



Radiant Heating & Cooling Systems

With so many advantages shouldn't you choose radiant panel systems?

HYDRONIC RADIANT CEILING SYSTEMS

Radiant panel ceiling systems are an energy and cost saving method of heating and cooling. Radiant heating systems provide comfort much the same way as the sun warms the earth. Cooling with radiant panels works on the same principle, however the panels absorb heat from the space. Radiant cooling and heating systems offer many advantages including:

- **COMFORTABLE:** The heating and cooling is distributed radiantly rather than by forced air providing a "draftless" environment.
- **FLEXIBLE:** Ceiling radiant panels offer maximum flexibility in future layout changes, such as enlarging rooms and moving partitions.
- **ECONOMICAL:** The pump energy required in hydronic systems is much less than that required for fans in forced air systems. The amount of energy to distribute the same amount of heating or cooling in forced air systems is typically 10 times greater than that needed for pumps in a hydronic radiant system.
- **SPACE-SAVING:** Radiant ceiling systems do not require wall space and, for cooling, require less height in the ceiling plenums as the ductwork required for ventilation air is significantly reduced.
- **HEALTHY ENVIRONMENT:** Radiant systems that heat and/or cool can takeover the sensible heating/cooling requirements allowing the ventilation system to provide only the air required for the latent load and ventilation requirements. This reduces the size of the ductwork and air handlers while providing superior ventilation, which greatly simplifies system design, construction and commissioning, as well as reducing the chances of "sick building syndrome."

STERLING'S VALUE-ADDED SERVICES

Sterling offers a number of services to assist the designer and installer of radiant ceiling systems.

- **SYSTEM DESIGN ASSISTANCE:** If you require application assistance, Sterling can help you. Our technical support staff can also provide CAD drawings for system layouts.



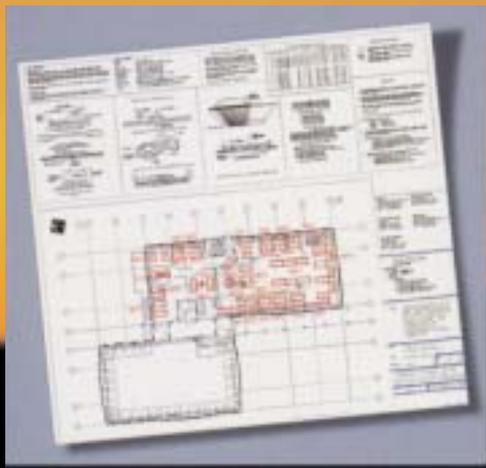
- **TRAINING:** Sterling's state-of-the-art Reed Institute Training Center features many installed, operating HVAC systems. The combination of classroom and hands-on training gives participants the opportunity to learn by doing and improve their knowledge of products, applications, installation, and service.

NOT ALL RADIANT PANELS ARE CREATED EQUAL

Sterling's product is based on the Frenger design. Frenger radiant ceiling panel systems were the first to be certified and tested in Europe over 40 years ago. Sterling's product has been installed in hundreds of installations throughout the United States and Canada. You'll find them in hospitals, schools, nursing homes, museums, recreational, institutional and correctional facilities.

Sterling radiant systems offer a number of advantages over other manufacturers.

- **FACTORY ASSEMBLED:** Sterling radiant panels are factory assembled and precut to exact lengths of up to 16', eliminating the extensive field labor required on other radiant panels systems.
- **POSITIVE TUBE TO PANEL BOND:** The copper tubing is positively affixed to the panel with a hold down clip. Thermal paste is also applied between the tubing and panel to assure a permanent yet flexible bond for maximum heat transfer.
- **STANDARD COPPER FITTINGS:** All panels use standard 5/8" copper tubing which allows the use of standard copper fittings.
- **LIGHTWEIGHT EXTRUDED ALUMINUM:** The linear panels are constructed of light weight aluminum. This lessens the weight that must be supported by the ceiling suspension system. The modular panels are available in either aluminum or steel.



LINEAR RADIANT PANELS



Attractive panels subtly blend with any decor.



