

# **NOTICE TO CONTRACTORS AND HOMEOWNERS**

## **MECHANICAL CODE REQUIREMENTS AND INFORMATION REQUIRED WITH PERMIT APPLICATION**

The new State Mechanical Code became effective on September 20, 2004. The new Mechanical Code incorporates the 2000 International Mechanical Code, International Fuel Gas Code and State Amendments Minnesota Rule Chapter 1346.

Enclosed is a new checklist worksheet that **must** be completed and submitted with applications for all new residential construction and the following work on all existing homes.

- Installation of a wood burning fireplace.
- Installation or replacement of an exhaust system such as a kitchen hood, central vacuum system and exhaust fans.
- Finishing of a basement and/or reducing the size or area of the room or space containing the furnace, boiler and/or water heater (combustion equipment).

In addition, we have prepared a handout which identifies some of the major changes that effect residential construction. If you have any questions regarding the new Mechanical Code and how it may affect your project, you may call the Building Inspections Department at (952) 442-7520 or 1-888-446-1801.

# COMBUSTION AIR/MAKE-UP AIR WORKSHEET

Date: \_\_\_\_\_

Name: \_\_\_\_\_ Site Address: \_\_\_\_\_

Total floor Area (including basement): \_\_\_\_\_

Size of Room with Combustion Equipment: \_\_\_\_\_

Average Ceiling Height \_\_\_\_\_ Number of Bedrooms \_\_\_\_\_

**\*Check all that apply**

### Year Home was Constructed

Pre-1994

1994-2003

2004 and After




### Combustion Equipment (Existing & New)

Atmospheric  
Vent

Fan Assist/  
Power Vent

Direct  
Vent

Electric

Water Heater Input: \_\_\_\_\_ BTU





Furnace/Boiler Input: \_\_\_\_\_ BTU





Furnace/Boiler Input: \_\_\_\_\_ BTU





Other \_\_\_\_\_





### Fireplace

Gas D.V.

Gas Log Insert

Wood Burning/Solid Fuel

Factory Wood Burning/  
Solid Fuel Closed  
Combustion with  
Combustion Air





### Ventilation System/Per Energy Code, Not Mechanical Code

Exhaust Only

Balanced

Fan 1 CFM: \_\_\_\_\_

Fan 2 CFM: \_\_\_\_\_

### Exhaust Systems

Yes

N/A

Kitchen

CFM: \_\_\_\_\_

Central Vacuum

CFM: \_\_\_\_\_

Other \_\_\_\_\_

CFM: \_\_\_\_\_

## New Code Requirements from the IMC and IFGC (with applicable State Amendments)

- Pressure equalization – Make-up Air and Combustion Air worksheets  
*1346.501.4 & 1346.5304*
- Stud Cavities shall not convey air from more than one floor level *IMC 602.3*
- All exposed gas lines (except black steel) shall be labeled “GAS” and include the working pressure of the line *IFGC 401.5 & 1346.5401.5.1*
- Gas piping protection - nail plates must extend 4” beyond wall plates and studs *IFGC 404.5*
- Sediment trap – drip leg must be a minimum of 3” in length *1346.5408.4*
- Piping support – ½” O.D. tubing supports spaced at intervals not exceeding 4’ *IFGC 415.1*
- Testing of gas piping – test pressure of not less than 25psi, test duration of 10 minutes (with prior approval from the Building Official), test gauge with 2psi increments or less with a pressure range of not greater than twice the test pressure applied, and the test pressure shall be within the middle 50 percent of the test gauge pressure range *1346.5406.4.1 – 1346.5406.4.3*

<b>Exit Terminations of vents, exhausts, and intakes</b>	<b><u>Windows/Doors/Gravity Air Inlets</u></b>	<b><u>Grade Level</u></b>	<b><u>Forced Air Inlet</u></b>	<b><u>Gas meter</u></b>
<b><u>Kitchen, Bath, Dryer, HRV Exhausts</u></b>	3 foot min. any direction	1 foot min. above finish grade	3 foot min. below, if within 10 feet horizontally	
<b><u>Mechanical Draft Equipment</u></b>	4 foot min. below or 4 foot min. to the side, 1 foot min. above	1 foot min. above finish grade	3 foot min. above within 10 feet horizontally	3 foot min. to the side, not directly above meter
<b><u>Combustion Air Intake</u></b>	0 feet clearance needed	1 foot min. above finish grade	0 feet clearance needed	3 foot min. below, within 10 feet horizontally
<b><u>HRV Exhaust</u></b>	3 foot min. any direction	1 foot min. above finish grade	3 foot min. below, if within 10 feet horizontally	
<b><u>Direct Vent Appliance</u></b>	Input(btu/hr) <10k = 6” 10k-50k = 9” >50k = 12”	1 foot min. above finish grade	Input(btu/hr) <10k = 6” 10k-50k = 9” >50k = 12”	