

# Look into radiant



...and what do you see?

FLIR Systems  
ThermaCAM®



**WattsRadiant**  
*Floor Heating & Snowmelting*

A subsidiary of Watts Water Technologies, Inc.

# See comfort in a new light.

**Overview:** We took our infrared camera to projects large and small to see why radiant is the most comfortable and efficient heat there is.

## Warm Light.

Look at a radiant home with an infrared camera. See how energy broadcasts from the floor? The people and all the objects in the room are bathed in radiant warmth.

Your floor becomes the warmest surface in the room so you can set your thermostat lower to save energy . . . with greater comfort. Most people find a radiant atmosphere stimulating, quieter, cleaner, and easier to breathe.

For any room and floor covering, Watts has a radiant solution that is reliable and affordable.



Floors and cookies are best when warm.

## 6 Reasons for Radiant

**More comfortable.**

**More efficient.**

**Cleaner.**

**No ducts or grills.**

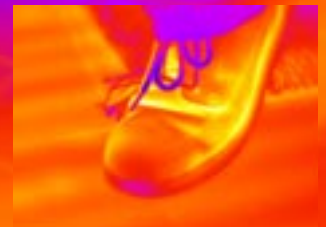
**Quieter.**

**Higher resale value.**

It's Saturday morning, and life is good on a warm floor.



Feel warm by a window.



Visualize the comfort your feet will feel.



# Radiant the way you want it.

**Overview:** *These are the most popular places for radiant floor heating.*



Open spaces stay warm without drafts, so you'll be cozy next to picture windows and exterior walls.



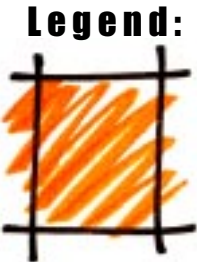
The most popular place for radiant. Floors dry faster and feel warm to your bare feet.



Welcome your guests with a warm floor. Radiant heat recovers quickly from open doors.



Plants and people do better with radiant heat . . . especially when the sun goes down.



Specify radiant in these areas.



Spend a lot of time in the kitchen? Radiant floors feel better, and you can use any floor covering.



Use your radiant snowmelt system to make your walks and driveways snow-free and safe.



# Radiant Under Frame Floors

**Overview:** Radiant components below your frame floor are a simple and practical way to heat the floor above.

## Hydronic Options

If you want radiant floors in a multistory project, ask for Onix™ tubing stapled to the underside of the subfloor.

Onix conducts heat through the flooring to warm your room quietly and evenly without changing your finished floor height.

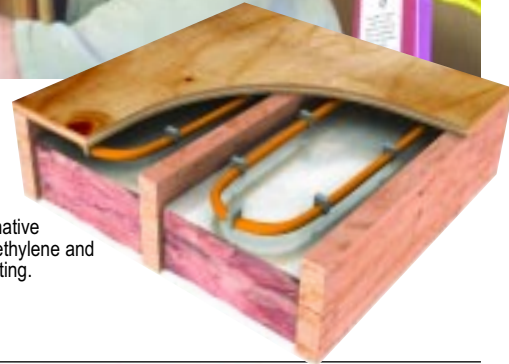
Onix is a flexible, cross-linked EPDM tubing with Aramid reinforcing and an aluminum oxygen barrier. It's the highest-performing radiant tubing available.



Onix allows easy radiant retrofit around pipes, ducts, and vents.



Onix Staple-up is the best value in radiant. It's easy to install, simple to control, and doesn't require special tools or fasteners.



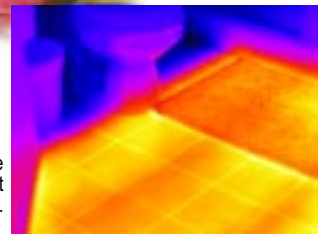
RadiantPEX® tubing is a popular alternative to Onix. It's made of cross-linked polyethylene and has a tough plastic oxygen barrier coating.

## Electric Options

For smaller areas use HeatWeave® UnderFloor™ mats. HeatWeave is stapled between floor joists to give your finished floor a new wonderful level of comfort.



Heatweave® electric mats staple-up between joists. Note the insulation below the suspended mat.



An infrared picture of HeatWeave at work shows how the joist space below warms the tile above.

## Recommended Products for Radiant Below Frame Floors:

### Hydronic



RadiantWorks®



RadiantPEX®

Onix™



HydroControl® Panel



Manifolds

### Electric



HeatWeave® UnderFloor Mats



FloorStat™ Control



# Radiant Above Frame Floors

**Overview:** Radiant tubing above frame floors is an easy way to retrofit an existing structure when access from below is not available. Electric mats can be embedded in thin-set mortar.

