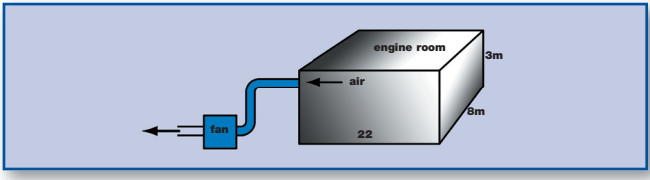
Ventilation fans tips



Useful tips on calculation and sizing for the correct Andrews Sykes ventilation fan

The selection of the correct fan can be achieved with the help of the following calculation:

- Calculate the volume of the room which needs to be ventilated (W x L x H)
- Select the recommended number of air changes per hour
- Multiply the results of 1 by result 2, this will give the required air volume per hour
- Select the correct fan or fans to achieve this air flow.

Example

An engine room which is 3 metres high x 8 metres wide x 22 metres long requires ventilation due to heat and fume build up. From the chart we can see that the recommended air change is between 15 and 30 depending on the intensity of the application. This case is fairly intense so on the side of caution we can use the ratio of 30 changes per hour.

To calculate;

3 m x 8 m x 22 m = 528 m^3 x 30 changes = 15,840 m^3 per hour

In this situation a model FV900 which has a capacity of 16,500 m^3 per hour would be most suitable.

Important note on using ducted units

If it is necessary to use long lengths of ducting or involve several bends in the ducting, it must be remembered that the resistance in the ducting will increase and the air volume provided will decrease drastically.

Due to high resistance, certain fans can become useless, although the stated air volume at low pressure would not indicate this at first sight. The Andrews Sykes FV fans do have high pressure capacity and can be used with several lengths of ducting.

In some applications it may be better to blow rather than suck the air out, or use a combination of the two. When used in sensitive environments or handling ignitable fumes, special precautions and equipment must be used. If the application is sensitive, complicated or long lengths of ducting need to be used, you should consult your local Andrews Sykes specialist who will be able to provide advice on all types of installations.