

Hydronic Heating and Cooling Solutions



Heating

Cooling

Fresh Air

Clean Air



Zehnder – everything you need to create a comfortable, healthy and energy-efficient indoor climate

Heating, cooling, fresh and clean air: at Zehnder, you will find everything you need to create a comfortable, healthy and energy-efficient indoor climate. Zehnder's wide and clearly structured portfolio can offer the right product for any project, be it private, public or commercial, new build or refurbishment. And where service is also concerned, you'll find that Zehnder is "always around you."

Heating

At Zehnder, **Heating** doesn't just come in the form of designer radiators. We offer solutions in all shapes and sizes, from radiant ceiling panels to heat pumps with integrated ventilation devices.

- Designer radiators
- Compact energy station with integrated heat pump
- Heating and cooling ceiling systems
- Comfortable indoor ventilation with heat recovery



Zehnder Designer Radiators

Cooling

Zehnder also offers sophisticated solutions for indoor **Cooling**. These range from cooling ceiling systems to comfortable indoor ventilation with a supply of pre-cooled fresh air.

- Heating and cooling ceiling systems
- Compact energy station with heat pump and brine pipe
- Comfortable indoor ventilation with geothermal heat exchanger for fresh air pre-cooling



Zehnder Heating and Cooling Ceiling Systems

Fresh Air

Fresh Air – a product range with a long tradition at Zehnder. Zehnder Comfosystems provides products and solutions for comfortable indoor ventilation with heat recovery for houses and apartments, for new builds and for renovation projects.

- Comfortable indoor ventilation
- Compact energy station with integrated ventilation device



Zehnder Comfosystems

Clean Air

Zehnder Clean Air Solutions provide **Clean Air** in buildings particularly prone to dust. In residential applications, the comfortable indoor ventilation provided by Zehnder Comfosystems filters external pollutants out of the air.

- Comfortable indoor ventilation with integrated fresh-air filter
- Compact energy station with integrated fresh-air filter
- Systems for clean air



Zehnder Clean Air Solutions



For decades, customers have looked to Zehnder Rittling for the industry's most advanced, reliable and efficient indoor climate solutions. Our extensive heating and cooling equipment offering is the ideal choice for retrofit and new construction in commercial, industrial and institutional applications.

Zehnder Rittling engineers can custom-build heating and cooling equipment for virtually any mechanical specification or architectural requirement. The result of more than a half-century of forward thinking, smart management and cost-saving innovation, Zehnder Rittling's products represent a triumph of modern engineering and a perpetual desire to break new ground.

Zehnder Rittling's commitment to design innovation and its unlimited custom engineering capabilities have resulted in a constantly-expanding product offering making us the perfect fit for all of your indoor climate needs. Our diversity and flexibility have removed the constraints of designing around limited catalog selections, allowing architects and engineers the freedom to apply standard HVAC products in extraordinary ways. Our philosophy continues to be, "if you can draw it, we can build it."