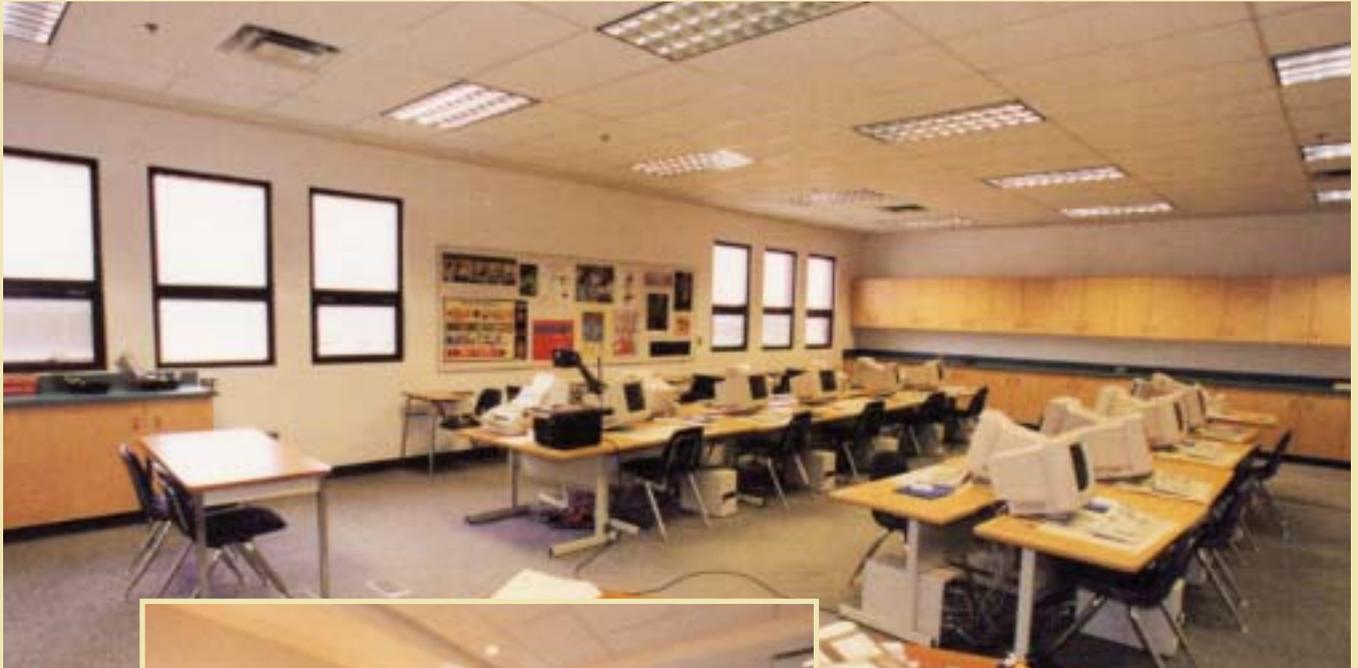
Panel placement provides comfort next to windows.

Linear panels are constructed of extruded aluminum and are typically installed wall to wall. The face plates are offered in a variety of surface finishes including smooth and ridged (castellated). Linear panels are also available in a variety of widths (normally in multiples of 5", 6" and 8") and in continuous lengths up to 16 feet. The panels may be ceiling mounted, normally mounted in a T-bar grid, or wall mounted. The panels are shipped factory assembled (including all u-bend connections) and supplied with the interconnecting tubing for directly adjacent panels.



Above panel may be wall mounted as well.

MODULAR RADIANT PANELS



Silk screened panels blend with existing ceiling tiles.

Modular panels are constructed of either sheet aluminum or steel and are made to fit in a standard 2' x 2' or 2' x 4' T-bar ceiling grid. The face plates are offered in a smooth surface finish, or perforated for acoustical treatment. The smooth face plates can be provided in a solid white color, or can be silk screened to match the ceiling tile's appearance. Perforated panels are used for acoustic control in applications (typically cooling) where a large portion of the available ceiling area is covered with panels.

Radiant ceilings frees up wall space for cabinets.



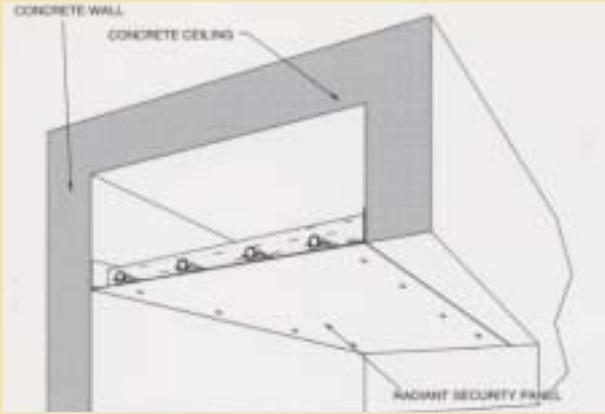
Perforated panels provide acoustic control.



Regular panels also available.



SECURITY RADIANT PANELS



Cavity above panel can be used to run other service to and between cells.

Security linear panels are constructed of heavy gauge steel and are typically installed in institutional and correctional facilities. The face plates are smooth and are available in a variety of widths (normally 12", 24", and 48") with continuous lengths up to 10 feet. The panels are ceiling or wall mounted, either on the surface or recessed. The panels are shipped factory assembled with the interconnecting tubing for adjacent panels.



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