

# Rittling Cabinet Convector

Catalog







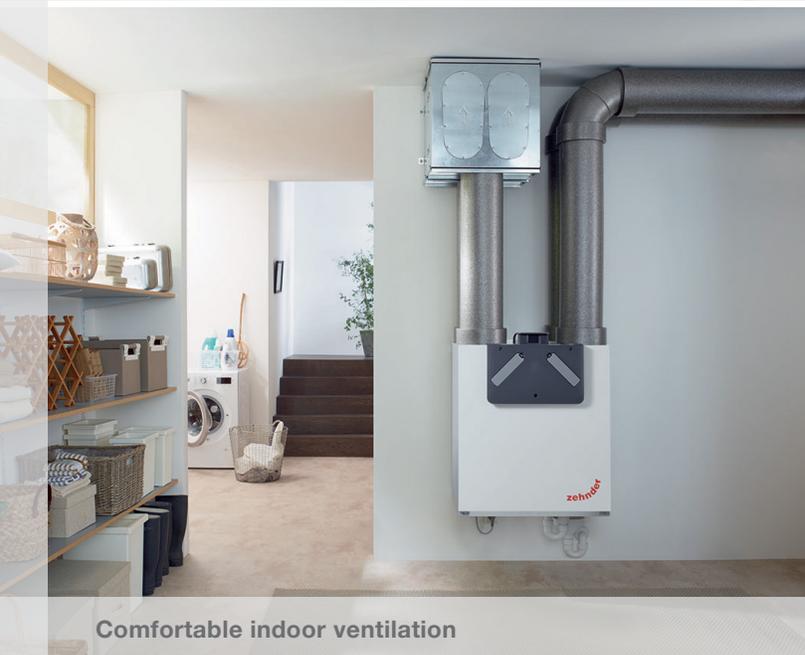
Zehnder decorative radiators



Heating and cooling ceiling systems

**zehnder**

always the  
best climate



Comfortable indoor ventilation



Clean air solutions

Always the best climate for

# IMPROVED QUALITY OF LIFE

With Zehnder, you will find the perfect climate for any space.

[www.zehnder-systems.com](http://www.zehnder-systems.com)



---

# Unmatched selection of standard and diverse options

Rittling Cabinet Convector can be integrated into any environment and provide a perfect solution for entrances, stairwells or other areas where heat loss is predominant. The sleek, decorative appearance and its flexibility are popular with architects and designers who seek a solution without creating a focal point within the space.

Rittling Cabinet Convector are offered in six (6) standard styles with varying heat outputs to provide a solution for any application. We offer a variety of non-standard lengths and heights as well as different sheet metal gauges to fit the needs of any application. A variety of inlets and outlets can be provided for each of the Convector styles: perforation patterns, bar grille and louvered.

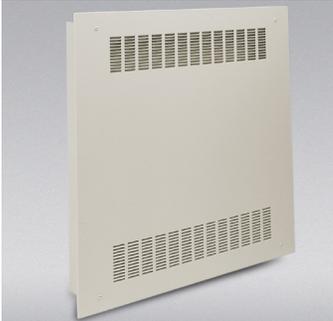
Zehnder Rittling experts are able to help with complex specification plans for any of our products through our competent sales team who can visit the site if requested.

“If you can draw it, we can build it.”

<b>Enclosure styles</b>	<b>2</b>
<b>Steam Ratings</b>	<b>3</b>
<b>Features</b>	<b>5</b>
<b>Options and accessories</b>	<b>7</b>
<b>Applications</b>	<b>8</b>
<b>Dimensions and data</b>	<b>10</b>
<b>Mechanical specifications</b>	<b>17</b>
<b>Warranty</b>	<b>20</b>

# Models and airflow arrangements

## Wall models



**Type PL:**  
**Fully recessed wall**

This fully recessed wall convector is designed to provide high outputs. The liner is recessed completely into the wall, leaving only the front panel exposed. Front inlet and outlet louvers are standard for wall mounted units. An optional arched inlet is available.



**Type RL:**  
**Partially recessed wall**

This partially recessed wall convector is designed to provide high outputs. The liner is partially recessed into the wall, leaving only the front panel exposed. Front inlet and outlet louvers are standard for wall mounted units. An optional arched inlet is available.



**Type SL:**  
**Wall hung slope top**

This fully exposed sloped-top convector is designed for wall mounting. It features a louvered outlet grille in the slope top that keeps debris from accumulating on the top of the unit. The inlet air is directed through the open bottom to produce high outputs.



**Type WL:**  
**Wall hung**

This fully exposed wall-mounted convector is attached to the wall. The flat top design features bottom open inlet and outlet louvers. An optional arched inlet is available.

## Floor models



**Type SF:**  
**Free standing slope top**

This fully exposed floor convector has sloping outlet louvers and is designed for mounting to a sidewall. The inlet air is directed through the bottom front inlet louver. An optional arched inlet is available.



**Type FL:**  
**Fully exposed floor**

This fully exposed floor-mounted convector is attached to the wall. The flat top design features front inlet and outlet louvers. An optional arched inlet is available.

**Table 1 - Steam ratings in EDR (215 °F at 65 °F E.A.T)**

Depth in inches	Length in inches	Slope Top-Wall Mounted Nom. Heights Type SL				Slope Top-Free Standing Type SF			
		18	20	26	32	18	20	26	32
4	24	16.4	16.9	17.7	18.4	15.0	15.6	17.0	17.7
	28	19.9	20.4	21.3	22.1	18.0	18.7	20.4	21.3
	36	26.9	27.9	28.9	30.2	24.6	25.4	27.6	29.0
	40	30.4	31.2	32.6	33.8	27.7	28.6	31.3	32.7
	48	37.3	38.3	40.0	41.6	33.9	35.2	38.3	40.1
	52	40.6	41.4	43.5	45.2	36.8	38.1	41.4	43.5
	60	47.5	48.4	50.8	53.4	42.7	44.6	48.4	50.8
	64	51.2	52.2	54.7	58.0	45.8	48.1	52.2	54.9
6	24	26.1	26.8	28.9	29.9	22.6	23.9	27.2	29.0
	28	31.5	32.3	34.7	36.2	27.2	28.7	32.3	34.7
	36	42.3	43.6	46.8	48.4	37.1	38.9	43.7	47.0
	40	47.7	49.1	52.7	54.8	41.6	43.9	49.2	52.9
	48	58.6	60.2	64.7	67.1	51.4	53.7	60.4	64.9
	52	63.7	65.5	70.4	73.3	56.4	58.4	65.5	70.4
	60	74.5	76.5	82.2	85.7	65.8	68.1	76.5	82.2
	62	80.1	82.3	88.4	92.0	70.2	73.5	82.4	88.8
8	24	32.4	33.4	36.0	37.5	30.0	30.8	33.6	36.1
	28	39.2	40.2	43.4	45.1	36.0	37.0	40.2	43.4
	36	53.0	54.5	58.8	61.2	49.0	50.6	57.4	58.9
	40	59.9	61.6	66.4	69.1	55.0	56.9	61.9	66.7
	48	73.6	75.4	81.5	84.9	68.0	69.9	74.0	81.9
	52	80.2	82.3	88.9	92.6	73.8	75.8	82.3	88.9
	60	93.8	96.3	104.0	108.5	86.4	88.7	96.3	104.0
	64	100.9	103.7	111.8	116.7	93.3	95.8	104.0	112.2

**Table 1A - Steam ratings in BTU/H (215 °F at 65 °F E.A.T)**

Depth in inches	Length in inches	Slope Top-Wall Mounted Nom. Heights Type SL				Slope Top-Free Standing Type SF			
		18	20	26	32	18	20	26	32
4	24	3936	4056	4248	4416	3600	3744	4080	4248
	28	4776	4896	5112	5304	4320	4488	4896	5112
	36	6456	6624	6936	7248	5904	6096	6624	6960
	40	7296	7488	7824	8112	6648	6864	7512	7848
	48	8952	9192	9600	9984	8134	8448	9192	9624
	52	9744	9936	10440	10848	8832	9144	9936	10440
	60	11400	11616	12192	12816	10248	10704	11616	12192
	64	12288	12528	13128	13920	10992	11544	12528	13176
6	24	6264	6432	6936	7176	5424	5736	6528	6960
	28	7560	7752	8328	8688	6528	6828	7752	8328
	36	10152	10464	11232	11616	8904	9336	10488	11280
	40	11448	11784	12648	13152	9984	10536	11808	12696
	48	14064	14448	15528	16104	12336	12888	14496	15576
	52	15288	15720	16896	17592	13536	14016	15720	16896
	60	17880	18360	19728	20568	15792	16344	18360	19728
	62	19224	19752	21216	22080	16848	17640	19776	21312
8	24	7776	8016	8640	9000	7200	7392	8064	8664
	28	9408	9648	10416	10824	8640	8880	9648	10416
	36	12720	13080	14112	14688	11760	12144	13776	14136
	40	14376	14784	15936	16584	13200	13656	14856	16008
	48	17664	18096	19560	20376	16320	16776	17760	19656
	52	19248	19752	21336	22224	17712	18192	19752	21336
	60	22512	23112	24960	26040	20736	21288	23112	24960
	64	24216	24888	26832	28008	22392	22992	24960	26928