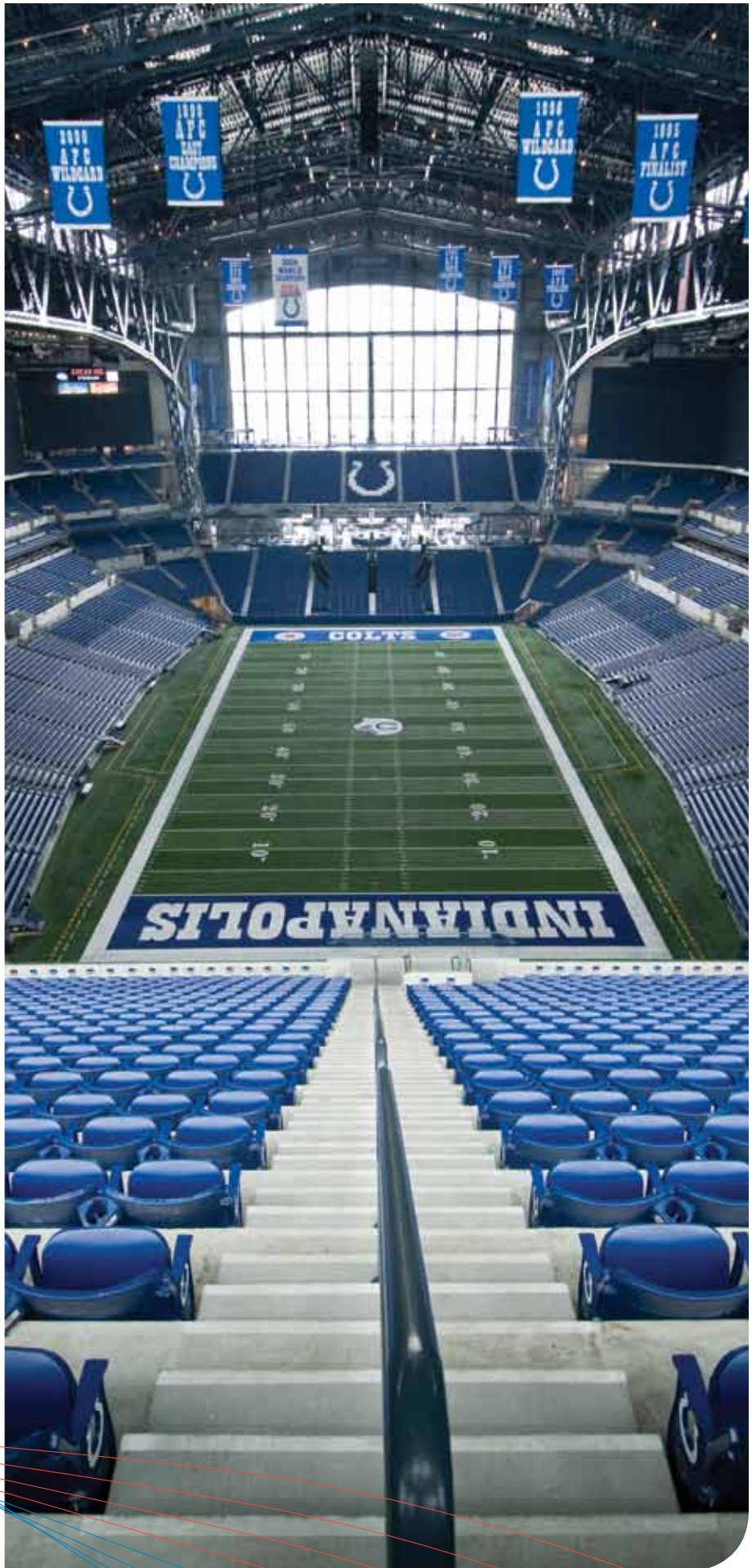
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Fan Coils

With more than 60 years experience in the design and manufacture of hydronic heating and cooling systems, Zehnder Rittling understands your need for efficient equipment that will complement the décor. Zehnder Rittling Fan Coil Units offer the latest in attractive design and are engineered to provide years of reliable operation and energy-efficient comfort.

Zehnder Rittling Fan Coils are installed in new building construction, renovated offices, residential complexes and educational institutions across North America. Zehnder Rittling Fan Coil products stand out of the crowd due to their unique heavy-duty construction and customized features. All Zehnder Rittling Fan Coils are the result of years of research on the latest hydronic coil, fan and motor technology available. Our units are designed for permanent balance and strength for years of trouble free performance. Custom hand-built solutions for retrofit and replacement are part of our everyday life.

As always, Zehnder Rittling experts are able to help with complex specification plans through our competent sales team who can visit the site if requested. "If you can draw it, we can build it."





Every Zehnder Rittling **Console Fan Coil** is designed to meet the specifications of each specific project. The entire Zehnder Rittling team, from our sales order staff, to engineering to manufacturing, is driven to provide our customers with the one-on-one customer service they have come to expect. When you combine that attention to detail with our custom design capabilities, you'll find our strengths are unmatched in the market place.

