

Whole House Mechanical Ventilation Worksheet

To assist in the Energy Code compliance in accordance to the 2018 State of Connecticut Building Code, Please complete this for, and submit it along with your Building and Mechanical permit applications for a new single-family residence

PROJECT ADDRESS: _____

OWNER / CONTRACTOR: _____

Section M1506 Mechanical Ventilation

M1507.3.1: System Design. The whole house ventilation system shall consist of one or more supply or 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 shall be considered as providing ventilation

M1507.3.2: System Controls. The whole house mechanical ventilation system shall be provided with controls that enable manual override.

M1507.3.3: Mechanical ventilation rate: The whole house ventilation shall provide outdoor air a continuous rate of not less than that determined in accordance with Table M1507.3.3(1)

Exception: The whole house mechanical ventilation system per mitted to operate intermittently where the system has controls that enable operation for not less than 25% of each 4 hour segment and ventilation rate prescribed in Table M1507.3.3 (1) is multiplied by the factor determined in accordance Table M1507.3.32

**TABLE M1507.3.3(1)
CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS**

DWELLING UNIT FLOOR AREA (square foot)	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	90	105	120	135	150
> 7,500	105	120	135	150	165

For SI: 1 square foot = 0.0929 m², 1 cubic foot per minute = 0.0004719 m³/s.

**TABLE M1507.3.3(2)
INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS^{a, b}**

RUN-TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	25%	33%	50%	66%	75%	100%
Factor ^a	4	3	2	1.5	1.3	1.0

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

Number of bedrooms _____ Square Footage (including finished basement) _____ Sq.ft.

What is the continuous airflow rate for this house per Table M1507.3.3(1)? _____ CFM

Is the system designed to be (Check One) _____ Continuous or _____ Intermittent?

If this is an intermittent system, what is the runtime factor? _____ X Min. CFM _____ = Total CFM _____

How do you propose to meet the required CFM for this system? (Check One)

_____ Outdoor air duct connected to the return duct with an ECM motor

_____ Exhaust fans with outdoor air duct connect to the return duct

_____ A combination of above

_____ ERV or air exchanger

_____ Other (Please Specify) _____