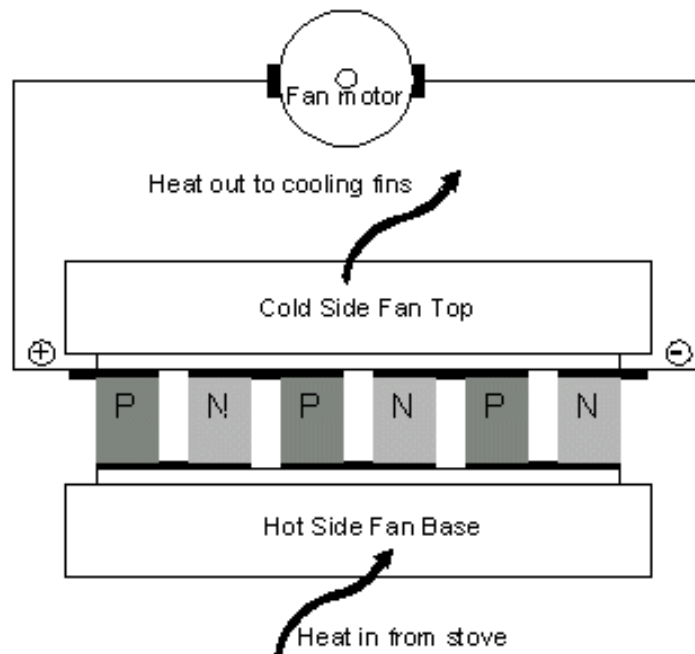


## Technical Information for the Ecofan™ 800 Series



The Caframo Ecofan™ is a heat powered fan designed to circulate the warm air created by a wood stove. This fan does not use any batteries or wall cords.

These fans have a thermoelectric module which acts as a small generator to power the fan's motor. When this generator module experiences a heat differential between its top and bottom surfaces, it pumps out electricity. The bottom surface of the module is heated by the base of the fan, while the top of the module is kept cooler by the fan's top cooling fins.

### **The Seebeck Effect**

The generator module is a unique semiconductor device that relies upon the Seebeck effect to generate electricity. When two dissimilar semiconductors (p-type and n-type) at the same temperature are connected together they establish a static electric potential difference. With the introduction of a temperature difference heat flows across the joined semiconductors which in turn permits electrons to flow. With the electron flow or current comes the ability to power electrical devices such as the fan's motor.