

RESIDENTIAL MECHANICAL VENTILATION

R303.3.2 Rooms without bathing or spa facilities. Water closet compartments or toilet rooms without bathtub, shower or spa facilities shall be provided with aggregate glazing area of not less than 3 square feet (0.3 n²), one-half of which must be openable.

Exception: The glazed area shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rate shall be in accordance with Table M1507.3.

M1507.3 Ventilation Rate. Ventilation systems shall be designed to have the capacity to exhaust the minimum air flow rate determined in accordance with Table M1507.3.

**Table M1507.3
EXHAUST RATES FOR RESIDENTIAL DWELLINGS**

Domestic Kitchens	
Range hoods/downdraft exhaust	Minimum 150 cfm intermittent or 25 cfm continuous
Bathrooms – Toilet Rooms	
Rooms containing bathing and spa facilities (Static pressure shall be rated @ 0.10 inch water gauge for intermittent fans.)	Minimum 80 cfm intermittent or 20 cfm continuous.
Toilet rooms without bathing or spa facilities, when not provided with natural ventilation per R303.3.2	Minimum 50 cfm

For SI: 1 cubic foot per minute = 0.422 l/s

M1507.4 Room with bathing or spa facilities. All rooms containing bathing or spa facilities shall be provided with a mechanical ventilation system controlled by dehumidistat, timer or similar means of automatic control.

M1507.1.1 Duct sizing. Prescriptive exhaust duct sizing shall be in accordance with Table M1507.4.

**Table M1507.4
PRESCRIPTIVE EXHAUST DUCT SIZING**

Fan tested CFM @ 0.10 in W.G.	Minimum Flex (Diameter)	Maximum Length (Feet)	Minimum Smooth (Diameter)	Maximum Length (Feet)	Maximum elbows (note a)
50	4"	25	4"	70	3
	5"	90	5"	100	3
	6"	No Limit	6"	No Limit	3
80	4" (note b)	N/A	4"	20	3
	5"	15	5"	100	3
	6"	90	6"	No Limit	3
100	5" (note b)	N/A	5"	50	3
	6"	45	6"	No Limit	3
125	6"	15	6"	No Limit	3
	7"	70	7"	No Limit	3

a. For each additional elbow subtract 10 feet from length.

b. Flex ducts of this diameter are not permitted with fans of this size.