ThermaRay-USA
Electric Radiant Heating

Radiant Ceiling Heating System

Features & Benefits

- **Lifetime Warranty**
- **Energy Efficient**
- **Maintenance Free**
- **Superior Comfort Gentle even temperature from floor to ceiling**
- **Affordable and easy to install**
- **Healthy - No blowing dust, allergens or airborne contaminants**
- **Safe - No open flames, high surface temps or risk of carbon monoxide poisoning**
- **Quiet - No Moving Parts, fans or pumps**
- **Zoning - Precisely controlled in each room**
- **Aesthetic - Completely concealed for more decorating freedom**
- **Resale Value - Increases due to low operating costs, superior comfort and no Maintenance**
- **ThermaRay's Radiant Heating course is Approved by the US Green Building Council (USGBC) and the American Institute of Architects (AIA)**

USGBC EDUCATION PROVIDER

CONTINUING EDUCATION AIA

The most common response is "Why would you want to put the heat in the ceiling if hot air rises". It is a fact that hot air rises, but heat does not. A Radiant Ceiling System works exactly like the sun as it warms the earth. Radiant rays travel in straight lines warming every object, surface and person in the room. A Radiant Ceiling System is like walking into a room with the sun shining and gently warming the entire room.

For over 30 Years, Therma-Ray has been manufacturing Radiant Ceiling Systems. The Radiant Ceiling Systems consist of a Teflon insulated conductor wire embedded in one of two ways: Either in a gypsum board or in a metal frame. The gypsum ceiling panels can be installed above sheetrock or any other ceiling material. The metal heaters can be installed in a ceiling grid system, surface mounted or hung from the ceiling. Available in all voltages.

Perfect for: Homes, Garages, Sunrooms, Condominiums, Churches, Schools, Apartments, Commercial / Industrial Buildings, Hotels, Restaurants, Retail, Etc.

Above Any Ceiling

Grid Ceiling Systems

Surface Mount

How Radiant Heat Works

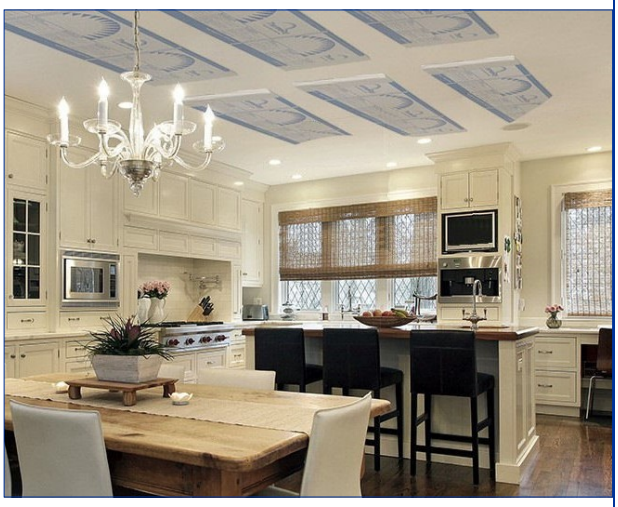
If you step from the shade to the sun on a cool day you experience how Radiant Heat warms our world. If you take an object like a rock and set it in the sun, it will absorb that warmth and then in turn help warm the space around it.

A ThermaRay Radiant Heating System accomplishes exactly that same effect. Whether the heating system is in the floor or the ceiling, the radiant rays travel in straight lines and warm all the objects in the space.

Silent, Invisible and Motionless Warmth is gently radiated to all the objects in the room. The walls, floor, ceiling, windows, furniture and essentially everything in the room become part of the heating system. This stored thermal mass keeps operating costs low, but Most Importantly the Radiant Rays Warm **"You".**

Lifetime WARRANTY

ThermaRay Creates a Natural, Healthy & Comfortable Environment



www.thermaray-usa.com **(800) 506-7973**

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INSTALLATION PROCESS

Gypsum Ceiling Panels

Plastic strapping is placed along the bottom of the trusses to hold the panels in place.

The ceiling heaters come in a variety of wattages and sizes for working around obstructions such as can lights, ceiling fans, etc...

Wiring & Testing

The heating panels are wired in parallel with 12 Ga. wire and 3M-567 connectors. Wiring should be done by a certified electrician and in accordance with NEC code requirements. An Ohms test is done to verify that all the panels are wired correctly and working properly.

Connection Enclosure

PC-1 Endcaps are used to cover the connections per NEC code requirements.

The circuits are wired directly to line voltage thermostats or to a relay control box in conjunction with low voltage thermostats.

Ready for Sheetrock

A heat loss should be done to determine the amount of panels needed for each room.

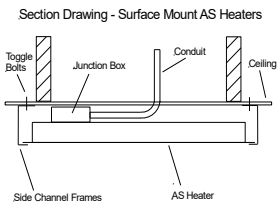
A plastic barrier can be placed according to local building codes and then sheetrock added to the ceiling to complete the radiant ceiling system.

Comfort & Efficiency

The radiant ceiling system is completely concealed creating an invisible, silent and most importantly comfortable and affordable heating system.

Each room can be precisely controlled for even greater savings and individual comfort.

Architectural Series (AS)



The AS frames are mounted to the ceiling and then the heaters are placed in the framework. The framework consists of two side channels and two end channels.
The Architectural Series (AS) heaters are available in 2' x 2' and 2' x 4' sizes.

Wiring

Wiring should be done by a certified electrician and in accordance with NEC code
The AS heaters are wired in series on a circuit using 12 gauge wire.
Models available are:
120v, 240v, 208v, and 277v voltages (250 - 750 Watts)

Install Options

The framework is 4 inches in height creating a very low profile and slim design.

The AS Heaters can also be suspended from the ceiling with cables or chains in high ceiling applications such as in warehouses or manufacturing plants.

Thermostats & Controls

The circuits are wired to Therma-Ray control box and then to the service panel. Line voltage thermostats can also be used depending on the load for each area. For even greater savings & comfort, each area or room can be controlled separately.

Comfort & Efficiency

The Architectural Series Heaters create a clean, quiet, safe and comfortable working environment.

The AS Heaters are energy efficient and very affordable to operate, especially when comparing to a standard forced-air convection system.

Commercial / Residential

High wattage heaters are designed for high heat loss or high ceiling areas and can be installed in grid framework, providing greater design freedom.
Used for primary heating and also for removing condensation and ice.

Grid Ceiling Systems

Lower Wattage heaters can be installed in lower ceiling grid applications as well.
Perfect for offices, schools, basements, hospitals, etc. providing unsurpassed comfort and freedom of design.

For More Information

ThermaRay-USA www.thermaray-usa.com

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