**Table 2 - Steam ratings in EDR (215 °F at 65 °F E.A.T)**

Depth in inches	Length in inches	Front Outlet - Nominal Heights			
		18	20	26	32
4	24	11.5	13.0	15.4	16.6
	28	13.8	15.9	18.6	19.9
	36	18.2	21.4	25.0	27.0
	40	20.4	24.0	28.2	30.4
	48	24.8	29.5	34.6	37.3
	52	27.3	32.5	37.8	40.6
	60	31.9	38.0	44.2	47.5
	64	33.9	40.6	47.4	51.1
6	24	16.8	18.9	23.0	25.6
	28	20.2	23.0	27.8	30.7
	36	26.8	30.6	37.5	41.3
	40	30.2	34.7	42.3	46.6
	48	37.0	42.5	51.8	56.9
	52	40.6	46.1	56.4	62.1
	60	47.5	54.4	66.0	72.6
	62	50.8	58.3	70.9	78.1
8	24	21.3	23.8	27.3	29.5
	28	26.6	29.0	32.9	35.5
	36	36.3	38.8	44.4	48.0
	40	41.1	43.9	50.1	54.1
	48	49.8	54.0	61.4	66.6
	52	56.1	59.3	67.1	72.6
	60	65.7	69.4	78.5	84.9
	64	69.9	74.1	84.4	91.4

**Table 2A - Steam ratings in BTU/H (215 °F at 65 °F E.A.T)**

Depth in inches	Length in inches	Front Outlet - Nominal Heights			
		18	20	26	32
4	24	2760	3120	3696	3984
	28	3312	3816	4464	4776
	36	4368	5136	6000	6480
	40	4896	5760	6768	7296
	48	5952	7080	8304	8952
	52	6552	7800	9072	9744
	60	7656	9120	10608	11400
	64	8136	9744	11376	12264
6	24	4032	4536	5520	6144
	28	4848	5520	6672	7368
	36	6432	7344	9000	9912
	40	7248	8328	10152	11184
	48	8880	10200	12432	13656
	52	9744	11064	13536	14904
	60	11400	13056	15840	17424
	62	12192	13992	17016	18744
8	24	5112	5712	6552	7080
	28	6384	6960	7896	8520
	36	8712	9312	10656	11520
	40	9864	10536	12024	12964
	48	11952	12960	14736	15984
	52	13464	14232	16104	17424
	60	15768	16656	18840	20376
	64	16776	17784	20256	21936

# Features



## Units shown, back to front

- Type SL, wall mounted with slope top louvered outlet.
- Type FL, floor mounted with optional arched inlet and vertical architectural bar grille outlet.
- Type SF, free standing with slope top and optional security perforated inlet/outlet.

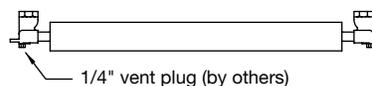
## Heating elements

Heating elements are available in three standard nominal depths: 4" with 2-tube element; 6" with 3-tube element; and 8" with 4-tube element. The element assembly is protected by shield plates running the entire length of the element, and is supported in enclosure by a welded bracket to eliminate strain on piping or element. Fins of 0.010" aluminum have integral collars to assure uniform spacing. Tubes are mechanically expanded into collars to permit maximum heat transfer. Headers are cast brass with 3/4" NPT top or bottom tapings.

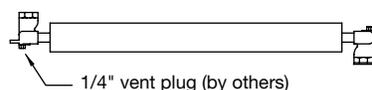
## Reversed headers

One header can be reversed to be mounted "up," while the other is mounted "down," for reverse piping applications. (Specify when ordering.)

Standard coil header



Optional coil header

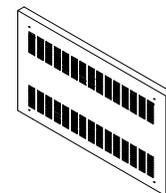


## Enclosures

Rittling Convector enclosures are specially constructed to satisfy the requirements of strength and safety in many different building applications. Rittling Convector enclosures are also available in louvered, perforated and aluminum grille inlet and outlets.

## Inlets and outlets

Standard units have louvered optional inlets and outlets. Units are available in 16-gauge and 14-gauge. The louvered openings are fabricated to be "pencil proof."



## Finish

All convectors are thoroughly cleaned and phosphatized after fabrication and finished with a polyester-epoxy powder coating.

### Notes:

- Size unit capacities for actual coil length.
- Not available as standard on units less than 28".

# Options and accessory equipment

## Factory assembled

### Cabinet

#### Construction

Cabinets are all suitably braced and reinforced and are optionally available in heavy-gauge cold rolled steel, 16-gauge, 14-gauge, 12-gauge (perforated inlet and outlet) only for special institutional applications. Stainless steel is also an option; consult factory.

#### Metal gauge combinations

Liner	20	18	20	18	16	20	18	16	14
Front	18	18	16	16	16	14	14	16	14

#### Fasteners

Phillips (standard)



Spanner



Allen Key

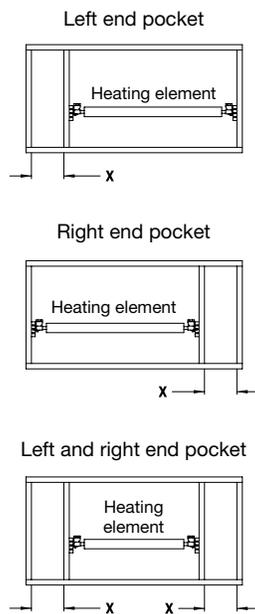


#### Non-standard sizes

Sizes other than standard can be provided for virtually any application. Please consult factory with requirements. Size increments of 1" recommended.

### End pockets

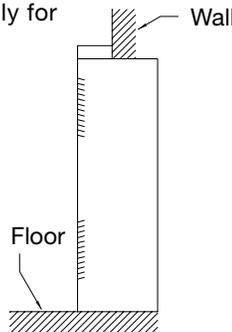
End pockets may be installed at one or both ends of the cabinet convector. The heating element is shortened and a vertical baffle with element support is provided between the end of the element and the end of the cabinet. End pockets are available in either 6" or 8" widths. Consult factory for other custom end pocket designs. Consult factory for custom end pocket designs. (Note: Size unit capacities for actual coil length.) Not available as standard on units less than 28".



End pocket size: (dimension X) = 6" or 8"

### 3-sided Convector

Available only for Type PL.



### Access doors

Access doors are provided in the front panel of cabinet convectors for inspection or operation of valves, traps or air vents.

These doors are attached on one side with a heavy-duty hinge.

A 1/4-turn locking device is provided with an optional Allen-head or spanner-head operator when security conditions dictate.

Access doors are available in many locations; consult factory for best positions.

- Certain door location options and door sizes depend on the height and length of the cabinet.
- Consult factory on door location options and door sizes at 20" high and below, and less than 32" long.
- All doors are 5" x 5" (standard) and 4" x 5" as noted.
- #5 & #6 NOT available on SL type.
- #3 & #4 NOT available on SL and SF types.

#3	#4
#1	#2
#5	#6

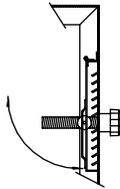
# Options and accessory equipment

## Factory assembled

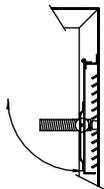
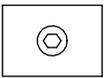
### Damper

The damper assembly covers the entire outlet area of the enclosure and consists of a 20-gauge cold rolled steel damper blade painted to match cabinet color, which is flanged at the top and bottom for additional rigidity. Standard damper assemblies are equipped with a knob operator or an optional tamper-resistant operator functions with a simple Allen wrench and is particularly valuable in school or institutional settings where only supervisory operation is desired.

Knob damper



Allen key damper

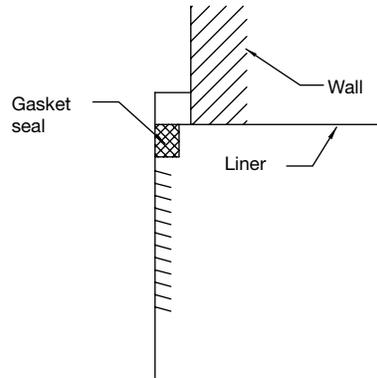


### Insulation

1/2" thick fiberglass insulation is available on convector sides, tops, fronts or backs for special applications. (Top does not apply to sloping models.) Cabinet for availability. Bar grille convectors are available in optional 16-gauge and 14-gauge.

### Urethane Gasket

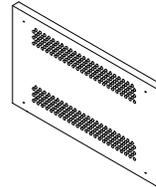
A gasket seal can be added to type PL convectors.



### Inlets and outlets

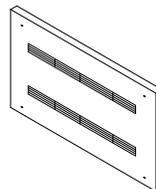
#### Perforation

Rittling institutional Convectors are available in two styles of perforations. 1/8" diameter holes on 3/16" staggered center lines are standard. 3/16" diameter holes on 1/4" staggered center lines are optional. Perforated convectors are available in optional 16-gauge, 14-gauge, and 12-gauge.



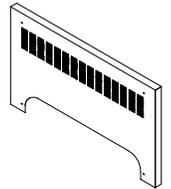
#### Bar grille

The optional architectural grille inlet and outlet consist of a heavy-duty extruded aluminum bar grille with a deep etched clear anodized (R-204) finish. Bar grille convectors are available in 16-gauge and 14-gauge. The vanes of the continuous extrusion have a 15° deflection for directional air flow. The grille opening is pencil proof. Consult factory for availability. Bar grille convectors are available in optional 16-gauge and 14-gauge.