## Hydronic Options

SubRay® allows you to place Onix™ or RadiantPEX™ over any wooden or masonry subfloor. SubRay is less than 5/8" thick, so it works well in remodeling. It's made of Group One Baltic Birch cabinet grade plywood to meet the requirements of the Hardwood Flooring Council.

Your finished radiant floor will be quiet and cozy.



On this job, SubRay® goes over a plywood deck on a second floor. The aluminum conduction layer spreads the warmth evenly.

Onix stapled to this subfloor will be covered with a thin layer of masonry and finished floor to make this window corner comfortable.



SubRay forms radiant channels under your finished floor.

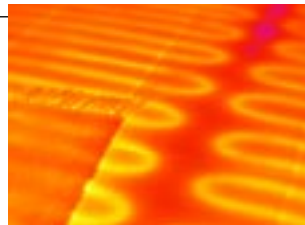


Onix or RadiantPEX installed in a thin slab over a frame floor with insulation below.



## Electric Options

Use HeatWeave® electric mats to warm any cold floor. Mats come in various sizes to allow you to economically warm a bathroom, entryway, or an entire kitchen.



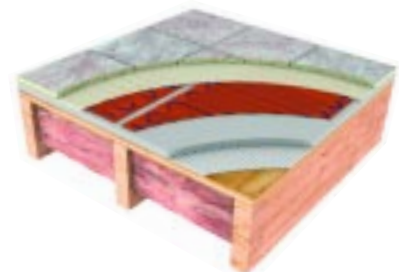
The infrared camera shows HeatWeave warming tile in a kitchen.



HeatWeave stapled to backerboard in a bathroom remodel.



Comb thin-set mortar over the HeatWeave mats and lay tile on top.



HeatWeave mats can go over cement backer board with thin-set mortar and tile on top. Cover the mat with a self-leveling mortar, and you can put any type of floor covering on top: hardwoods, laminates, or carpet.

## Recommended Products for Radiant Above Frame Floors:

### Hydronic



RadiantWorks®



SubRay®



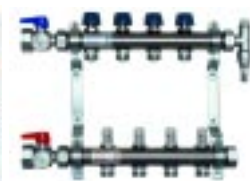
RadiantPEX®



Onix™



HydroControl® Panel



Manifolds

**OR**

### Electric



HeatWeave® Mats



FloorStat™ Control



# Radiant in a Slab Floor

**Overview:** Radiant tubing in a concrete slab or thin slab is an easy installation. Electric mats can be embedded in thin-set mortar.

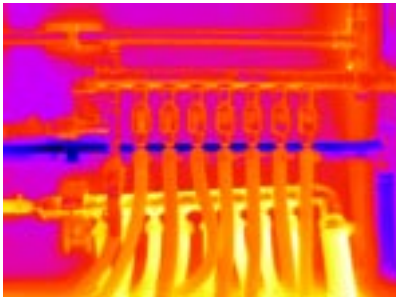
## Hydronic Options

Every slab floor is a cold floor unless you have radiant. If your plans call for a slab, install circuits of RadiantPEX® or Onix™ tubing before the concrete is poured. Your floor level will not be affected and you can use any type of finished floor.

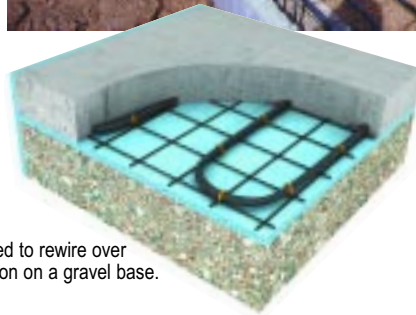
Or, install radiant tubing in a thin slab over masonry, wood, or metal decks.



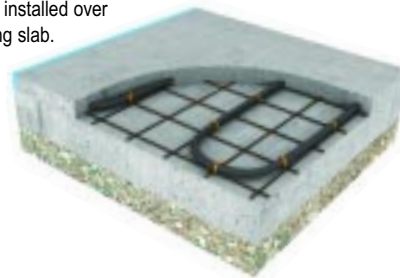
Onix ties to reinforcing wire before the slab is poured.



The infrared camera shows how manifolds and circuits of radiant tubing make warm floors.



Onix tied to rewire over insulation on a gravel base.



