

Choose the Right Fan

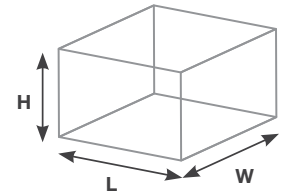
Extraction fans should be placed as close as possible to the steam source (e.g. over or near the shower). Inline fans are the most appropriate solution as the extraction grille can be placed directly above the steam source. Use following steps 1-6 as your guide to selecting the right fan for your application.

1. Calculate the Room Size

- Calculate the room volume in cubic metres (L x W x H) e.g. 2.8m x 2.6m x 2.4m = 17.47m³.
- Multiply the room volume by the following guidelines for air changes per hour (ACH) for that room. Always use the higher limit.

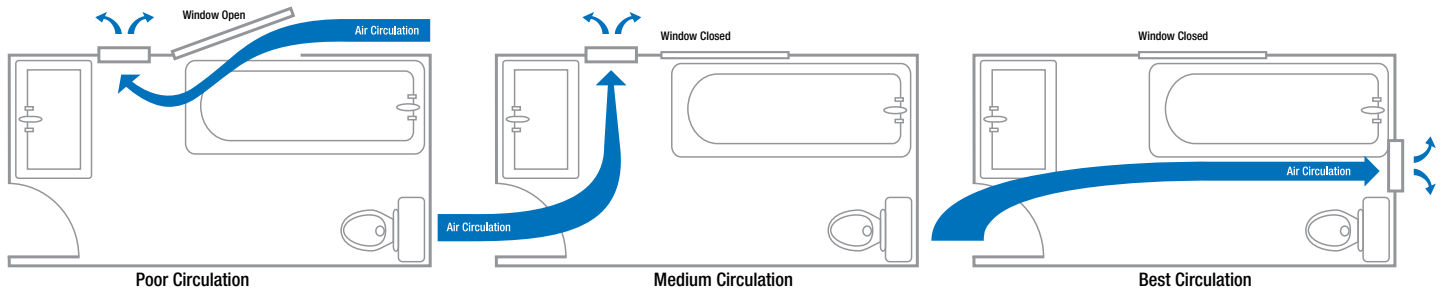
Toilets	6-10 ACH
Bathrooms, showers, ensuites	11-15 ACH
Kitchens, laundries	15-20 ACH

- The result is the minimum airflow performance required in cubic metres per hour that can be assessed against the fans Free Air Fan Performance, listed on the following pages, after a large downgrading allowance is made for the considerable slowing effect of a complete installed system. See page 3 for a description of duct system losses that will also occur from fascias, grilles, cowls and backdraft shutters. Manrose technical support can be consulted for their recommendations.



2. Consider the Location in the Room

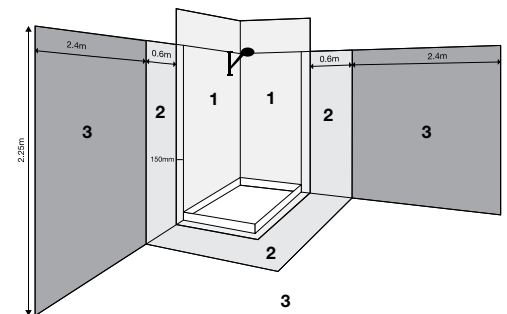
The right placement of an extraction fan will ensure optimum airflow through the bathroom. To ensure the fan works to its maximum efficiency, the extracted air needs to be replenished, or "made up", with an equal amount of dry air drawn in from an adjacent room or hallway. This make-up air replenishment may be assisted with the installation of a door grille (FAN0159).



3. Wet Area Zones & Recommended Fan Types

Wet area zones are determined by their proximity to the bath or shower. Use the wet area zone plan and table to identify what type of fan is required.

Zone	Description	Recommended Fan Type
1	Area immediately above the bath or shower tray up to the higher of either 2.25m or the height of the fixed plumbing connection	Safety extra low voltage, inline fans only, or contour without light
2	Area within 0.6m around the edge of the bath or shower tray	Any fan
3	Any area outside Wet Area Zones 1 & 2	Any fan



4. Select a Fan Type

From the list below select a fan type, then see the following sections to identify the model you require. Ensure the model you select has a performance (m³/h) greater than the performance calculated in step 1.

Fan Type	Application	Key
Inline Extraction Fans	Wet area zone 1	Green
Wall/Ceiling Fans	Wall and ceiling	Orange
Heat-Fan-Light Systems	Ceiling, multi-function	Blue
Inline Extraction Fan Kits	Wet area zone 1, integrated light	Teal
Through Wall Fan Kits	Wall	Light Blue
Through Roof Fan Kits	Roof	Red
Safety Extra Low Voltage (SELV)	Wet area zone 1	Pink
Window Fans	Window	Yellow



5. Saving Energy

The best way of calculating the most efficient fan for your needs, is to compare the specific fan powers of each one selected. The fan with the lower watts per l/s, will use less energy. If a fan has similar specific fan power to another, but much higher pressure for ducted installations, it will still be the more efficient option.

Max. Fan Watts (W)	Max. Fan Pressure (Pa)	Free Air Fan Performance (l/s)	(m ³ /hr)	Specific Fan Power (W/l/s)	Sound dB(A)
25	60	101	364	0.25	40
20	35	36	130	0.56	41

6. Fan Switching Options

Option	Description	Option	Description
Standard	Remote wall switch	Auto Sense	Condition sensor incorporated in fan
Timer	Remote switch with delayed OFF adjustable from 1-20 minutes	Variable Speed Controller	Incorporated speed drive in fan
Pull Cord	Integral pull cord switch on fan	Humidity Automation	Humidity sensing and control incorporated in fan
PIR Control	Motion sensor incorporated in fan		