Zehnder Rittling Console Fan Coils are built with a rugged, heavy duty construction to ensure a long life cycle. Each unit features an attractive epoxy powder coat paint finish, matched to the color specified by your project. Any necessary maintenance is simplified by our easily accessible filters and fan decks that can be quickly removed.

- Wide range of floor, wall and ceiling models and air flow arrangements available
- Standard and high capacity coils and motors to meet varying space requirements



Whether you're an architect, engineer, or contractor, Zehnder Rittling **Vertical Hi-Stack Fan Coils** are built to keep your job moving smoothly. Our team is constantly looking for ways to enhance the unit features and reduce installation and labor costs. The highly engineered motor and blower provide the quietest unit in the market place. There are a multitude of arrangements possible, taking into account the aesthetics and space requirements of the room.

- Modular, pre-piped, factory-tested unit minimizes installation labor expense and the possibility of a problematic system start-up
- Slide rail fan deck design and motor quick connect allow for ease of maintenance
- Custom-build capabilities that rival any in the industry



Zehnder Rittling **High Capacity Fan Coils** stand out of the crowd due to their unique heavy-duty construction and customized applications capability. Our units are designed to deliver large volumes of conditioned air to multiple locations or to large open areas.

- Adjustable sheaves, on belt drive units, provide flexibility in site air balancing
- High horsepower motors and centrifugal blowers designed to overcome high external static pressures
- Easily removable access panels allowing adequate room to service the units
- 2" MERV7 filters, removable drain pan (vertical units) and double wall construction option (vertical units) providing superior indoor air quality

Radiant Heating and Cooling Ceiling Panels

Heating and cooling with Zehnder Rittling Radiant Heating and Cooling Ceiling Panels provide optimal indoor climate and efficient use of energy throughout the year. With more efficient buildings becoming a requirement instead of a luxury, new regulations now dictate how energy efficient a building should be. While this helps create an ideal indoor climate in the winter months, it subsequently creates a new problem in the transitional seasons and in the summer months:

- The new standard of well-insulated buildings cause the interior spaces to easily over-heat.
- Increased interior temperatures are the result of high exterior temperatures combined with the interior heat load. Contributing factors include computers, copiers, printers, other technical equipment and even the people occupying the space.

Zehnder Rittling Radiant Heating and Cooling Ceiling Panels are an elegant and innovative response to the requirements placed on modern indoor climate control – heating and cooling with a highly efficient use of energy.





Zehnder Rittling **Carboline Radiant Heating and Cooling Ceiling Panels** are an elegant and innovative response to the requirements placed on modern indoor climate control - in summer and in winter. Carboline can be used to heat and cool in applications up to 16 ft high. The main areas of application are:

- Offices
- Schools
- Hospitals
- Meeting rooms
- Operating rooms



Zehnder Rittling **ZIP Radiant Ceiling Panels** can provide heating and cooling both comfortably and efficiently. ZIP can be used in applications up to 100 feet high. The main areas of application are:

- Shipyards and maintenance hangars
- Factories
- Warehouses and manufacturing facilities
- Exhibition areas and showrooms
- Schools and hospitals
- Sports and multi-purpose complexes



Radiant heating is widely regarded as the most natural heating process available. Zehnder Rittling **Linear Radiant Ceiling Panels** are made of extruded aluminum and eliminate floor drafts and cold spots. Low humidity levels, air contaminants and virtually all problems associated with forced-air heating are greatly reduced and often eliminated.

- Lower installed costs
- Lower energy usage
- Reduced maintenance
- Quiet operation

Heat Pumps

The perfect room climate is today, more than ever, a question of economic energy use and active climate control. The solution for efficient and energy-saving heating and cooling is the Zehnder Rittling Water Source Heat Pumps.

Simple to install and virtually unheard, the Zehnder Rittling Water Source Heat Pumps provide the quietest solution to the commercial marketplace.

