



Vacrite Limited
Unit 163 Chiswick High Road
London
W4 4HH

0845 467 9197
www.VacAndVent.co.uk
info@VacAndVent.co.uk

Technical Data Sheet

Air Watts

Air Watts are used in an effort to rate the output power of the vacuum cleaner instead of its input power.

This rating is mostly used for rating the power unit in a central vacuum system.

It is based on suction with air flow at the unit itself.

The suction and air flow are measured with the air flow being restricted by **a two inch opening**.

The formula for Air Watts is as follows:

$$(\text{Air Flow} \times \text{Dynamic Vacuum})/8.5$$

Where **Air flow** is in Cubic Feet per Minute (CFM) and

Vacuum is in Inches of Water Lift.

OR

$$\text{Air Flow} \times \text{Dynamic Vacuum} \times 9.813$$

Where **Air flow** is in Litres per second and

Vacuum is in metres of Water Lift.

Vacuum is measured while air is flowing, in other words 'dynamic vacuum'. Not 'static vacuum' while air flow is zero. Static or sealed vacuum will be about 4 times higher than dynamic vacuum.

As a matter of interest:

Air flow

If volume of air movement is 50 litres per second in a 50mm (int dia) pipe then air speed within pipe is:

25 metres per sec

90 km per hour

56 mph