### Arched inlet

The optional arched inlet is available on models PL, SF and FL only. Type PL must be 3-sided overlap. Units with arched inlets can have louvered, perforated or bar grille outlets. Units are available in optional 16-gauge or 14-gauge. With perforated outlets, 12-gauge is also available.



### Color

Cabinets may be finished in one of the standard Zehnder Rittling decorator colors. Additional colors are optionally available, please furnish a color chip for custom color.

# Applications

## Vapor and vacuum systems (steam)

### Figure 1: Down-feed hook-up, reverse header coil

This arrangement of down-feed hook-up is used when the steam mains are above the cabinet convectors with drops that are connected to the unit. This arrangement can be used only with freestanding units. The valve is shown inside the cabinet as it can easily be operated by lifting the removable front for an optional access door. A thermostatic control valve with a bulb in the inlet may be substituted for the hand-operated valve shown. The valve can also be installed outside the cabinet if desired. (Valve and piping installed by others.)

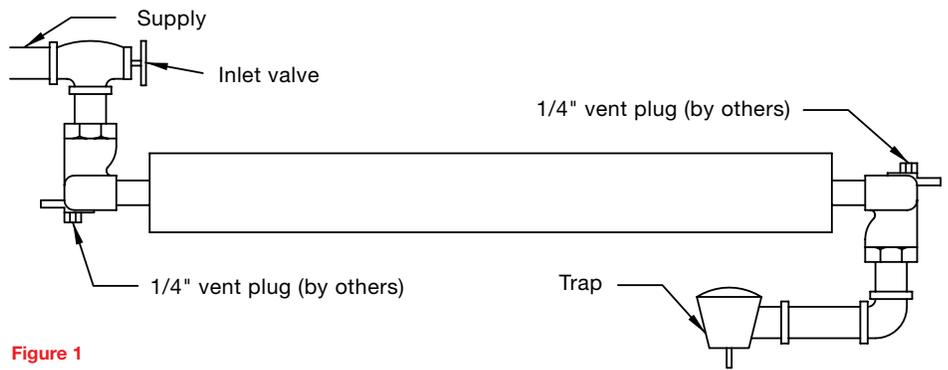


Figure 1

### Figure 2: Up-feed hook-up, standard header coil

This figure shows an arrangement for an up-feed hook-up for semi-recessed or freestanding units. A "straight" through trap of proper size may be substituted for the "angle" trap shown, which allows access to the valve.

On all steam systems, the convector element should pitch down to the return.

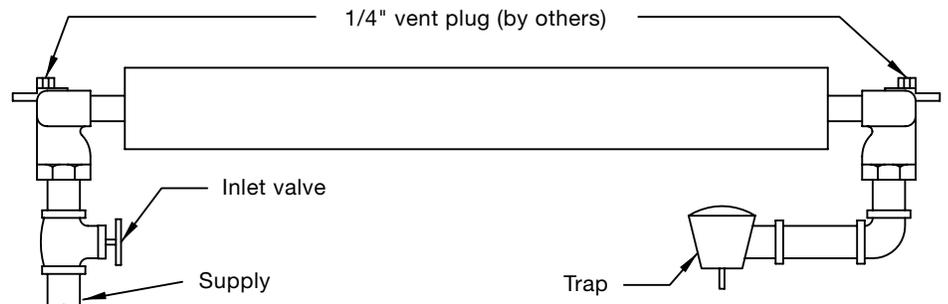


Figure 2

Rittling Convectors are not recommended for one-pipe steam systems. Typical connections are shown. Other arrangements, however, can be used.

# Applications

## Hot water systems

### Figure 3: Down-feed hook-up, reverse header coil

This figure shows a down-feed arrangement. The supply must be above the tube level of the element. Air valves are not needed at the individual units. A proper piping system allows for the collection of air and venting at the high point.

On all down-feed systems, the pitch should be down toward the return.

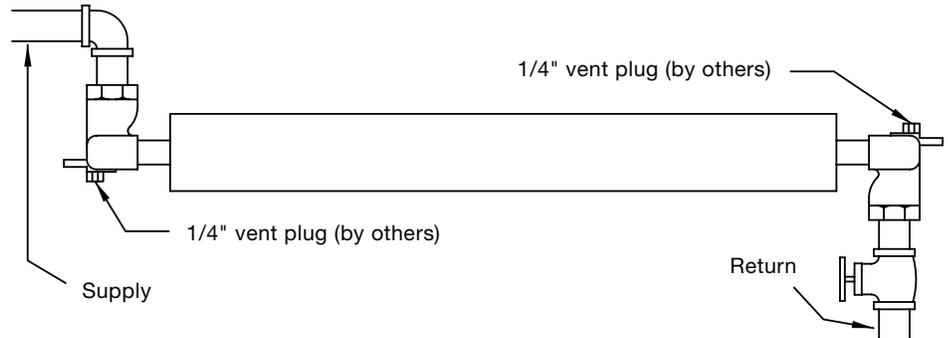


Figure 3

### Figure 4: Up-feed hook-up, standard header coil

This figure shows an up-feed arrangement which can be used with first floor units where mains are in the basement or where the upper floors are supplied by risers from lower floors. Up-feed systems require venting at each convactor, and the pitch should be down toward the supply.

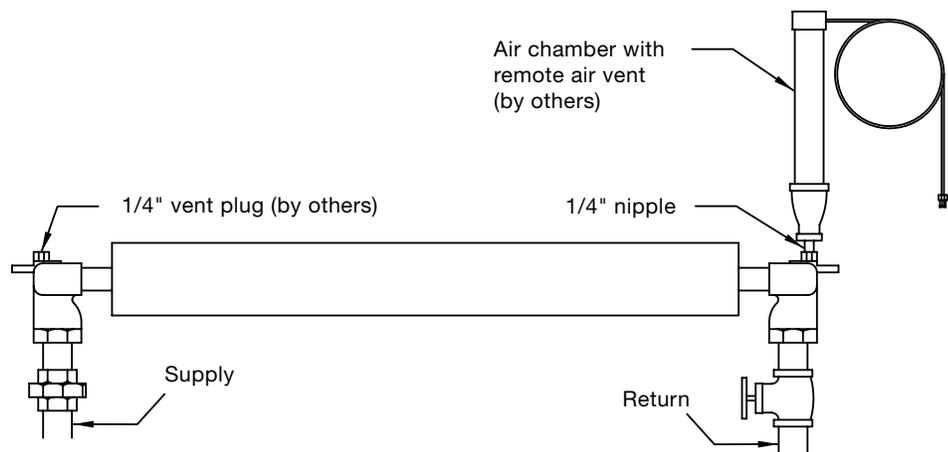


Figure 4

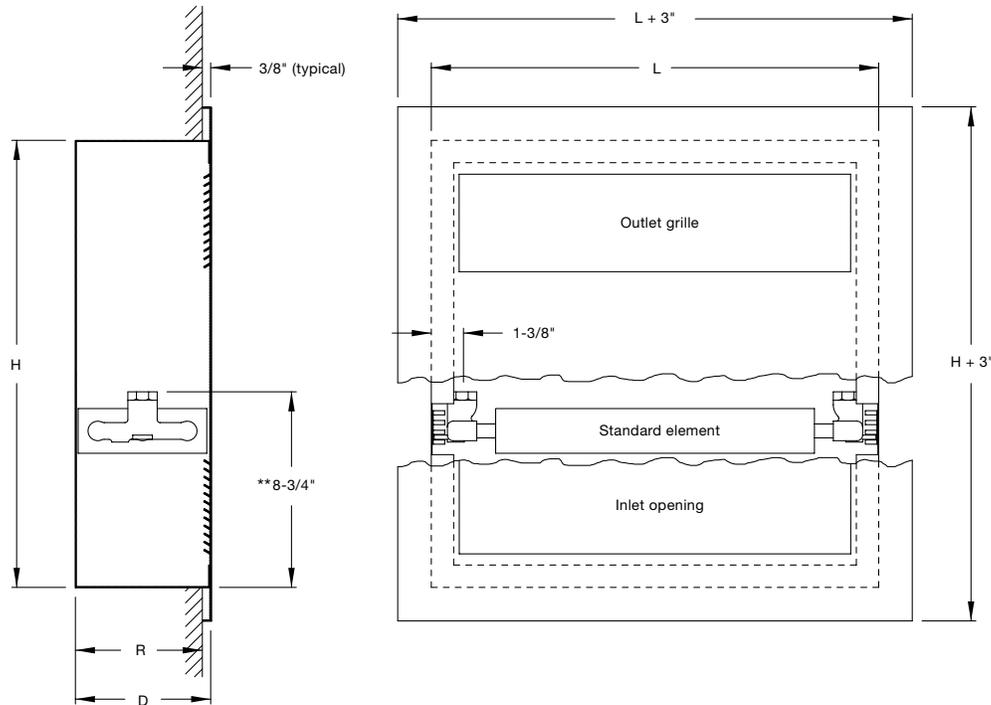
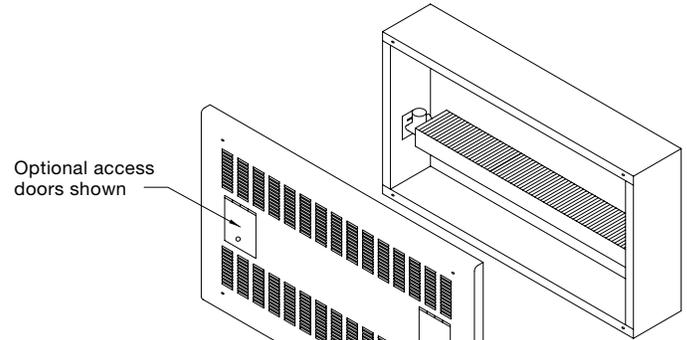
Two different arrangements are shown for hot water piping connections, down-feed and up-feed.