As well as the reliably high product quality associated with all Zehnder Rittling products, our Water Source Heat Pumps offer a number of advantages: the heavy duty construction and custom applications capability provided by the Zehnder Rittling engineering team maximizes flexibility of selection and minimizes cost of installation.

As an added service, Zehnder Rittling experts are able to help with complex specification plans through our competent sales team who can visit the site if requested.





Zehnder Rittling **Vertical Stack Water Source Heat Pumps** are the direct result of years of research and extensive testing in our state-of-the-art design lab by our dedicated team of engineers. As a result, the Heat Pump design lends itself equally to new and retrofit applications.

- Ideal for hi-rise applications including apartments, condominiums and dormitories
- Heavy duty construction ensures long life
- Contact your Zehnder Rittling representative for custom applications



The simplest and most effective solutions are always those that come from nature; this is the case for the Zehnder Rittling **Vertical Stack Water Source Heat Pump**. Our design takes advantage of the moderate temperature the earth provides to boost the efficiency of the energy draw and reduce the operational costs of heating and cooling systems.

Promoting healthy indoor air quality, Zehnder Rittling Vertical Stack Water Source Heat Pumps incorporate coated aluminum air coils to expedite condensate drainage. Additionally, the standard stainless steel drain pan with microprocessor-based condensate overflow protection inhibits microbial growth and minimizes maintenance.

- The quietest solution in the market place
- Utilizing geothermal technology, our heat pumps are environmentally friendly, extremely energy efficient and qualify for LEED certification



The perfect indoor climate: comfortable, yet unobtrusive aesthetics and efficiency are our primary concerns. The Zehnder Rittling **Vertical Stack Water Source Heat Pump** operates in the background only noticeable by the perfect indoor climate - the architectural design of the room remains in the forefront not the heating and cooling system.

- Designed for furred in application or ducted with high static blower option
- Discharge air can be one, two or three sides
- Three acoustical return air panel options are available

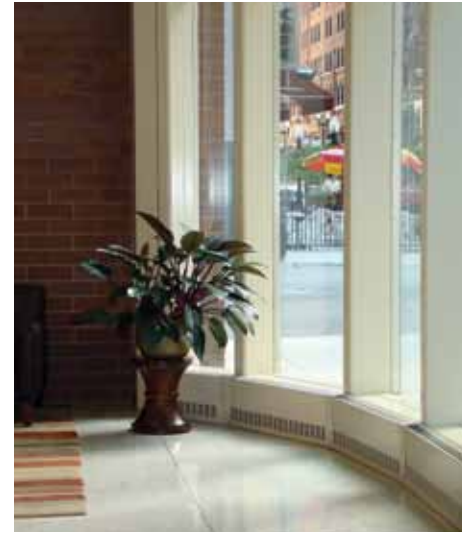
Rittling Hydronics

For years, architects have applied perimeter heating products with aesthetics and functionality as driving factors. Engineers, working in tandem with architects, are focused on specifying systems to provide a comfortable and energy efficient means of achieving project requirements. Zehnder Rittling has been the solution provider with a full range of perimeter heating products that are virtually transparent in their surroundings.

Over sixty years of experience in the design and manufacture of products has instilled confidence in the market place to select Zehnder Rittling as the number one provider of indoor climate solutions. Our wide range of products, from attractive architectural bar grilles to curved enclosures, demonstrates our engineering expertise and willingness to tackle any challenge.

Let us tackle the challenges your application presents.





Zehnder Rittling has specialized in the design and manufacture of **Finned Tube** heating equipment since 1946, giving the market an unmatched selection for versatility of design configuration. All Finned Tube models use permanently bonded fins to optimize rapid, constant, high heat transfer.

