HOW WINDKAT WORKS

Windkat uses a system of injection nozzles to maintain constant negative pressure in any professionally installed flue to which it is fitted and is the most effective anti-downdraught cowl on the market. We make that bold claim because Windkat cures problems other cowls have failed to solve. It is unique among cowls and chimney pots in its ability to not only reliably cure downdraught, but also improve draw. The Windkat helps to maintain a steady even draw unlike other static anti-downdraught cowls that cannot create up-draught and are less effective at stopping downdraught. The Windkat also holds several advantages over spinning cowls as they stop functioning in low wind and create too much draw in high wind areas where they are not adviseable. They are prone to the failures commonly associated with wear and tear of moving parts. The diagram below simplistically shows how wind of any speed and direction hits the Windkat and is channelled upwards. That in-turn draws air up the flue from below. The precise geometry, size and design of the patented air ducts/injection nozzles are what sets it apart from all competitor products and are the secret to superior performance. Airflow is stabilised and regulated in a precise and unique way. This superior performance has been independently tested and verified by German Universities and the German Government.

The purpose of a flue is to draw exhaust gases, from combustion in fireplaces or stoves, up the chimney and safely
out into the atmosphere. There are however certain factors including local topography (hills or trees), building design (low chimneys) and most commonly weather conditions (strong winds or thermal inversions) that can act like a ‘cap’ on the critical zone where the chimney meets the atmosphere. This creates overpressure and stops exhaust gases from rising and therefore exiting the building. These factors can lead to the unfortunate scenario of a fire that is difficult to light and/or burns irregularly. But BEWARE, as a poorly functioning flue can also lead to highly toxic exhaust gases backing-up, coming back down the flue (downdraught) and entering your room which can be extremely dangerous and even life threatening.

As well as having your chimney checked regularly by a qualified sweep, the Windkat is the best solution on the market today for avoiding these downdraught problems. But there’s even more! Not only does the Windkat stop downdraught, but its unique ability to maintain a steady even draw in virtually all weather conditions leads to greatly increased efficiency in combustion. This means that wood and other fuels are burned at their optimum rate meaning more complete combustion which in turn leads to pollution reduction and financial savings.
Advantages at a glance:

- Provides constant even negative pressure which banishes downdraught and increases combustion efficiency.
- Fits directly and very securely onto the flat top of your chimney stack (base plate configuration) and replaces any existing chimney pot. The Plug-in configuration allows installation directly into single or double walled flue pipes.
- Unlike a rotating cowl the windkat has no moving parts to wear out, won't develop an irritating noise, is effective even in still conditions, won't stop working, and maintains a constant even draw.
- The Windkat is far more effective then most other static anti-downdraught cowls.

The hinged top allows for easy cleaning access.