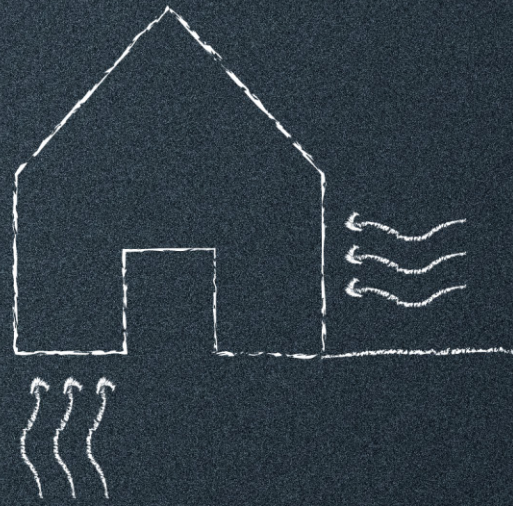


# RADIANT and SNOWMELT SYSTEMS

Ultimate control, efficiency and savings for superior home comfort.



*Living full of energy*



Room temperatures can be reduced by as much as 5°F without sacrificing comfort. For a typical home this means you can save up to 30% on your heating cost.



Radiant Heating has become increasingly popular in North America due to the fact that it provides the highest level of comfort, contributes to a healthy living environment and is incredibly efficient thereby reducing the use of non-replenishing natural resources.

The ideal temperature for human comfort is 73°F/19°C at foot level and 67°F/23°C at head level. Radiant floor heating delivers the closest match to these requirements. There is no air blowing around dust and allergens which can cause discomfort and illness. Radiant heating uses relatively cooler temperature water to heat your living space allowing the use of heat pumps and solar energy to be used as a heat source thus reducing the use of fossil fuels.

The versatility and reliability of radiant heating is unsurpassed. For most projects, a radiant heating system provides the ideal solution. Radiant panels can be fitted into virtually all floor constructions and can be installed in walls and ceilings as well. Whatever the application - a comfortable home, a nice business atmosphere, a healthy day-care environment, a maintenance garage with dry floors, a snow-free emergency entry, a hangar that doesn't waste heat, a warm floor in a chilly kennel, or winter football on live turf - all can be built utilizing a radiant heating system.

#### • **Unsurpassed Comfort**

By delivering heat where the human body needs it most and creating an even ambient temperature by heating all objects in the room, radiant heat is the most comfortable heating system on the market.

#### • **Variety of Heat Sources**

The relatively lower supply temperatures needed with radiant heat allows for a number of different and energy efficient heat source options such as: condensing boilers, condensing tankless water heaters, outdoor wood boilers, geothermal heat pumps and solar.

#### • **Multiple Zoning**

The ability to create zones based on special, occasional or common usage provides for exceptional control and efficiency.

#### • **Decorating freedom**

Furnishings can be placed in any location or arrangement desired.

#### • **Peace and Quiet**

A well designed radiant system will operate virtually silently. No more noises from large fans, air forced through small registers, pipe expansion and contraction or water gurgling in pipes.

#### • **Healthy Heat**

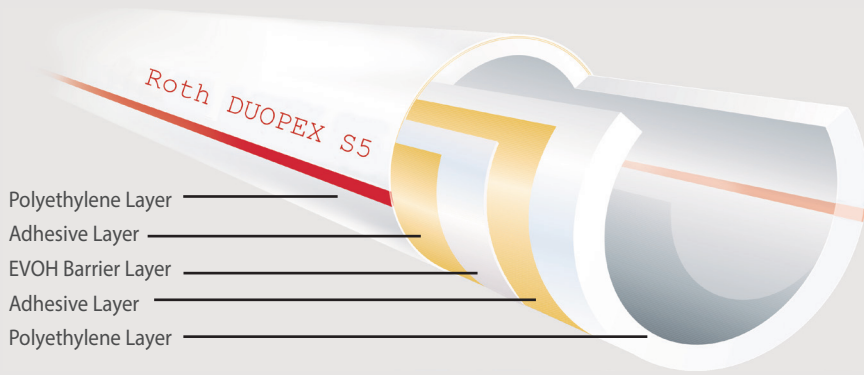
Air, along with airborne bacteria and allergens, is not circulated with a radiant system. In addition, radiant heat does not dry out the air as with other systems.

Environmentally-friendly products that produce, distribute and store energy for the finest homes.



## **HYDRONIC RADIANT HEATING SYSTEMS**

Roth Systems are designed to ensure easy control of heating in each room or zone. Thermostats for each separate heating zone give you effortless touch control to accommodate warmer bathrooms or cooler bedrooms for example. Direct sunlight, a burning fireplace, a large number of guests...such factors can disrupt the heat distribution of a traditional system, resulting in both higher costs and temperature-related inconveniences. Roth puts an end to these and other problems with a system that provides the ultimate in control, efficiency and savings. Nothing compares to a Roth Hydronic Radiant Heating System.



