Hydronic Finned-Tube Radiation
With so many advantages shouldn’t you choose hydronic perimeter heat?

HYDRONIC PERIMETER HEATING ADVANTAGES

• COMFORTABLE: Hydronic perimeter heat gently blankets the exterior walls and glass, eliminating the drafts and local cold spots which often occur with forced air heating systems. Through the combined effects of radiant and convection heating, people are more comfortable at temperatures 2 - 4 degrees lower offering significant energy savings. Humidity levels are also easier to maintain as heat provided by hydronic finned-tube radiation does not produce the lower humidity levels often associated with forced air and electric heat systems. Rooms can be easily zoned with individual temperature controls to provide that extra comfort.

• FLEXIBLE: The piping used to distribute the hydronic heat is much smaller than the ductwork used in forced air systems. This not only provides more usable space for the occupants, but offers much more flexibility when designing buildings or major renovations. Future layout changes, such as enlarging the rooms and moving partitions can be much more easily accomplished.

• QUIET: Hydronic finned-tube radiation systems have no large fans, but deliver hot water to the individual zones by quiet, remote pumps. Without ductwork, there is no conduit to carry the system’s fan noise and other sounds throughout the building.

• CLEAN: Hydronic perimeter heating systems are cleaner and healthier. There is no ductwork and fans to redistribute dirt, odors, and germs through a building’s forced air system.

• ECONOMICAL: The pump energy required in hydronic perimeter systems is much less than that required for fans in forced air systems. The amount of energy to distribute the same amount of heat in forced air systems is typically 10 times greater than that needed for the pumps in a hydronic perimeter system. Forced air systems also have significant heat loss and leakage in the duct system, while there is no leakage and much less heat loss through hydronic piping. Additional savings can be realized with the use of outdoor air reset controls which are easily applied on hydronic perimeter systems.

• FUEL OPTIONS: Because hydronic perimeter systems employ boilers as their source of heat, the system can usually use any energy source including gas, oil, electric, solid fuel or solar. The boiler used to provide the hot water heating can also be used for other duties in the building including domestic hot water heating, snow melting, swimming pool heating, etc.

• DEDICATED HEATING: A single system that both heats and cools must have compromises designed in. Delivering heat from below and allowing the heat to rise is much more comfortable and preferable to overhead heating, which is more appropriate for cooling systems. Any additional expenses required to install dedicated separate systems for heating and cooling is paid with greater comfort and operating efficiency. For dedicated heating, hydronic perimeter heat is the best choice.
• **STERLING VERSALINE SPECIFIER:** A Windows® based selection program which helps engineers select the best combination of enclosures and elements for their project and helps with the creation of project specific specification. Available on CD-ROM.

• **CAD LIBRARY:** These libraries now include standard and custom finned-tube application drawings. Tied back to the Sterling Specifier, it can call up specific product drawings on CAD for measuring, checking clearances and copying to project documents. The custom drawings aid in finding solutions to your unique design needs.

• **QUALITY:** Sterling finned-tube radiation is built to last. Internal welded gussets integrate with and support the enclosure. Ball bearing element supports are nylon isolated to eliminate the transition of noise due to expansion and contraction. Aluminum or steel fins are mechanically bonded through expansion to copper or steel tubing, ensuring quiet operation, long life, and maximum heat transfer. All paint finishes are oven baked.

• **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.

• **IBR RATINGS:** As a member of the Hydronic Institute of Boiler and Radiator Manufacturers (IBR), Sterling meets strict industry performance requirements. All Sterling performance ratings are based on IBR testing or are IBR approved, where applicable.

Sterling offers the industry’s most complete line of finned-tube hydronic heating elements and enclosures. We engineer and manufacture products that deliver reliability, long life, and value.

This catalog highlights the range, features, and benefits of our commercial and institutional finned-tube radiation product lines.
Versa-Line is Sterling’s most versatile and flexible line of multi-purpose commercial hydronic heating enclosures. Contractors and engineers appreciate Versa-Line’s exceptional range of enclosure styles, heights, depths, lengths, and element selections. In schools, general office buildings, common walkways, and high traffic areas, Versa-Line enclosures provide good looks, durability, and excellent value.
Classic Architecturally Designed Enclosures, a standard of excellence in design, materials, and construction unmatched in the industry, are Sterling's top line. Their crisp look and streamlined clear anodized aluminum grille provide unmatched design opportunities for office buildings, banks, executive offices, and luxury hotels. Two basic Classic designs are available in three standard depths and a wide range of heights and can include mill-pressed textured steel.
LB2 and LCS-10 are Sterling’s high-value choice for commercial strength and durability. Specify LB2 for to-the-floor installations in such areas as dormitories, military housing, nursing homes, and apartment houses. Specify LCS-10 for areas where off the floor mounting is appropriate or higher BTU’s are required.
Guardian security enclosures are constructed from perforated heavy gauge steel. Their exceptionally rugged design is ideal for secure and controlled environments including correctional facilities, holding cells, psychiatric facilities, and athletic facilities. Choose from a variety of designs that accommodate local and prevailing design codes, or let Sterling develop a custom design to your specifications.
When only made-to-order will do, Sterling can build custom enclosure designs to your specifications. We work directly with the architects to create enclosures that combine aesthetic beauty with the exceptional performance you expect from STERLING. Custom enclosures may be straight or angular and mount on the wall, floor or sill — whatever the job demands. Sterling custom enclosures are compatible with all standard hydronic heating system components. A CAD library of previously designed custom applications is available on diskette from your local representative as a design aid to help you visualize some of the possible configurations available to deal with special situations.

Any Questions?

We’ll be happy to discuss your needs to help you get the best performance from the best hydronic perimeter heating systems in the business — STERLING. To learn more about the products described in this catalog, please call us today at (413) 568-9571.

Thank you for your interest in Sterling.

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