# Dimensions and data

## Model PL Fully recessed wall

Nominal lengths (L)	Nominal heights (H)	Nominal depths (D)	Maximum dimension (R)
■ 24"	■ 18**	■ 4"	■ 3-3/4"
■ 28"	■ 20"	■ 6"	■ 5-3/4"
■ 36"	■ 26"	■ 8"	■ 7-5/8"
■ 40"	■ 32"		
■ 48"			
■ 52"			
■ 60"			
■ 64"			

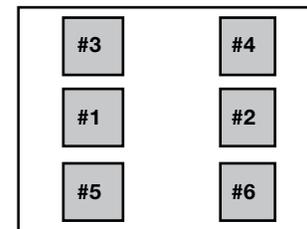
Any combination of length, height and depth is available.



### PL Convactor Access Door Location Availability

Unit Height	Unit Lengths	# of Doors Available	Available Locations	Door Size
Less than 18"	All Lengths	0	No access door locations available	
18" to 19"	Less than 32"	1	3, 4, 5, 6	4"H x 5"W
18" to 19"	Less than 32"	2	3, 5 or 4, 6	4"H x 5"W
18" to 19"	32" and longer	4	3, 4, 5, 6	4"H x 5"W
20" to 25"	Less than 32"	1	1, 2, 3, 4, 5, 6	4"H x 5"W
20" to 25"	Less than 32"	2	1, 2 or 3, 5 or 4, 6	4"H x 5"W
20" to 25"	32" and longer	4	3, 4, 5, 6	5"H x 5"W
26" and over	Less than 32"	2	1, 2 or 3, 5 or 4, 6	5"H x 5"W
26" and over	Less than 32"	4	1, 2, 3, 5 or 1, 2, 4, 6	5"H x 5"W
26" and over	32" and longer	6	1, 2, 3, 4, 5, 6	5"H x 5"W

### Standard Convactor Access Door Locations



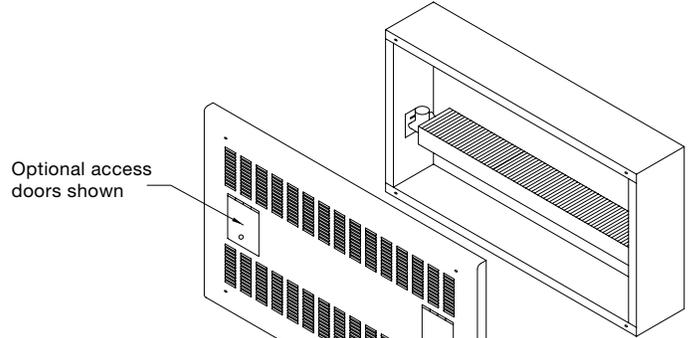
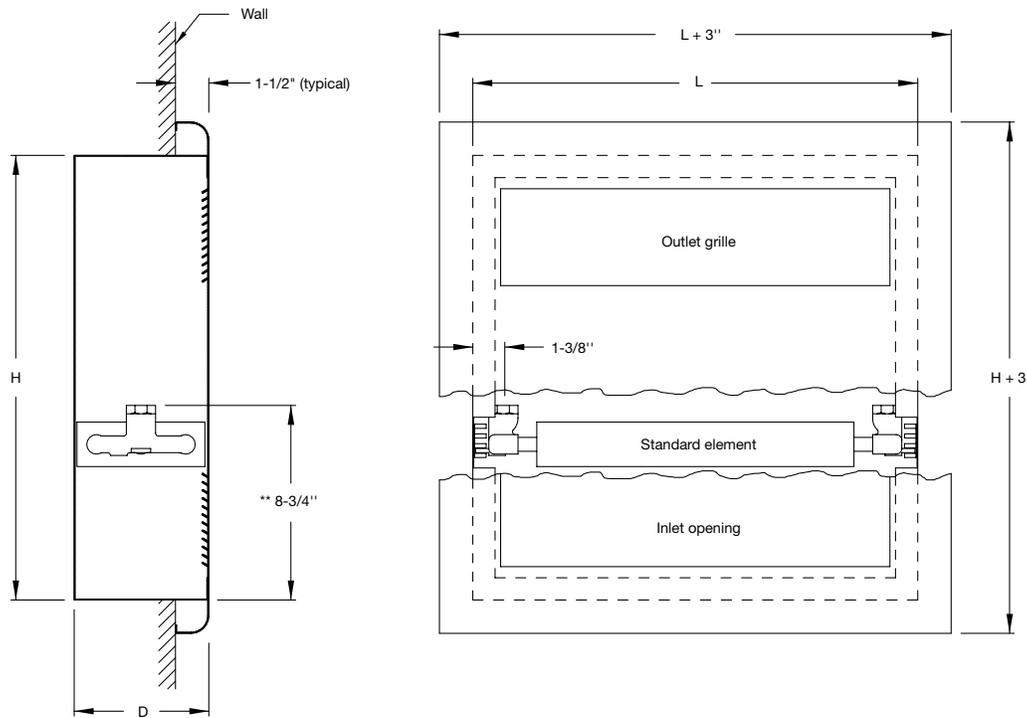
- Note:**
- Access doors not available in locations 5 and 6 with arched inlet.
  - \*Contact factory on heights less than 20"
  - For convectors less than 28" long, end pockets are not offered as standard. Consult factory for availability.
  - \*\*The coil is adjustable 7/8" up in 7/16" increments.

# Dimensions and data

## Model RL Partially recessed wall

Nominal lengths (L)	Nominal heights (H)	Nominal depths (D)	Maximum dimension (R)
■ 24"	■ 18"	■ 4"	■ 3-3/4"
■ 28"	■ 20"	■ 6"	■ 5-3/4"
■ 36"	■ 26"	■ 8"	■ 7-5/8"
■ 40"	■ 32"		
■ 48"			
■ 52"			
■ 60"			
■ 64"			

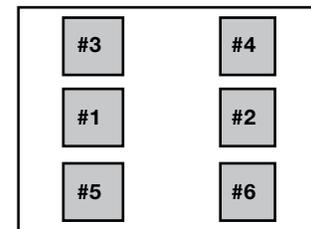
Any combination of length, height and depth is available.



### RL Convector Access Door Location Availability

Unit Height	Unit Lengths	# of Doors Available	Available Locations	Door Size
Less than 18"	All Lengths	0	No access door locations available	
18" to 19"	Less than 32"	1	3, 4, 5, 6	4"H x 5"W
18" to 19"	Less than 32"	2	3, 5 or 4, 6	4"H x 5"W
18" to 19"	32" and longer	4	3, 4, 5, 6	4"H x 5"W
20" to 25"	Less than 32"	1	1, 2, 3, 4, 5, 6	4"H x 5"W
20" to 25"	Less than 32"	2	1, 2 or 3, 5 or 4, 6	4"H x 5"W
20" to 25"	32" and longer	4	3, 4, 5, 6	5"H x 5"W
26" and over	Less than 32"	2	1, 2 or 3, 5 or 4, 6	5"H x 5"W
26" and over	Less than 32"	4	1, 2, 3, 5 or 1, 2, 4, 6	5"H x 5"W
26" and over	32" and longer	6	1, 2, 3, 4, 5, 6	5"H x 5"W

