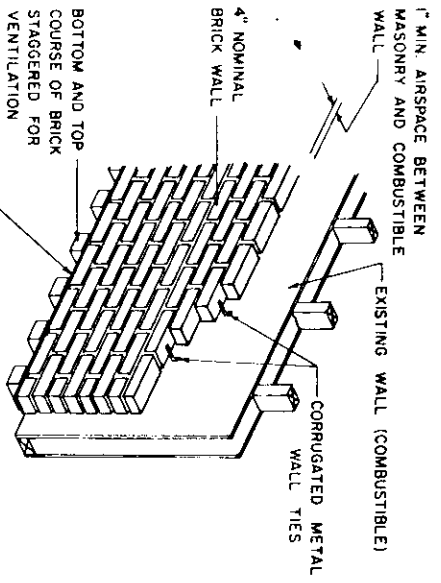
DRAWINGS EXCEEDED NATIONAL SAFETY RECOMMENDATIONS AS OF 800-1942. STATE AND LOCAL CODES MAY DIFFER (IN SOME CASES NOT AS STRICTED). CHECK LOCAL FIRE CODES BEFORE SUBSTITUTING NONCOMBUSTIBLE MATERIALS THAT ARE ALTERNATES TO METAL OR MASONRY.

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AGRICULTURE AND HOME ECONOMICS

UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

WOOD STOVE INSTALLATION PLAN

MD '84 7253 SHEET 1 OF 2



MASONRY CLEARANCE REDUCTION SYSTEM

NOTE: DO NOT PLACE MASONRY WALL TIES DIRECTLY BEHIND HEATER OR STOVEPIPE.

REGARDING TABLES AND OTHER SPECIFICATIONS.

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CLEARANCE REDUCING-SYSTEM CHECKLIST

1. NONCOMBUSTIBLE SPACERS AND TIES ARE USED.
2. NO SPACER OR TIE IS USED DIRECTLY BEHIND THE STOVE OR STOVEPIPE.
3. THE STOVE IS NOT CLOSER THAN 12 INCHES TO A WALL OR OTHER COMBUSTIBLE MATERIALS UNLESS THE STOVE IS SPECIFICALLY LISTED FOR SHORTER CLEARANCES.
4. PREFABRICATED PROTECTION SHIELDS ARE LISTED AND INSTALLED ACCORDING TO THE MANUFACTURER'S DIRECTION.
5. FLOOR PROTECTION EXTENDS 18 INCHES BEYOND ALL SIDES OF THE STOVE.
6. THE WALL PROTECTOR EXTENDS AT LEAST 36 INCHES BEYOND THE TOP AND SIDES OF THE STOVE, AND AT LEAST 18 INCHES BEYOND EACH SIDE OF THE STOVEPIPE.
7. FOR ALL VENTILATED HEAT SHIELDS, THERE IS AT LEAST 1 INCH OF OPEN AIR SPACE AROUND THE PERIMETER AND BEHIND THE PROTECTOR.
8. FOR A MASONRY WALL PROTECTOR, THERE IS AT LEAST 1/2 INCH OF OPEN VENTILATED AIR SPACE BETWEEN THE STOVEPIPE AND THE MASONRY.
9. MINERAL WOOL BATS (BLANKET OR BOARD) HAS A MINIMUM DENSITY OF 8 LB. PER FT³ AND A MINIMUM MELTING POINT OF 1500°.
10. INSULATION MATERIAL USED AS PART OF A PROTECTOR IS MADE OF NONCOMBUSTIBLE MATERIAL, AND HAS A THERMAL CONDUCTIVITY OF 1.0 (BTU PER INCH-FIT-HR-°F) OR LESS.