- 15 steel-finned, steel tube
- 27 aluminum-finned, copper tube
- 6 different tubes, 5 types of fins, 3 options for fin spacing
- Lengths from 1–12 ft. in 6-in. increments

When appearance and flexibility of the heating installation are primary considerations, Zehnder Rittling **Regency F-Series Enclosures** offer thermal efficiency and an emphatic vertical stance with stylish louvers and sleek, wall-hugging profiles.

- 14, 16 or 18-gauge cold rolled steel, stainless steel available
- Lengths from 1–8 feet in 6-inch increments
- Heights to accommodate 1–3 rows of finned tube

Zehnder Rittling **Architectural Enclosures** were designed to complement contemporary architectural and interior design. Models in this series feature enclosures with clean-cut linear profiles of classic simplicity and strong horizontal lines.

The linear effect is further enhanced by a nearly transparent seam between adjacent covers and completely concealed mounting hardware.

- 14, 16 or 18-gauge cold rolled steel, stainless steel available
- Heavy-duty extrusion models
- Lengths from 1–8 feet in 6-inch increments

Rittling Hydronics

Zehnder Rittling can meet your needs by offering products that can be ordered by length or terminal products. Perimeter heating applications, such as security enclosures, are effective when used in highly restrictive environments such as prisons, hospitals and public schools. Terminal products, such as convectors, are primarily utilized in stairwells and vestibules.

Zehnder Rittling Steel Panel Radiator differs from perimeter heating applications as it is an architecturally driven product. The sleek, attractive profile lends itself to high profile installations.

Give Zehnder Rittling the opportunity to prove our commitment.





Zehnder Rittling **E-Series Enclosures** slip securely over one, two or three vertical rows of wall-mounted finned tube. E-Series Enclosures are an attractive and economical perimeter heating solution.

- Three models available
- Eight sizes to choose from
- Lengths of 1–8 ft. in 6-in. increments

Zehnder Rittling **Security Series Enclosures** are designed to provide extreme strength and durability in locations where this feature is a necessity for the safety of those who benefit from the technology beneath the enclosure.

The sturdy, high-output Security Series Enclosures are available in more than eight standard models.

- 12, 14 or 16-gauge cold rolled steel, stainless steel available
- Standard perforation pattern is 1/8" diameter holes on 3/16" staggered center lines
- Lengths from 1–8 feet in 6-inch increments



Distinguished by its attractive, space-saving characteristics, Zehnder Rittling **Steel Panel Radiators** meet the highest standards of form, function and conservation.

Zehnder Rittling's sophisticated, Euro-style design boasts ease of installation and ensures that every room will be heated evenly and efficiently. This architecturally specified perimeter heating solution provides high heat output and the low-profile style that blends into the surroundings.

- Wall, ceiling and floor mounted styles
- Three operating pressures
- Field and factory curved options
- Five year warranty



Cabinet Convectors, from Zehnder Rittling, are engineered to provide high heating capacity in open or hard-to-heat areas, ideal for new installations or to replace old cast iron radiators.

Available in non-standard sizes, Cabinet Convectors eliminate the time and expense of designing a convector system around manufacturer specifications.

- Standard louvered
- Security perforated
- Architectural bar grille
- Four standard mounting styles
- Variety of heights, lengths and depths

Rittling Hydronics

The Zehnder Rittling unit heaters are offered in both horizontal and vertical air arrangements. The rugged construction includes an attractive, textured epoxy powder coated casing and finger-proof fan guard. They provide a low cost method of heating large open areas such as stadium concourses, factories, warehouses and staircases.

The cabinet unit heaters are designed for more intimate settings. The panel construction is intended to maintain crisp, straight lines and is built to withstand everyday wear and tear. Decorative grilles can be added to enhance their appearance. The motors and blowers perform efficiently, quietly providing the needed heating. Serviceability is achieved through quarter-turn fasteners, filter access through open bottom and easy removal of fan decks.

Another style of perimeter heating and cooling is displacement ventilation, such as induction units. This style of HVAC technology has been around since the late 1950's and provides perimeter heating and cooling with low sound levels. At the same time, the required ventilation is maintained providing a comfortable and healthy workplace.