### Standard Convector Access Door Locations



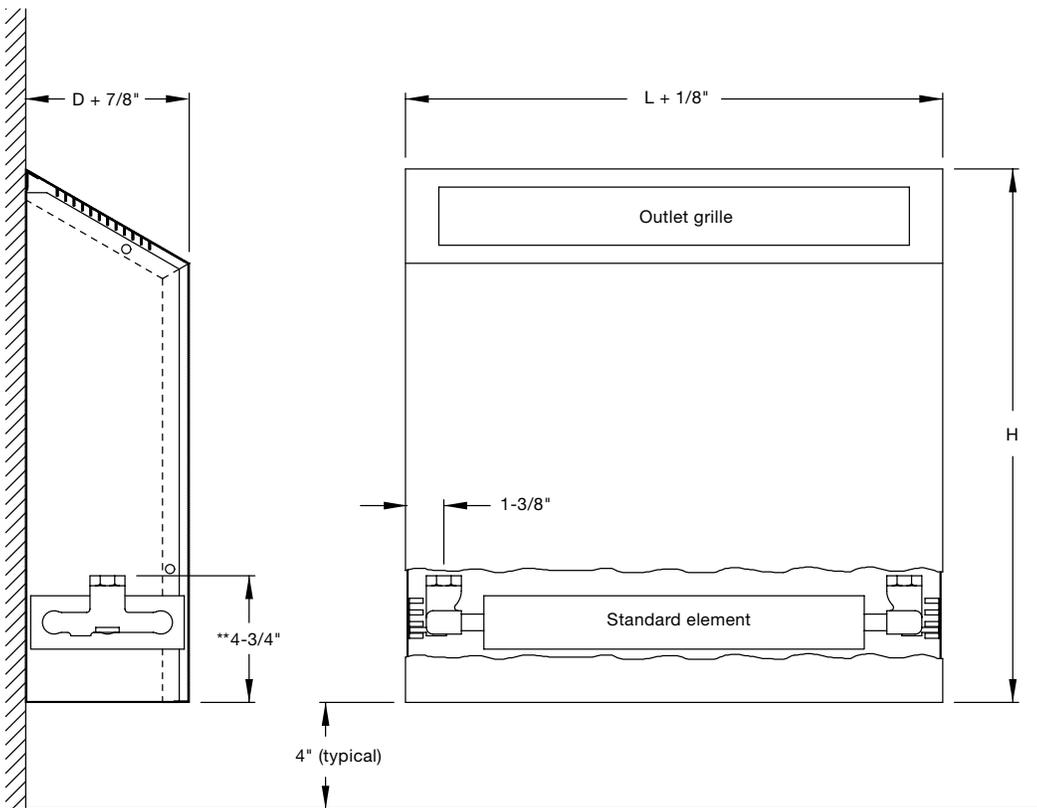
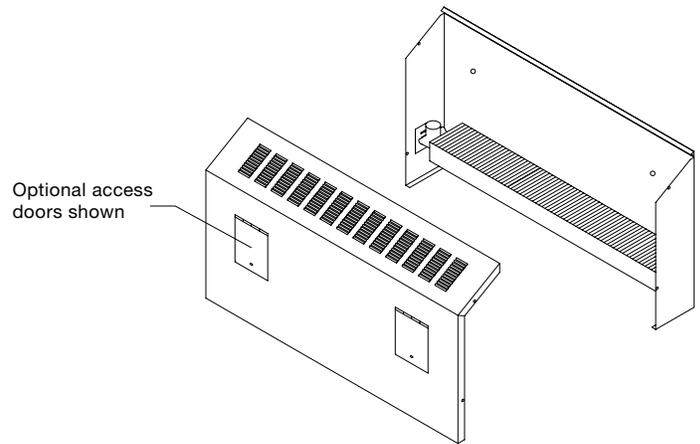
- Note:**
- Access doors not available in locations 5 and 6 with arched inlet.
  - \*Contact factory on heights less than 20"
  - For convectors less than 28" long, end pockets are not offered as standard. Consult factory for availability.
  - \*\*The coil is adjustable 7/8" up in 7/16" increments.

# Dimensions and data

## Model SL Wall hung slope top

Nominal lengths (L)	Nominal heights (H)	Nominal depths (D)
■ 24"	■ 18**	■ 4"
■ 28"	■ 20"	■ 6"
■ 36"	■ 26"	■ 8"
■ 40"		
■ 48"	■ 32"	
■ 52"		
■ 60"		
■ 64"		

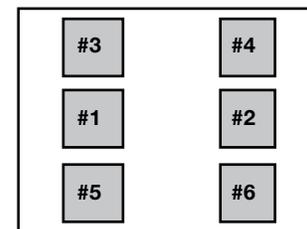
Any combination of length, height and depth is available.



### SL Convactor Access Door Location Availability

Unit Height	Unit Lengths	# of Doors Available	Available Locations	Door Size
Up to 20"	All lengths	2	1, 2	4"H x 5"W
20" and over	All lengths	2	1,2	5"H x 5"W

### Standard Convactor Access Door Locations



**Note:**

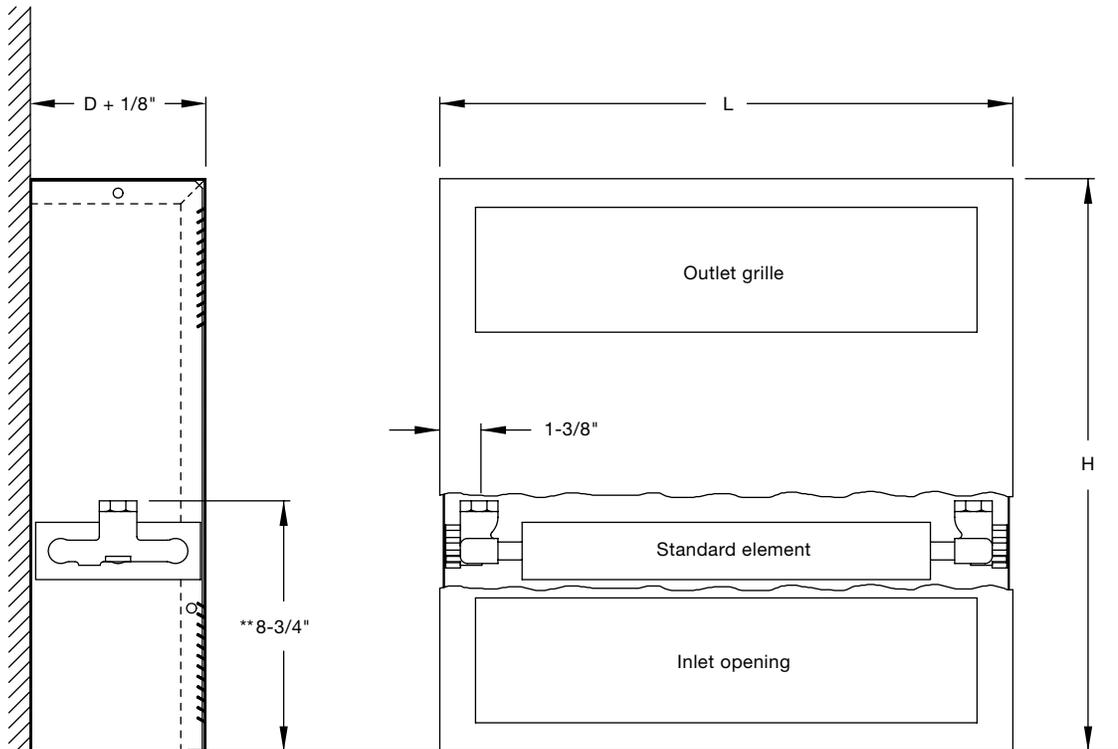
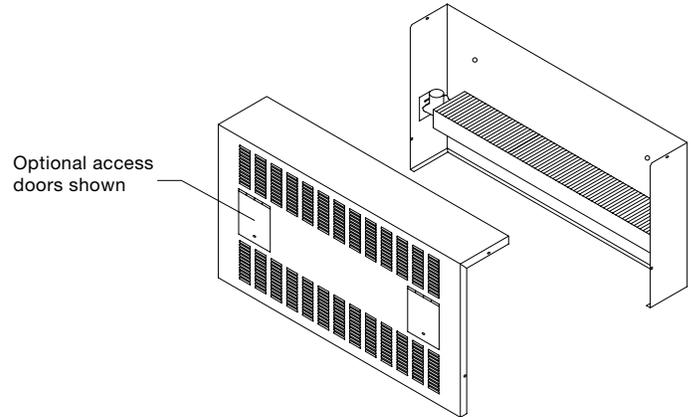
- \*Contact factory on heights less than 20"
- \*\*The coil is adjustable 7/8" up in 7/16" increments.
- For convectors less than 28" long, end pockets are not offered as standard. Consult factory for availability.

# Dimensions and data

## Model FL Free standing floor

Nominal lengths (L)	Nominal heights (H)	Nominal depths (D)
■ 24"	■ 18**	■ 4"
■ 28"	■ 20"	■ 6"
■ 36"	■ 26"	■ 8"
■ 40"		
■ 48"	■ 32"	
■ 52"		
■ 60"		
■ 64"		

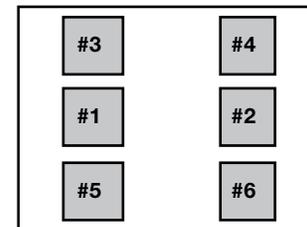
Any combination of length, height and depth is available.



### FL Convector Access Door Location Availability

Unit Height	Unit Lengths	# of Doors Available	Available Locations	Door Size
Up to 18"	Less than 32"	1	3, 4, 5, 6	4"H x 5"W
Up to 18"	Less than 32"	2	3, 5 or 4, 6	4"H x 5"W
Up to 18"	32" and longer	4	3, 4, 5, 6	4"H x 5"W
19"	Less than 32"	1	1, 2, 3, 4, 5, 6	4"H x 5"W
19"	Less than 32"	2	1, 2 or 3, 5 or 4, 6	4"H x 5"W
19"	32" and longer	4	1, 2, 5, 6	4"H x 5"W
20" and over	Less than 32"	2	1, 2 or 3, 5 or 4, 6	5"H x 5"W
20" and over	Less than 32"	4	1, 2, 3, 5 or 1, 2, 4, 6	5"H x 5"W
20" and over	32" and longer	6	1, 2, 3, 4, 5, 6	5"H x 5"W

