

### Steve Kelly

We are happy to announce the addition of Steve Kelly to our sales and technical staff. Steve brings to E.W. Leonard a well-rounded knowledge of the plumbing and heating industry with expertise in steam and hydronic heating systems and radiant floor design and layout. Steve's background includes hands on experience in the field as well as technical service manager for a major heating manufacturer. Whether you are looking for help with a problem job, trying to fix a problematic piece of equipment, or looking for system design, Steve is ready to lend a hand.



As part of our commitment to provide innovative and quality products, E. W. Leonard is proud to announce that we have added Spruce Environmental Technologies to our product offering. Founded in 1989 as a radon fan manufacturer, Spruce Environmental Technologies, Inc. rapidly branched out into other products and services for a healthy indoor environment.

Under the Spruce label, the company manufactures inline fans that create quiet, effective ventilation for kitchens, baths, and the entire home. Spruce fans can reduce radon and other soil gases and are equally ideal for removing moisture anywhere in the home, including crawlspaces, beneath sub-floors, attics or anywhere

damaging, moist air can accumulate. Call us for more information.

### Five Rules for Infrared Layouts

Infrared heaters keep people warm by heating them directly or through secondary sources. The heater produces infrared energy which radiates down directly on people and objects. The objects, like the floor and walls of the building, absorb the energy and re-radiate it back to people. It's very much like the sun. An easy concept, but many factors go into effective infrared layouts. Here are five rules for infrared placement:

- 1) Place the heater with the burner end near doors and colder walls of the building. Matching the hotter end of the heater with the colder areas of the building will put more direct radiant heat on the walls, floors and people where there is the most heat loss, evening out heat distribution.
- 2) Place the heater so it radiates on the maximum amount of concrete floor. Concrete is an excellent energy absorber. When

### Centrotherm Approvals

#### UL 1738 Approved

Polypropylene is the smart choice for venting today's high efficiency condensing appliances. It is corrosion resistant, non-toxic, 100% recyclable and rated for flue gases up to 230°. Centrotherm is currently the **ONLY** non-metallic vent system that meets the U.S. **UL 1738** standard.

Lochinvar recently approved Centrotherm's InnoFlue SW for use in their Knight, Armor, Sync and Shield products. InnoFlue Flex is available for use on Shield, Armor and Knight models with vent diameters up to 4 inches.

Centrotherm's InnoFlue vent has been approved by most of the leading appliance manufacturers including Buderus, Burnham, Heat Transfer Products, Laars and Peerless, just to name a few. Call us for a complete listing of approved manufacturers.

Centrotherm is the only manufacturer with over 15 years of experience manufacturing the most complete line of polypropylene flue gas systems in the industry, including both rigid and flexible pipe. Centrotherm's InnoFlue products are in stock at E.W. Leonard, Inc.

there is surplus heat, concrete acts as a thermal storage tank. When there is a lack of heat, concrete radiates the stored heat to people or other materials in the building space.

- 3) Choose heaters that are shorter rather than longer and hang them as high as possible. Adding length to the tube only marginally increases the total radiant output. Hanging the units high maximizes the size of the radiant footprint on the floor, keeping in mind that the floor acts as a thermal storage tank.
- 4) Maximize radiant efficiency by choosing deep, well-engineered reflectors and end caps. With Superior Radiant's perfectly parabolic reflector, 100% of the emitted radiant energy reaches the floor and heats the space.
- 5) To size a low intensity radiant system, calculate the building heat loss by conventional methods, then reduce that load by 5-15%. Radiant transfer results in an efficiency gain of between 5 to 15%. To maximize comfort and fuel economy, do not oversize the heating system.

For the complete article on designing effective infrared layouts, go to the Superior Radiant Products website or click on the following link:

<http://www.superiorradiant.com/Resources/EffectiveLayouts.aspx>

**SUPERIOR RADIANT PRODUCTS**



Over the last year, Modine has introduced a number of new products to the heating market. Modine continues to be the market leader in quality and product availability with their complete line of "made in America" unit heaters, duct furnaces, cabinet heaters, convectors, and make-up air units. Below is a brief introduction to their new products:

**Hot Dawg H2O.** The HHD is a low profile, hot water unit heater ideally suited for residential garages and basements, as well as commercial applications. Its low profile, clean appearance maximizes head room.

**Effinity.** The Effinity or PTC gas fired, condensing unit heater features the highest efficiency available today. In six model sizes ranging from 135,000 to 310,000 BTU/Hr input, the PTC's separated combustion technology provides fresh, clean air for combustion with 93% efficiency.

**Valedictorian.** This vertical unit ventilator for new construction or replacement of existing units in schools, improves indoor air quality and operates in conjunction with the central chiller/boiler plant.

**Ductless Split and Mini-split Ceiling Cassettes.** Modine cassettes are available in three models including DX cooling, heat pumps and chilled water cooling.

**Commercial Packaged Ventilation System.** This 15-30 ton commercial ventilation system with optional energy recovery is a state of the art solution for dehumidification and ventilation needs.



## Kelly's Korner

We are often asked if a Modine gas fired unit heater may be field converted for use with another gas type. In order to answer that question, we need the full model number and serial number from the unit. The control code determines what kind of gas the unit was originally made for. The control code is the last two numerical digits in the model number. On older units the control code was shown separately near the serial number. The serial number tells us the year the unit was built.

Modine no longer offers LP kits to convert natural units made prior to 1990 to propane. Units with a control code of 08 also cannot be converted. Modine provides conversion kits for just about all other unit heaters made after 1990. The kit provides the orifice and other parts needed to convert along with instructions and label. Occasionally a gas valve may be required.

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