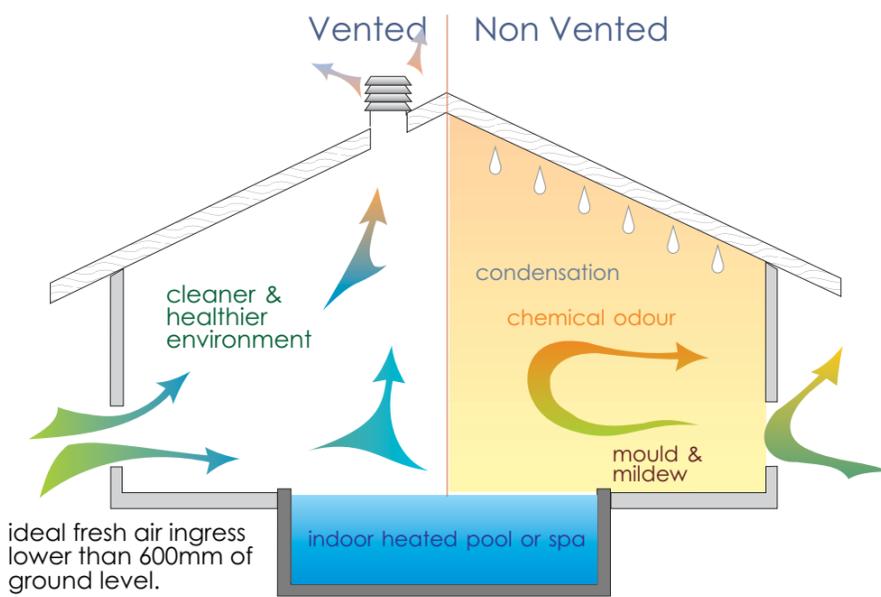




Ventilating Heated Indoor Pools & Spas



Inadequate wet area ventilation leads to

- ▶ Moisture precipitation (indoor rain)
- ▶ Mould (consequence of bacteria growth)
- ▶ Odour (consequence of mould)
- ▶ Degradation of materials (consequence of all + salt)
- ▶ Unhealthy environment (respiratory problems)

Indoor pool areas are not just another room. Careful consideration needs to be exercised when planning and building such areas especially where water is to be heated.

Air ingress dictates where egress is to be located on the roof

Wet area ventilation employs heat and pressure dynamics to facilitate air movement. In all cases ingress to egress is to be balanced and appropriate to the disposition of the area being ventilated.

It is not a matter of ingress being in a convenient location and a vent(s) anywhere on the roof for the purpose of aesthetic conformity.

Problems arise when practitioners focus only on the aesthetics and not on the performance necessary.

The client may not know what is in store for them in the short term but they soon acquire an education which leads to uncomfortable questions being asked in the not so long term. The one thing that practitioners fail to realise is that this particular wet area has chlorine salts present and cannot be simply considered as an oversized bathroom.

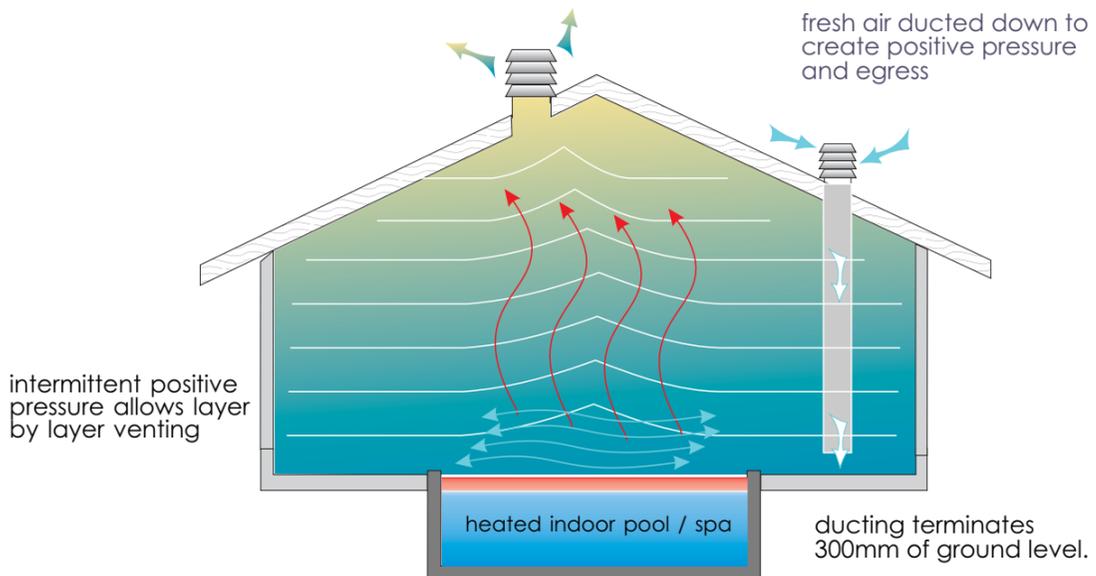
Volume replacement is critical. Recirculating the air through a dehumidifier may remove the moisture but not the odour nor will it improve the air quality, so an expensive quick fix is not the answer.

With pressure being greatest at ground level, air ingress is required to be within 600mm of the ground. This dynamic is used to facilitate efficient ingress into the building and can only be done if efficient and proportional displacement is present.

You do not want the roof ventilator to create negative pressure and thus establish an unwanted direct line from ingress to egress

Indoor Pool / Spa Ventilation (mechanical ingress)

Where low level peripheral natural air ingress is not available. This approach is for air ingress only, do not use mechanical for egress



Should mechanical means be used to introduce air volume into an area it must be done without causing flow paths.

The introduction of air to the area must be in a manner as to pressurise the area with the roof ventilator(s) providing relief. (similar to inflating the tyre of your car)

You do not want a direct line established from in to out. Ingress must be slow and positive, egress must be laminar. A pulsing mode may be used as opposed to continuous flow