### Standard Convector Access Door Locations



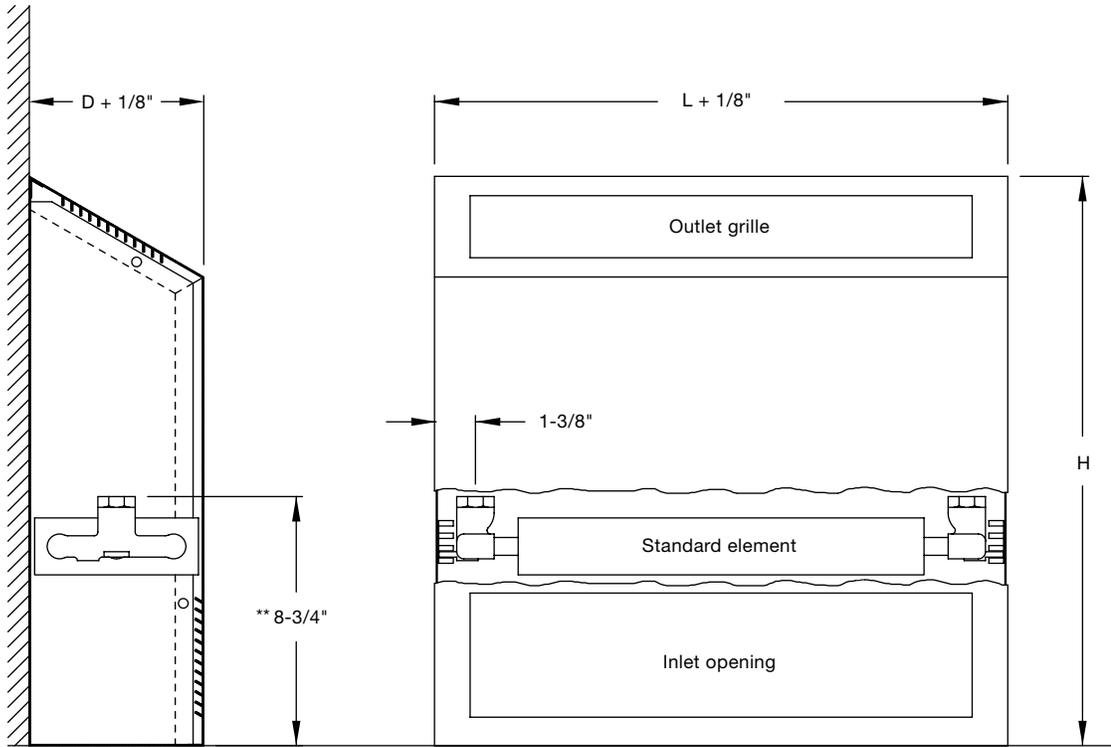
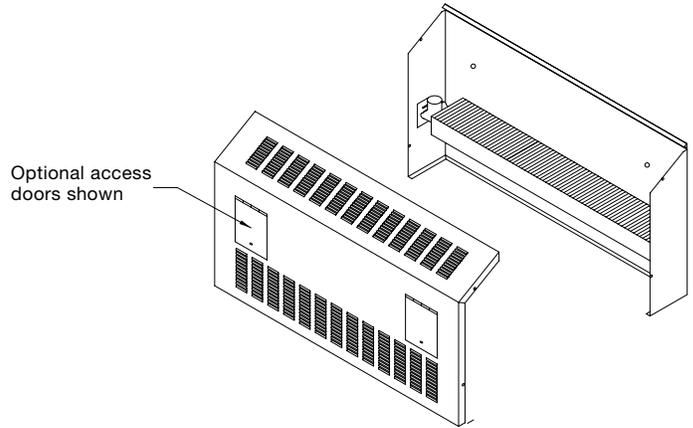
- Note:**
- Access doors not available in locations 5 and 6 with arched inlet.
  - \*Contact factory on heights less than 20"
  - For convectors less than 28" long, end pockets are not offered as standard. Consult factory for availability.
  - \*\*The coil is adjustable 7/8" up in 7/16" increments.

# Dimensions and data

## Model SF Free standing slope top

Nominal lengths (L)	Nominal heights (H)	Nominal depths (D)
■ 24"	■ 18**	■ 4"
■ 28"	■ 20"	■ 6"
■ 36"	■ 26"	■ 8"
■ 40"		
■ 48"	■ 32"	
■ 52"		
■ 60"		
■ 64"		

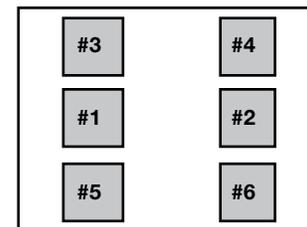
Any combination of length, height and depth is available.



### SF Convector Access Door Location Availability

Unit Height	Unit Lengths	# of Doors Available	Available Locations	Door Size
Up to 18"	Less than 32"	1	5 or 6	4"H x 5"W
Up to 18"	32" and longer	2	5, 6	4"H x 5"W
18" to 19"	Less than 32"	3	1, 2, 5 or 1, 2, 6	4"H x 5"W
18" to 19"	32" and longer	4	1, 2, 5, 6	4"H x 5"W
20" and over	Less than 32"	3	1, 2, 5 or 1, 2, 6	5"H x 5"W
20" and over	32" and longer	4	1, 2, 5, 6	5"H x 5"W

### Standard Convector Access Door Locations



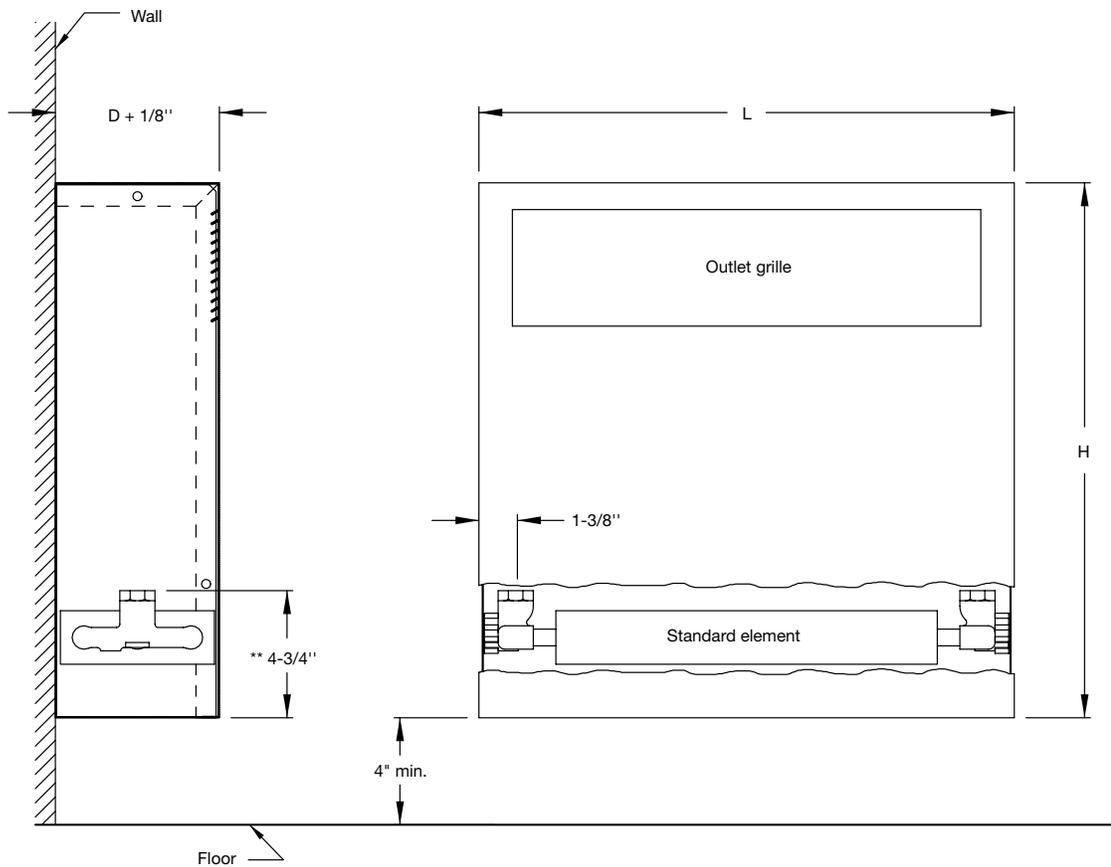
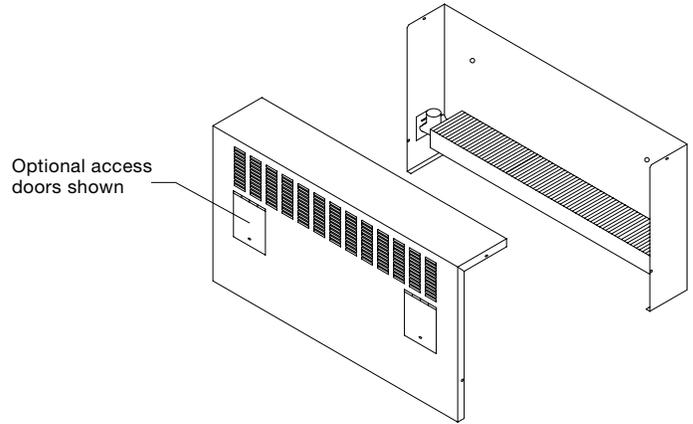
- Note:**
- Access doors not available in locations 5 and 6 with arched inlet.
  - \*Contact factory on heights less than 20"
  - For convectors less than 28" long, end pockets are not offered as standard. Consult factory for availability.
  - \*\*The coil is adjustable 7/8" up in 7/16" increments.

