

Learn why Close Comfort is such an improvement over normal portable ACs



Close Comfort air conditioner

- 55 cm high x 29 cm x 39 cm, 17.5 kg, easy to carry
- Can be used anywhere, unlimited mobility
- 300 Watts electrical power, 800 – 1,100 Watts cooling
- All cooling directed around user location
- Instant localised cooling
- Noise 47 – 54 dB
- Purchase price \$649
- + 5 year running cost \$370 (Sydney) = \$1019
- Windows and doors open
- Optional bed tent intensifies cooling, provides chemical-free mosquito protection



Single hose portable air conditioner

- 78 cm high x 38 cm x 46 cm, 32 kg
- Has to be near window, wheels for mobility
- 1000 Watts electrical power, 2,900 Watts cooling
- Hose sucks out all the cool air, and more: little if any room cooling
- Part of room may feel cooler after several minutes
- Noise 55 – 63 dB
- Purchase price \$550
- + 5 year running cost \$1,260 (Sydney) = \$1810
- Windows and doors closed,

Why buy a machine that sucks all the cool air out of the room?

A great idea: eliminate the hose!

Traditional portable air conditioners come with a window kit: a large hose and a frame to install it in a window. The kit can be fiddly and difficult to install with many windows.

Apart from these difficulties, there's a much better reason to eliminate the hose.

The diagram shows how air flows through and around a single hose portable air conditioner.

The machine creates a cool air flow from the front vent, typically around 200 cubic metres per hour.

To cool the hot condenser, the machine sucks about 300 cubic metres of air from the room and exhausts it through the hose outside. That's more than all the cool air produced by the machine.

Warm air from the outside flows back into the room to make up for the air exhausted through the hose, so the room feels just as hot as outside, except where the cool air comes out of the machine.

It gets worse: in humid weather, the rate at which water vapour enters the room is greater than the amount of water removed by the air conditioner. Therefore, humidity in the room steadily increases, making the warm conditions even less comfortable.

A split air conditioner provides more effective cooling. However, even that has disadvantages. A split air conditioner does not provide any ventilation, so carbon dioxide and volatile organic compounds accumulate in the room, which can make the room air unhealthy in a short time, depending on the number of people and air leakage past doors and windows.

Close Comfort provides a much healthier energy-saving alternative with fresh air circulating through open windows. Close Comfort does not try and cool the walls, ceiling and floor, saving most of the energy used by a room air conditioner. Instead, Close Comfort directs all its cooling where you need it: on your face and upper body, making you *feel* comfortable, using much less energy.

