

## **Baseboard Heating Usage**

The concept and original design was developed by the Canadian Gas Research Institute. The basic idea stems from the cost savings using Natural Gas versus Electricity. Even though the efficiency rating of an electric baseboard heater is better than an equivalent natural gas unit, the operating costs for a natural gas unit will be lower.

Some companies are expanding upon the Canadian Gas Institute's ideas. They see a future for this product in a variety of applications. The Most common usage would be in the home or office. The gas baseboard heaters could be used as the main or supplementary heating source. This type of equipment could be easily designed in new construction or retrofitted into existing buildings. Greater cost savings would be realized in regions that experience harsh winter climates.

One customer's design uses Comair Rotron Blowers to introduce outdoor air into the burner area. This aids in the combustion process making the unit more efficient. A reduced speed version of our Biscuit AC is being used to minimize the acoustical noise. Also, the blower is built with ball bearings to handle the high temperatures that occur at the fan inlet. The efficiency rating for this type of baseboard heating is 81%. Speed controlled DC Blowers are also available and can result in deceased power consumption as well as system noise.

The unique characteristic of this application is the requirement of a silicone seal between the two motor housings. This seal was specified by the customer and introduced into the manufacturing process of our Biscuit AC fan line. The heater has undergone CSA testing and we are currently supplying product. These new baseboard heaters will be available for this winter season throughout Canada.

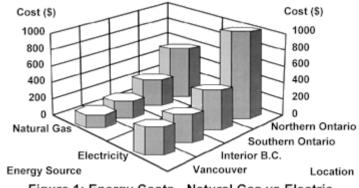


Figure 1: Energy Costs - Natural Gas vs Electric