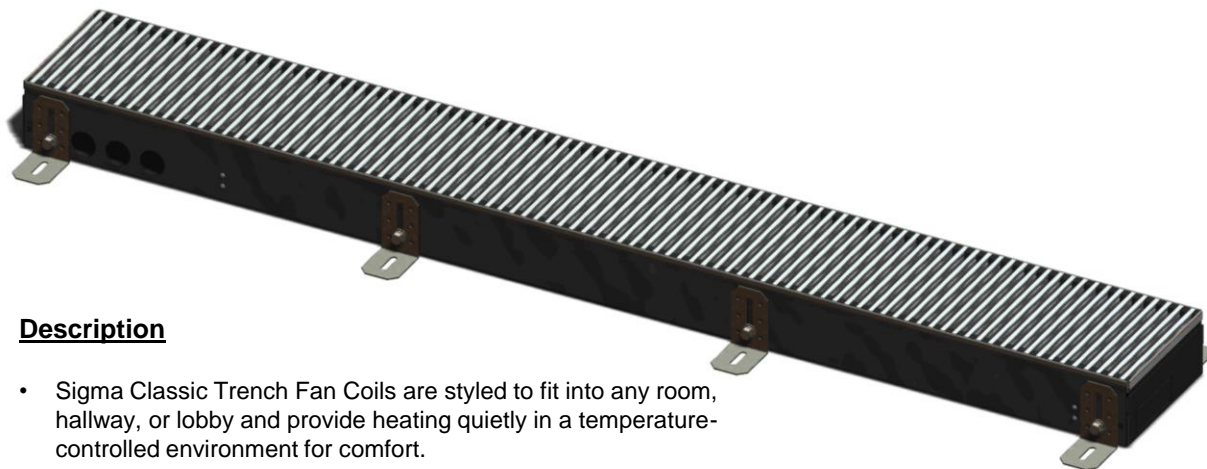




# **SIGMA Trench Fan Coil**

*Forced Air Floor Level Low Flow Hydronic Heater*

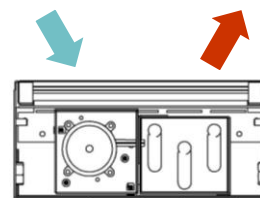


## **Description**

- Sigma Classic Trench Fan Coils are styled to fit into any room, hallway, or lobby and provide heating quietly in a temperature-controlled environment for comfort.

## **Standard Features**

- Cabinet constructed with corrosion resistant 18GA Galvanneal steel with black powder coat finish applied on the interior surfaces.
- Adjustable leveling bolts.
- Roll-out clear anodized extruded aluminum bar grille with air-foil design and rubber supports.
- Adjustable stainless steel frame for bar grille adjustment to best match finish floor level.
- 24VDC whisper quiet tangential fans with integral thermal overload protection, with 0-10VDC variable speed input, with black powder coated mesh guards.
- Heating coil constructed with Copper tubes and Aluminum fins with black E-coating with 1/2" NPT connections.



## **Optional Features**

- 120VAC – 24VDC power supply good for powering multiple units.
- Adjustable pedestals with various height range models
- Inactive filler assemblies.

## **General Overview**

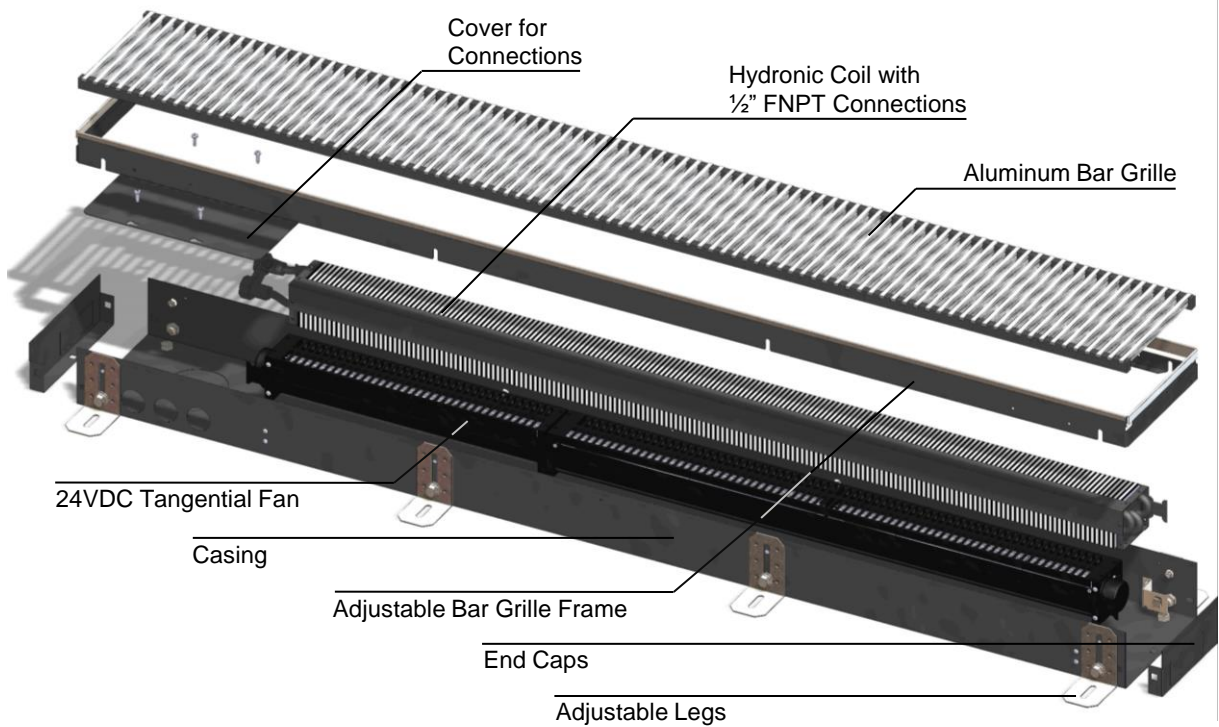
Sigma Classic Trench Fan Coils are a floor level low profile forced air convection system that provides heat from the unit typically recessed in a trench flush with the floor. The durable clear anodized aluminum bar grille allows the air to pass through quietly, providing an elegant look as well as being safe to walk on. Typical installations would have multiple units mounted in a continuous trench running along full height or partial glass windows or exterior walls to eliminate cold drafts during the heating season. Power supplies can be provided for powering multiple unit fans. Typical control systems would have a temperature controlled valve feeding multiple units for a given zone.