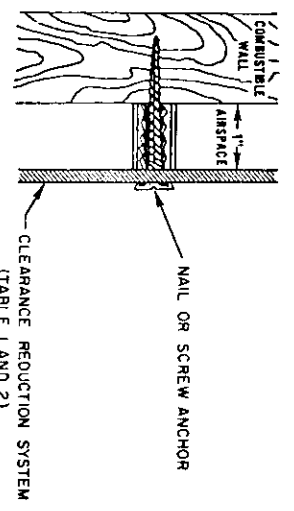


TABLE 1. WOODSTOVE CLEARANCES TO WALLS AND CEILINGS WITH CLEARANCE REDUCTION SYSTEMS

CLEARANCE REDUCING-SYSTEM	MAXIMUM CLEARANCE REDUCTION	MINIMUM CLEARANCE WHEN THE REQUIRED CLEARANCE WITH NO PROTECTION IS 36 INCHES ¹
3 3/4" THICK MASONRY WALL WITHOUT VENTILATED AIRSPACE	33%	24"
5" THICK NON-COMBUSTIBLE BOARD OVER ONE-INCH GLASS FIBER OR MINERAL WOOL BATS WITHOUT VENTILATED AIRSPACE	50%	18"
24-GAGE SHEET METAL OVER ONE-INCH GLASS FIBER OR MINERAL WOOL BATT BEIN FORGED WITH WIRE OR EQUIVALENT OR 24-GAGE SHEET METAL WITH 1" VENTILATED AIRSPACE	66%	12"
35" THICK MASONRY WALL WITH 1" VENTILATED AIRSPACE	66%	12"
24-GAGE SHEET METAL WITH 1" VENTILATED AIRSPACE	66%	18"
5" THICK NON-COMBUSTIBLE INSULATION BOARD WITH 1" VENTILATED AIRSPACE	66%	12"
ONE-INCH GLASS FIBER OR MINERAL WOOL BATT SANDWICHED BETWEEN TWO SHEETS 24-GAGE SHEET METAL WITH 1" VENTILATED AIRSPACE	66%	12"
24-GAGE SHEET METAL WITH VENTILATED AIRSPACE OVER 24-GAGE SHEET METAL WITH VENTILATED AIRSPACE PREFABRICATED LISTEN SYSTEM	66%	12"

TABLE 2. STOVEPIPE OR VENT CLEARANCES WITH CLEARANCE REDUCTION SYSTEMS^{1,2}

CLEARANCE REDUCING-SYSTEM	36"	18"	9"	6"
28-GAGE SHEET METAL SPACED OUT 1"	18	9	4	2
35" THICK MASONRY WALL SPACED OUT 1"	18	9	4	2
22-GAGE SHEET METAL ON ONE-INCH MINERAL WOOL BATS REINFORCED WITH WIRE OR EQUIVALENT, SPACED OUT 1"	12	3	2	2

¹ FOR 6" AND 8" DIAMETER STOVEPIPE THE TOTAL WIDTH OF THE CLEARANCE REDUCTION SYSTEM MUST BE AT LEAST 36 INCHES

² MOST RESIDENTIAL INSTALLATIONS REQUIRE SINGLE WALL STOVEPIPE TO HAVE AN 18" CLEARANCE TO COMBUSTIBLE MATERIALS WHEN NO PROTECTION IS PROVIDED. FOLLOW MANUFACTURER'S LISTING ON STOVEPIPE CLEARANCES.

TABLE 3. FLOOR MOUNTINGS FOR ROOM HEATERS OR FIREPLACE STOVES¹

TYPE OF HEATER	ALLOWED MOUNTING 2,3
STOVE HAS LESS THAN 2" OF VENTILATED OPEN SPACE BEHIND THE FIRE CHAMBER OR BASE.	THESE APPLIANCES CANNOT BE PLACED ON COMBUSTIBLE FLOORS
STOVE HAS 2" TO 6" OF VENTILATED OPEN SPACE BEHIND THE FIRE CHAMBER OR BASE	FLOOR PROTECTION CONSISTS OF 4-INCH THICK HOLLOW MASONRY LAID WITH THE ENDS UNSEALED AND JOINTS MATCHED TO PROVIDE AIR CIRCULATION THROUGH THE MASONRY CORE SPACES. THE TOP SURFACE OF THE MASONRY IS COVERED BY 24-GAGE SHEET METAL
STOVE HAS MORE THAN 6" OF VENTILATED OPEN SPACE BEHIND THE FIRE CHAMBER OR BASE.	FLOOR PROTECTION CONSISTS OF CLOSELY SPACED MASONRY UNITS NOT LESS THAN 2" IN THICKNESS. SUCH MASONRY MUST BE COVERED BY 24-GAGE SHEET METAL.

¹ MANUFACTURERS OF LISTED HEATERS USUALLY SPECIFY THE TYPE OF MATERIAL REQUIRED FOR FLOOR PROTECTION AND, IF AVAILABLE, THESE MATERIALS SHOULD BE USED.

² A FLOOR PROTECTOR LISTED BY A RECOGNIZED TESTING LABORATORY AND INSTALLED ACCORDING TO THE INSTRUCTIONS MAY BE EMPLOYED.

³ FLOOR PROTECTION EXTENDS 18" BEYOND ALL SIDES OF THE STOVE.

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