Polyethylene Layer

Adhesive Layer

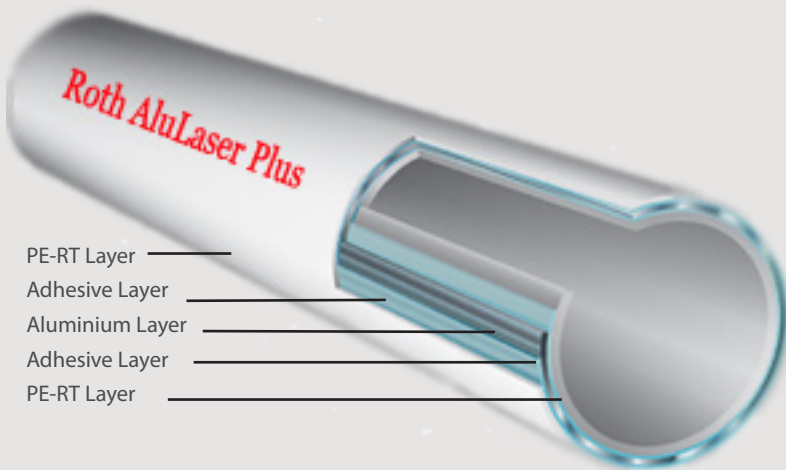
EVOH Barrier Layer

Adhesive Layer

Polyethylene Layer

### Roth DuoPex S5 5-layer PEX Tubing

- Ultimate protection of the integrated EVOH oxygen barrier layer from mechanical damages and the elements.
- Superior durability due to the co-extrusion combined with the one-step E-beam cross-linking (PEX-c) = no layer delamination.
- Natural, milky white with two red stripes.
- Easily repaired to original state if kinked.
- Assortment of barbed and manifold fittings available.



PE-RT Layer

Adhesive Layer

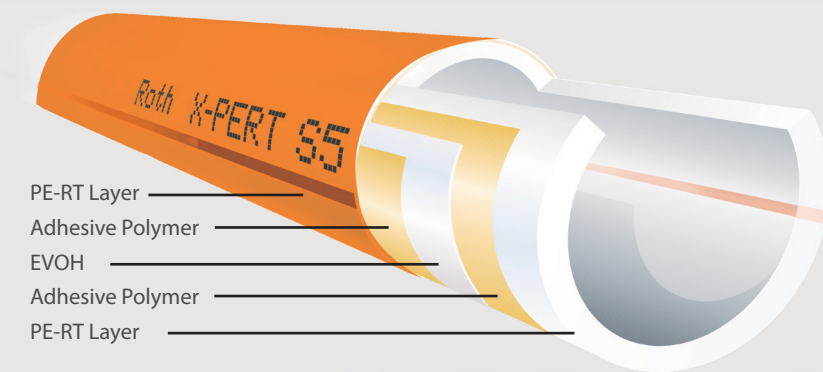
Aluminium Layer

Adhesive Layer

PE-RT Layer

### Roth AluLaser Plus 5-layer PERT-AL-PERT Tubing

- Laser-welded overlapped aluminum shield assuring complete oxygen diffusion barrier
- Combines strength of metal with longevity and durability of plastic
- Highest memory – easy to install
- Low linear expansion – 1/10 that of PEX
- Maintains shape after bending or when heated by circulating fluid.
- Perfect for baseboard, radiator, unit heater, fan coil piping as well as radiant heating
- Assortment of press and manifold fittings available.



PE-RT Layer

Adhesive Polymer

EVOH

Adhesive Polymer

PE-RT Layer

### Roth X-PERT® S5 5-layer PE-RT pipe with O2 Barrier

- Polyethylene for raised temperature (PE-RT)
- No cross-linking required, no waste, no chemicals
- Pioneered in Europe and actively used for over 20 years
- DOWLEX™ 2344 Polyethylene Copolymer Resin
- 100% Recyclable material

Roth offers Wrightsoft® design software to assist in sizing and layout of the radiant project.



**Generation**

> Solar

**Storage**

- > Septic
- > Cistern
- > Rainwater Collection
- > Oil Storage Tanks

**Distribution**

- > Radiant Floor Heating
- > Plumbing Systems



Roth Industries, Inc.  
Roth North America Corporate Office  
PO Box 245  
Syracuse, NY 13211  
P: 888.266.7684  
F: 315-475-0200  
www.roth-usa.com

Distributed By: