

# Whole-House Mechanical Ventilation Worksheet

## And Other Important Compliance Information for

### Single Family Residences/Townhouses

2015 MRC effective February 8<sup>th</sup> 2016

To facilitate Permit issuance and Energy Code Compliance in accordance with the 2015 Michigan Residential Code, please complete this form and keep a copy posted on the jobsite kitchen window. By signing below (**required**), you are certifying that this system is installed and tested to meet the checklist as completed. The ventilation details are required to be on the heat plan.

Project address: \_\_\_\_\_ Signature of the Permit Holder: \_\_\_\_\_

## 1. Mechanical Ventilation- Section M-1507

- a. **System design-M-1507.3.1** The whole-house ventilation system shall consist of one or more of the following:
- One or more supply fans
  - Or one or more exhaust fans
  - Or a combination of such, and associated ducts and controls.
  - Local exhaust or supply fans are permitted to serve as such a system.
  - Outdoor air ducts connected to the return side of an air handler (ECM Motor required) shall be considered as providing supply ventilation.
- b. **System controls-M-1507.3.2** The whole-house mechanical ventilation system shall be provided with controls that enable manual override. Please specify on the heat plan.
- c. **Mechanical ventilation rate-M-1507.3.3** The whole-house mechanical ventilation system shall provide outdoor air at a continuous rate of not less than that determined in accordance with **Table M1507.3.3 (1)**.  
**\*Exception:** The whole-house mechanical ventilation system is permitted to operate intermittently where the system has controls that enable operation for not less than 25 percent of each 4-hour segment and the ventilation rate prescribed in Table M1507.3.3 (1), (see below) is multiplied by the factor determined in accordance with Table M1507.3.3 (2) (see below).

**Table M1507.3.3 (1)**

### CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT FLOOR AREA (square feet)	NUMBER OF BEDROOMS				
	0-1	2-3	4-5	6-7	>7
	Airflow in CFM				
>1,500	30	45	60	75	90
1,501-3,000	45	60	75	90	105
3,001-4,500	60	75	90	105	120
4,501-6,000	75	90	105	120	135
6,001-7,500	60	105	120	135	150
>7,500	105	120	135	150	165

**Table M1057.3.3 (2)**

### INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS <sup>a,b</sup>

RUN TIME PERCENTAGE IN EACH 4 hour SEGMENT	25%	33%	60%	66%	75%	100%
FACTOR <sup>a</sup>	4	3	2	1.5	1.3	1.0

- For ventilation system run time values between those given, the factors are permitted to be determined by interpolation
- Extrapolation beyond the table is prohibited