Zehnder Rittling has a variety of induction configurations to package with decorative custom enclosure for use in universities, commercial offices and condominiums.





Air distribution is virtually unlimited with Zehnder Rittling **Unit Heaters**. All steam/hot water unit heaters are available in a wide range of models and airflow arrangements to satisfy the demands of your specifications and provide years of reliable operation and energy-efficient comfort.

- Heavy duty construction with epoxy powder coat finish for extended operating life cycle
- Easy electrical connection
- Factory tested components to ensure proper function when unit arrives on site
- Thermal overload protection
- Totally enclosed motors
- Optional air diffusion accessories can be provided to offer a wide variation in air distribution patterns



Zehnder Rittling **Cabinet Unit Heaters** run quietly in the background of each setting and feature individual controls for optimum management of the indoor environment. Each unit is built to the same height and depth, providing a consistent appearance when an installation calls for units of varying lengths.

- Wide range of floor, wall and ceiling models and air flow arrangements
- Standard and high capacity coils and motors to meet varying space requirements
- Durable 16-gauge panel construction, 14-gauge optional, with epoxy powder coat finish
- Attractive aluminum bar grille, double deflection grille, and perforated grille air supply options



Designed to provide air quality and acoustical performance, Zehnder Rittling **Induction Units** are designed for operation in North American climates. By effectively blending conditioned outside air with filtered room air, a constant supply of air maintains comfortable conditions in the space.

Zehnder Rittling offers a complete line of complementary cabinetry for our Induction Units. The cabinetry provides a stylish look while maintaining proper air flow to allow operation at peak efficiency.

- Twelve models
- Water and bypass control units
- Quiet operation
- Minimal maintenance required

Zehnder Rittling – everything you need to create a comfortable, healthy and energy-efficient indoor climate

Heating and cooling: at Zehnder Rittling, you will find everything you need to create a comfortable, healthy and energy-efficient indoor climate. Our extensive heating and cooling equipment offering is the ideal choice for retrofit and new construction in commercial, industrial and institutional applications. Going forward, you'll find that Zehnder Rittling's philosophy continues to be "if you can draw it, we can build it."

Heating

Cooling

Zehnder Rittling is so confident in our **ZIP Radiant Ceiling Panels** that we installed them in our own manufacturing space. We transfer waste heat from our paint oven using an air-to-water heat exchanger.

The plant's boilers run only during plant shutdowns and for routine maintenance. The ZIP panels heat our plant 98% of the time using free energy.

Zehnder Rittling Headquarters
Buffalo, NY



Heating

Cooling

The AC Lofts conversion project turned a six-story building into state-of-the-art student housing. The primary challenge was to install an entirely new HVAC system that would be energy efficient and conform to the dynamics and function of a hi-rise apartment facility.

Zehnder Rittling **Vertical Stack Water Source Heat Pumps** were selected as the basis of design, allowing independent zone control in each apartment for maximum comfort and the ability to either heat the living space in the winter or provide cooling in the summer.

AC Lofts
Buffalo, NY



Heating

Cooling

The Carolina is a step back in time to when elegance defined grand hotels and resorts. Built in 1901, this National Historic Landmark boasts 226 4-diamond guest rooms and suites that feature everything a first-class traveler desires.

When it came time to renovate the guest rooms, performance and attention to detail were paramount. Zehnder Rittling delivered **Vertical Hi-Stack Fan Coils** as well as short lead times. We also staged delivery to coincide with the constraints of the renovation schedule.

The Carolina Hotel
Pinehurst, NC



Heating

Cooling

After a visit to the Zehnder Rittling plant in September of 2007, the University of Chicago decided that Zehnder Rittling **Fan Coils** were just what they needed for their new resident housing facility. With staggered shipments to meet the construction schedule, 690 Vertical Hi-Stack Fan Coils and 62 horizontal ceiling console fan coils were installed.

University of Chicago
Chicago, IL