# Dimensions and data

## Model WL Wall hung

Nominal lengths (L)	Nominal heights (H)	Nominal depths (D)
■ 24"	■ 18**	■ 4"
■ 28"	■ 20"	■ 6"
■ 36"	■ 26"	■ 8"
■ 40"		
■ 48"	■ 32"	
■ 52"		
■ 60"		
■ 64"		

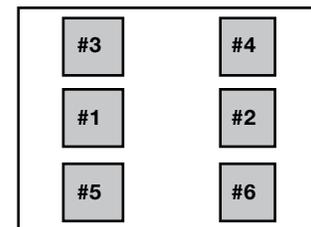
Any combination of length, height and depth is available.



### WL Convector Access Door Location Availability

Unit Height	Unit Lengths	# of Doors Available	Available Locations	Door Size
Up to 20"	Less than 32"	1	3 or 4, 1 or 2	4"H x 5"W
Up to 20"	32" and longer	2	3, 4 or 1,2	4"H x 5"W
20" and over	Less than 32"	3	1, 2, 3 or 1, 2, 4	5"H x 5"W
20" and over	32" and longer	4	1, 2, 3, 4	5"H x 5"W

### Standard Convector Access Door Locations



#### Note:

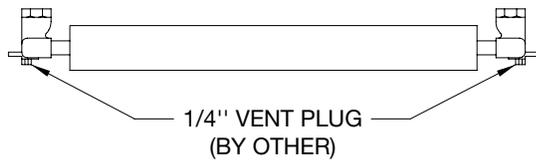
- Access doors not available in locations 5 and 6 with arched inlet.
- \*Contact factory on heights less than 20"

- For convectors less than 28" long, end pockets are not offered as standard. Consult factory for availability.
- \*\*The coil is adjustable 7/8" up in 7/16" increments.

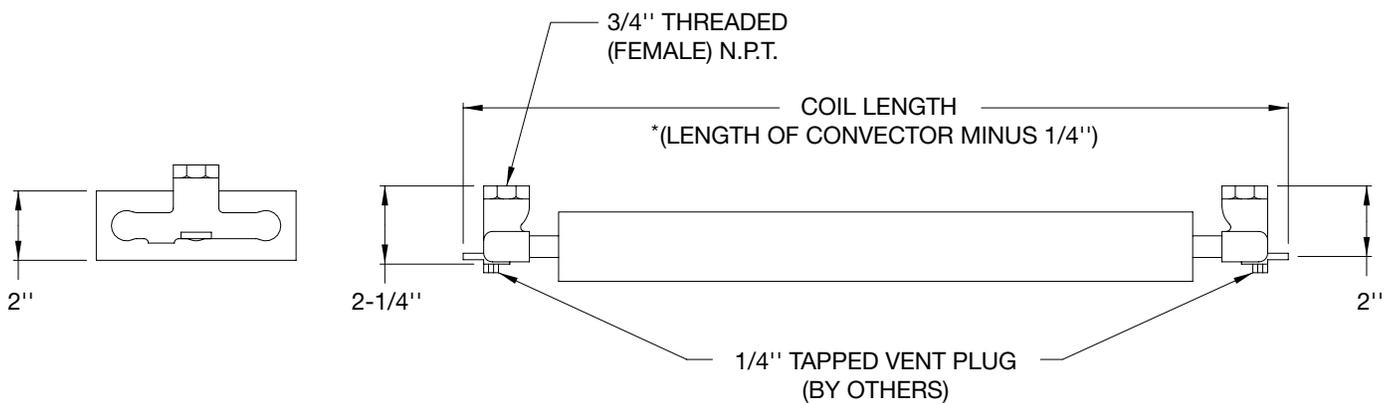
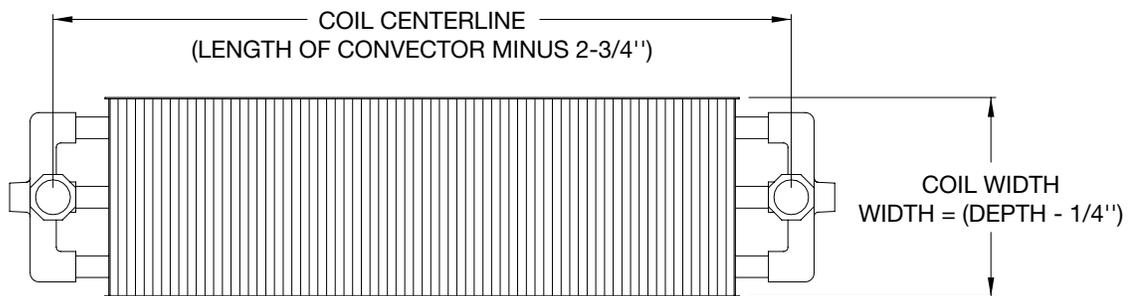
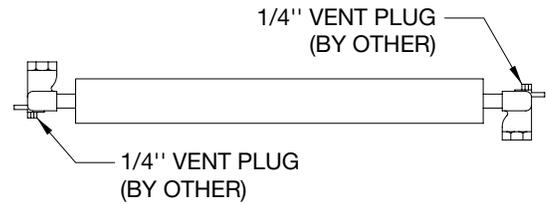
# Dimensions and data

Model coil

## N = Standard Coil



## B = Optional Coil



**Note:**

- Fins are 0.010" thick aluminum.
- Header material is cast brass.
- \*For Connectors with end pockets, subtract end pocket length from length of Convector.

# Mechanical specifications

## General

The contractor shall furnish and install Rittling Convectors with required mounting components and accessories to meet size, capacity and characteristics as required on the Equipment Schedule or on the plans. Units shall be installed in a neat and workmanlike manner in accordance with specifications and manufacturer recommendations. All material shall be manufactured by Zehnder Rittling.

## Heating elements

The heating element is designed for either two-pipe steam or two-pipe hot water systems. The coil is manufactured using non-ferrous 1/2" nominal copper tubing and aluminum fins which are die cut with a thickness of no less than 0.010". The fins have integral collars, which provide maximum heat transfer between the tubes and the fins. The tubes are mechanically bonded to the fins to ensure permanent contact.

The entire fin assembly shall be encased in a heavy gauge galvanized steel frame with spacers locked at regular intervals to provide added protection to the finned element.

Headers are cast brass with 3/4" FNPT tapings. Standard configuration is supplied with both inlet and outlet connections facing downward. Optional reverse tapping is available with one connection facing upward and the other connection facing downward.

Assembled heating elements shall be hydrostatically tested to 1700 PSIG prior to leaving the factory and rated for a maximum 300 PSIG working pressure at 200°F.

## Cabinet construction

Enclosures shall be of the size and style as shown on the plans. The cabinet fronts shall be manufactured from 12-gauge, 14-gauge, 16-gauge or 18-gauge standard. Pick one - cold rolled steel. Cabinet front shall be flanged on top and sides for added rigidity. The cabinet shall be reinforced and braced where necessary to provide additional stiffness. The liners shall be manufactured from 12-gauge, 14-gauge, 16-gauge, 18-gauge or 2-gauge standard. Pick one - cold rolled steel. 18-gauge cold rolled steel heating element support brackets shall be spot welded to the inside ends of the liners. Heating element support brackets allow for pitch adjustments of up to 1-1/4" for return of condensation in steam systems and as required by piping arrangements. Cabinet fronts are to be attached to liners using Phillips head fasteners standard. [Tamper proof Spanner head fasteners] [Tamper proof Allen Head fasteners]

Convector shall be provided with an air inlet/air discharge configuration as listed below. Must specify for each unit.

- Louvered inlet and/or outlet that are die-formed to allow directional flow of air with the maximum amount of free open area. The louvered openings are fabricated to be "pencil proof."
- Security perforated inlet/perforated outlet shall be provided with 1/8" diameter holes on 3/16" staggered centerlines. 3/16" diameter holes on 1/4" staggered centerlines is also available.
- Architectural grille inlet and/or outlet shall be a heavy-duty extruded aluminum bar grille with a deep etched clear anodized finish. The vanes of the continuous extrusion shall have a 15-degree deflection for directional airflow. The grille opening shall be "pencil proof."
- Arched inlet, available on SF, FL, RL and PL models, when an open inlet is required for floor mounted units. PL and RL models to be 3-sided overlap with this option.

---

# Mechanical specifications

Convactor cabinets shall be provided with the following configurations:

- Type SF: This fully exposed floor convactor has sloping outlet and is designed for mounting to a sidewall. The inlet air is directed through bottom front inlet. Louvered inlet and outlet as standard.
- Type FL: This fully exposed floor mounted convactor is attached to the sidewall. The flat top design features front outlet and bottom front inlet. Louvered inlet and outlet as standard.
- Type SL: This fully exposed wall mounted convactor with slope outlet. The inlet air is directed through the open bottom.
- Type WL: This fully exposed wall convactor features a flat top with front vertical outlet. Inlet air passes through the open bottom.
- Type RL: This semi-recessed convactor is designed for partially recessed wall mounting. The front inlet and outlet are advantageous where wall space is limited. The liner is recessed partially into the wall leaving the remaining front panel exposed. Louvered inlet and outlet as standard.
- Type PL: This convactor is designed for full recess into the wall. The front inlet and outlet are advantageous where wall space is limited. The liner is recessed completely into the wall leaving only the front panel exposed. Louvered inlet and outlet as standard.

## Finish

All enclosures and accessories shall be degreased and chemically phosphatized before application of a durable, attractive electrostatic epoxy powder coating. Color to be selected from standard Zehnder Rittling color chart.

