**Ask Jon Eakes**

# Pro: Electronic Thermostats & Baseboard Heaters

Last Updated: Friday, November 30th, 2007, Created: Friday, November 30th, 2007

Baseboard electric heaters are notorious for providing uneven heat -- cycling hot and cold -- with thermostats that are quite unreliable. Whether looking at them for the whole house or topping up the heat in difficult to reach corners of the house, most contractors see baseboard electric heaters as necessary evils.

Why have modern electronic thermostats changed all of that? First, the thermostat is on the wall, not on the baseboard, measuring what you feel in the room. The best of the electronic thermostats will check the air temperature every 3 to 6 seconds. They then send an ON or an OFF signal to the baseboard heater. That means that often they are told to turn OFF before they have reached their maximum temperature, or ON before they have gone totally cold -- giving a warm even heat when full power is not needed. This turns out to be more comfortable and responsive than hydronic (hot water) or other radiant heat systems known for their comfort. They can easily keep a room within half a degree of its set-point.

Low voltage electronic thermostats are the norm, but full line voltage electronic thermostats are now available for direct replacement of old baseboard controls because of a massive replacement program driven by Hydro Quebec -- the majority of all houses in Quebec are heated with electric baseboards.

**Originally published as an article by Jon Eakes in Home Builder Magazine, the magazine of the Canadian Home Builder's Association.

**Keywords:**
Energy Conservation, Heating, Thermostats