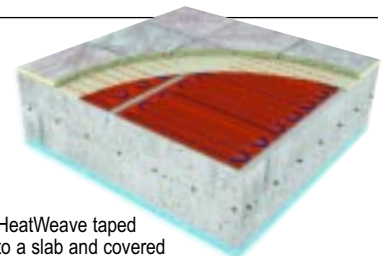
Onix or RadiantPEX in a thin slab, installed over an existing slab.



RadiantPEX ready for a residential slab.

## Electric Options

If you have a smaller area, lay out mats of HeatWeave over your subfloor. Cover with thin-set or self-leveling mortar that provides at least 1/4"-thick coverage. Then finish with any type of floor covering.



HeatWeave taped to a slab and covered with thin-set masonry and tile.

### Recommended Products for Radiant in Slab Floors:

#### Hydronic



RadiantWorks®



RadiantPEX®

Onix™



HydroControl® Panel



Manifolds

#### Electric



HeatWeave® Mats



FloorStat™ Control



# Snowmelting

**Overview:** Snowmelting is especially useful under textured or colored concrete, brick, or stone, where snow-removal equipment may damage the surface.

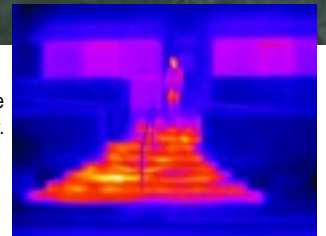
Even in moderate climates, orientation and shading may encourage snow and ice accumulation on your drive and walkways.

Radiant tubing with antifreeze is a proven strategy for making surfaces dry and safe, even in extreme climates. From very large commercial projects to home sidewalks, snowmelting will help protect clients, friends, and visitors.

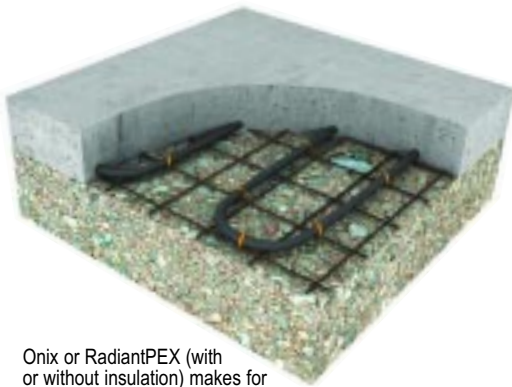
A Watts Radiant snowmelt system can be installed alone, or as part of a larger radiant space-heating system.



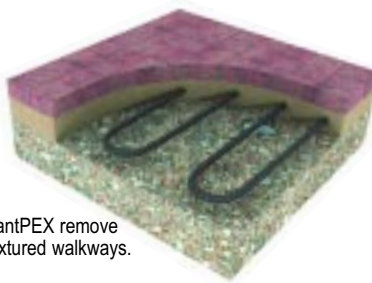
The stairs and steps of this courthouse are free from snow and ice.



This infrared image shows why.



Onix or RadiantPEX (with or without insulation) makes for dry and safe slabs.



Onix or RadiantPEX remove snow from textured walkways.



Snowmelting is perfect for commercial and residential projects.



Snowmelt tubing installed in a residential driveway prior to pouring the concrete.

## Recommended Products for Snowmelting:

### Hydronic



RadiantWorks®



RadiantPEX®



HydroControl® Panel



Manifolds

OR

Onix™



# Feel Comfortable with Watts Radiant.

**Overview:** *Watts Radiant is part of Watts Water Technologies, Inc. of North Andover, Massachusetts. Founded in 1874, Watts Water Technologies is one of the oldest, most trusted manufacturers in the United States. Watts is listed on the New York Stock Exchange as WTS.*

## Design

Your comfort requires the right equipment, sized properly. That's why we use RadiantWorks®, the most advanced radiant design program in North America. In use for over 10 years and updated constantly, this program takes into account your needs, your building, and your location to provide a cost-effective design and lower operating costs.



## Equipment

Watts Radiant offers more and better radiant equipment than anyone in North America. If you want a hydronic radiant floor, ask for a HydroControl®. The pumps, valves, fittings, and most of the electrical components are engineered and assembled for your project on a panel that arrives on your jobsite, ready for installation.



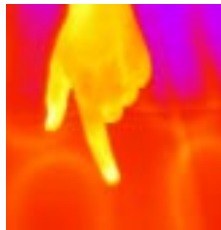
## Support

The people at Watts Radiant have hundreds of years of accumulated radiant experience. Work with a network of engineers, manufacturer's representatives, wholesalers, and professional contractors to bring you the promise of radiant: comfort and economy. Call us toll-free for a local contact.



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**The Future Looks Radiant®**

  
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A subsidiary of Watts Water Technologies, Inc.

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