## Accessories and options

Dampers shall be provided where indicated. Damper blades shall be fabricated from 20-gauge cold rolled material painted to match enclosure color. Threaded damper screw and trunion shall provide positive operation of blade to provide variable heat output. Solid plastic damper knobs attached to damper screw shall operate damper. Recessed security Allen head operators shall be used in secure areas as indicated. Security damper must be operated by use of a hex key.

Access doors shall be flush mounted with doors hinged at the top and use a slotted fastener-standard. Tamper proof spanner head fasteners and tamper proof Allen head fasteners are optional

Convectors shall be provided with 1/2" thick faced fiberglass insulation on cabinet fronts, liners and sides for special applications. Urethane gasket seal shall be provided to seal front cover (type PL only).

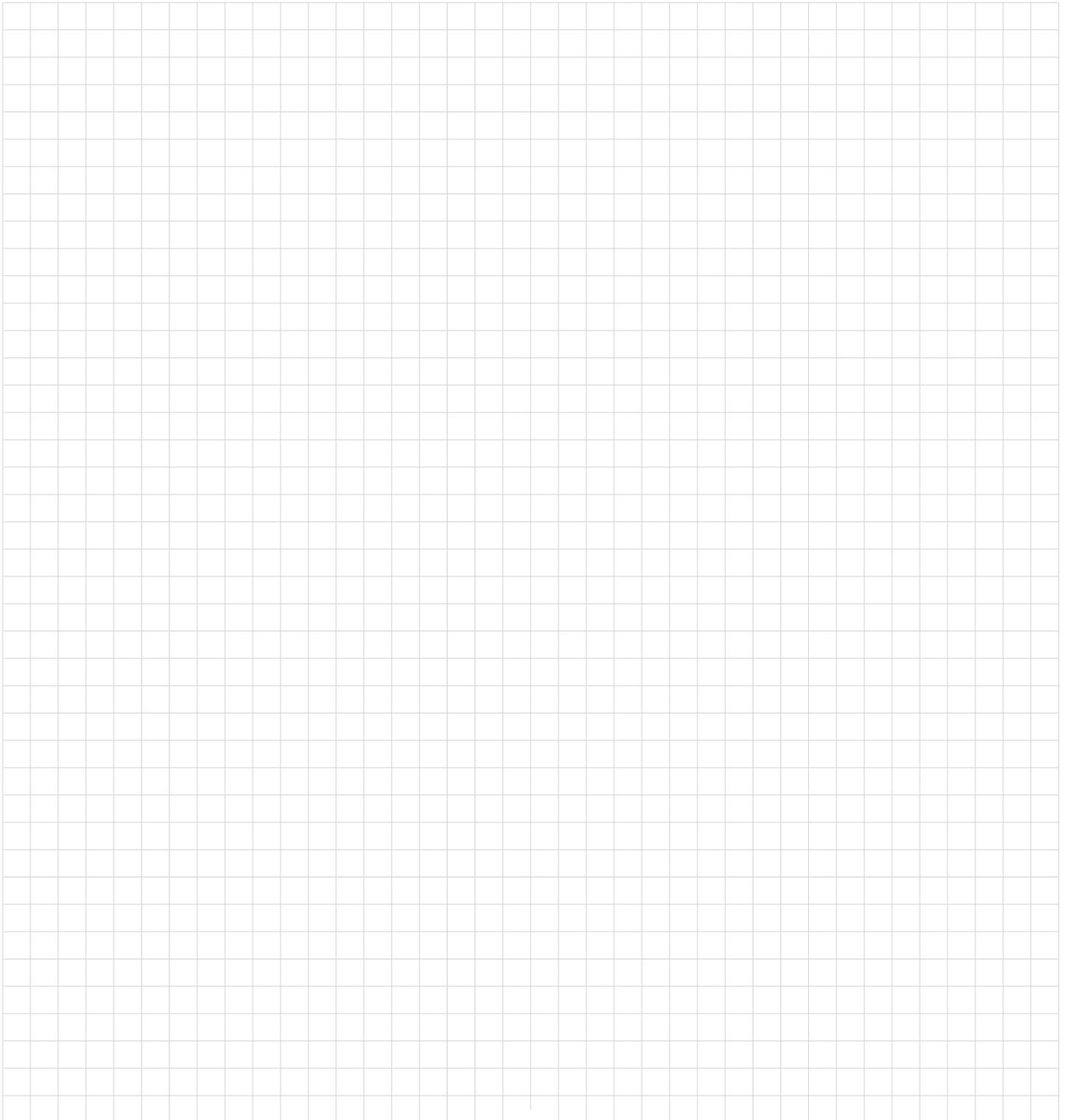
End pockets shall be installed when noted on drawings and schedules. End pockets shall be left end only, right end only or both ends. Pick one. When provided the heating element shall be shortened and vertical baffle with element support shall be provided between the end of the element and the end of the cabinet. The end pocket length shall be 6" long or 8" long. Pick one. Consult factory for custom end pocket requirements.

**zehnder**

always the  
best climate

Always the best climate for

# SMART IDEAS



The brand  
with the  
best indoor  
climate  
solutions.

## NUMBERS THAT SPEAK FOR THEMSELVES

MANUFACTURER OF THE

**1<sup>ST</sup>**

STEEL RADIATOR IN  
THE WORLD

**121**

YEARS OF INNOVATIVE TRADITION

AROUND

**3,000**

EMPLOYEES

FOUNDED IN

**1895**

REPRESENTED IN  
COUNTRIES

**19**

**1,800,000**

TONNES OF CO<sub>2</sub> SAVED SINCE 2005

## WARRANTY

Zehnder guarantees its products to be free from defects in material and workmanship for a period of one year from date of shipment from our Buffalo, New York factory.

Should there be any defects in the good(s), the purchaser should promptly notify Zehnder. Upon receipt of written consent from Zehnder, the purchaser shall return the defective good(s) to the factory for inspection with freight prepaid. If inspection shows the goods to be defective, Zehnder will at its discretion repair or replace the said item(s).

Defects arising from damage due to shipment, improper installation, negligence or misuse by others are not covered by this warranty.



### Comfortable indoor ventilation

Our comfortable indoor ventilation is energy-efficient and provides a healthy indoor climate. It promotes the well-being of the occupants and increases the value of the property.



### Heating and cooling ceiling systems

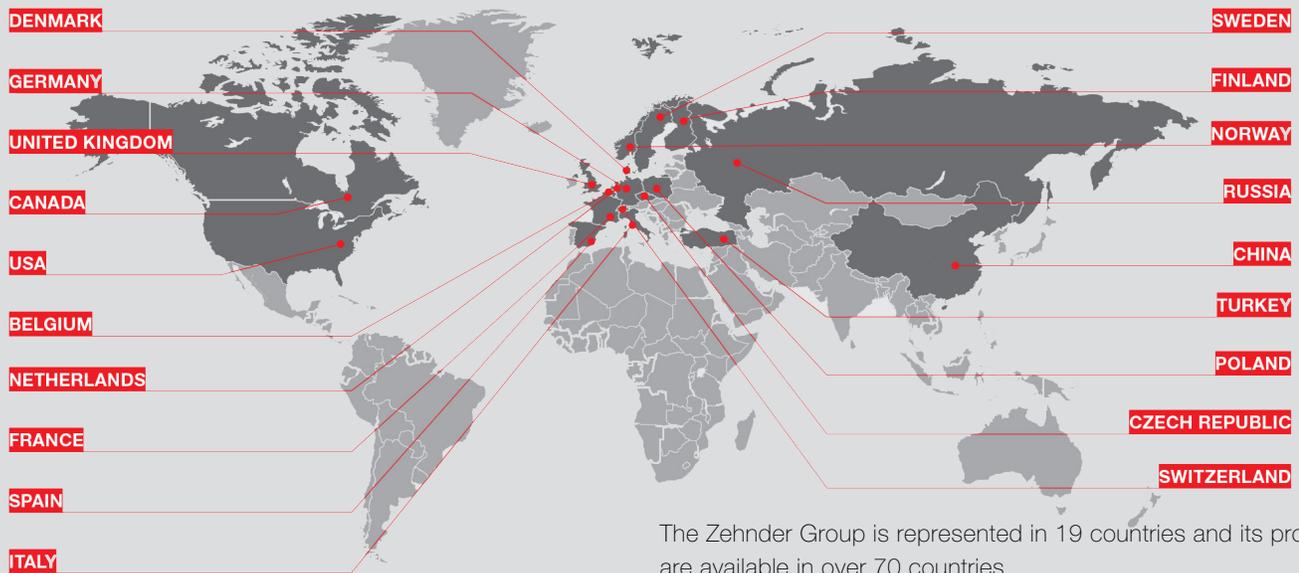
Zehnder heating and cooling ceiling systems are convenient and energy-efficient for heating and cooling. They are perfectly attuned to the relevant environment.



### Clean air solutions

Clean air solutions from Zehnder reduce the level of dust in the air, create a healthier working climate and reduce the amount of cleaning required.

## BEST CLIMATE IN THE WORLD



The Zehnder Group is represented in 19 countries and its products are available in over 70 countries

This warranty is extended only to the original purchaser from Zehnder.

**IMPORTANT: Approved submittal documentation, specific to each project, supersedes the general guidelines contained within this document.**

The Zehnder brand offers excellent indoor climate solutions within the sectors of decorative radiators, clean air solutions, comfortable indoor ventilation and heating and cooling ceiling systems.

