

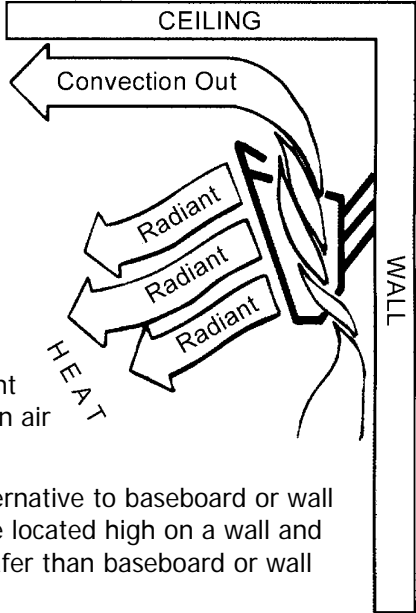
# APPENDIX B

## HEATING SYSTEMS

### Digital Thermostat

<b>WHY</b>	<ul style="list-style-type: none"><li>• A quality digital thermostat allows residents to precisely regulate a unit's temperature. Cheaper thermostats typically heat to a temperature up to 5 degrees higher or lower than specified.</li><li>• A digital thermostat is easily programmed to heat the house to different levels at different times depending on residents' needs, potentially</li></ul>
<b>HOW</b>	<ul style="list-style-type: none"><li>• Specify a high-quality thermostat that is simple to program and explain</li></ul>
<b>COST</b>	<ul style="list-style-type: none"><li>• Approximately \$60-100 per unit.</li></ul>

### Radiant Cove Heaters

<b>WHY</b>	<ul style="list-style-type: none"><li>• These electric systems radiate heat directly to objects in their "line of sight." The heaters are long rectangular metal units that are placed high on a wall, where they are out of the way of furniture, doors and small children.</li><li>• The system is zonal, so the temperature of each room can be independently controlled.</li><li>• People prefer radiant heat from sources like sunshine, fireplaces, wood stoves or warm floors to other forms of heat. Radiant heat is perceived as comfortable even when air temperatures are low.</li><li>• Radiant cove heaters are an affordable alternative to baseboard or wall heaters. In addition, because the units are located high on a wall and operate at lower temperatures, they are safer than baseboard or wall heaters.</li><li>• Radiant heaters can be more energy efficient than other resistance heat</li></ul>	 <p>The diagram illustrates the operation of a radiant cove heater. A rectangular heater unit is mounted high on a vertical wall. Three arrows labeled 'Radiant' point away from the heater, indicating direct heat radiation. A larger arrow labeled 'Convection Out' points towards the ceiling, showing the upward movement of air. The ceiling is labeled 'CEILING' and the wall is labeled 'WALL'. The word 'HEAT' is written vertically near the bottom of the heater unit.</p>
------------	--	--

## APPENDIX B - HEATING SYSTEMS

	<ul style="list-style-type: none"><li>• Radiant cove heaters are an affordable alternative to baseboard or wall heaters. In addition, because the units are located high on a wall and operate at lower temperatures, they are safer than baseboard or wall heaters.</li><li>• Radiant heaters can be more energy efficient than other resistance heat because they maintain comfort at lower temperature settings.</li></ul>
<b>HOW</b>	<ul style="list-style-type: none"><li>• Radiant heaters make sense in new or properly weatherized buildings. Radiant cove heaters are easily installed high on the wall of each room in which heating is needed. They can also be readily installed in rehabs where the owner is converting from baseboard or wall heaters.</li></ul>
<b>COST</b>	<ul style="list-style-type: none"><li>• The cost of installing radiant cove heaters is about the same as higher quality wall heaters and slightly more than baseboard heating. However, the system costs 10% to 15% less to operate and maintains acceptable levels of comfort.</li></ul>

### High Efficiency Gas Sealed Combustion Forced Air Furnaces

<b>WHY</b>	<ul style="list-style-type: none"><li>• "Sealed combustion," means there is little chance of combustion gas spillage or backdrafting, a safety benefit for occupants.</li><li>• Higher efficiency ratings translate to lower monthly gas costs. Some furnaces have more efficient blower motors that also reduce electric bills.</li></ul>
<b>HOW</b>	<ul style="list-style-type: none"><li>• Furnace efficiency is wasted if the unit is tied to an inefficient duct system, which is common. The ducts should be sealed to eliminate air leaks in crawl spaces, attics and garages (where furnaces are located in</li></ul>
<b>COST</b>	<ul style="list-style-type: none"><li>• Approximately \$3200 per unit.</li></ul>

## Water Heater Water Boiler Supplied Fan Assisted Heaters & Hydronic Baseboard (i.e. "Turbonics")

**WHY**

Hydronic heat is:

- Quiet, with no large fans or ducts to transmit noise
- Clean, gently circulating room air by convection without creating dust or odors
- Even, warming the full length of cold walls and windows for the greatest comfort
- Flexible, allowing placement of furnishings without concern for blocking registers
- Simple to install, particularly for retrofitting existing buildings
- Efficient, moving warm water through small pipes with less heat loss than ducts
- Zoned for room to room control.

**HOW**

Contact your supplier for information on specific systems, their

**COST**

At this time these systems are almost as high in price as forced-air systems, because contractors without experience installing these systems tend to bid high.

It is expected that the installation costs for these systems in the Seattle market will drop dramatically as more contractors become familiar with their installation.