# **SIGMA** Trench Fan Coil

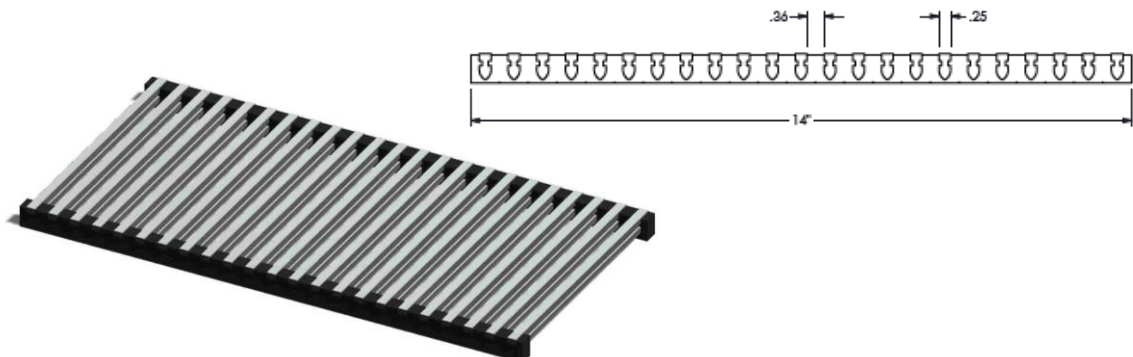
Forced Air Floor Level Low Flow Hydronic Heater

## Classic Trench Fan Coil Assembly Parts



### Bar Grille

- Aluminum clear anodized cross bars with rubber supports on each side.
- Flexible and easy to size to any length.
- Bar grille frame for fine adjustability.

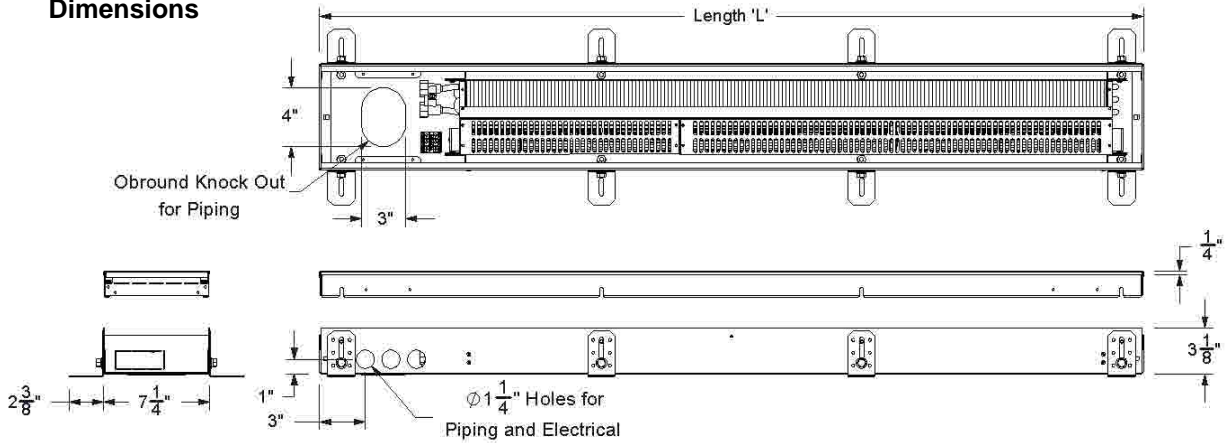




# SIGMA Trench Fan Coil

Forced Air Floor Level Low Flow Hydronic Heater

## Dimensions



| Cabinet Dimensions (in / cm) |              |                |                |                |                |
|------------------------------|--------------|----------------|----------------|----------------|----------------|
| Model                        |              | STFC-CL-HO-L28 | STFC-CL-HO-L42 | STFC-CL-HO-L56 | STFC-CL-HO-L70 |
| Length 'L'                   |              | 28 / 71        | 42 / 107       | 56 / 142       | 70 / 178       |
| Cabinet Height               |              | 3.375 / 8.6    |                |                |                |
| Adjustable Heights           | Leveling Leg | +1.75 / +4.4   |                |                |                |
|                              | Bar Grille   | +0.313 / +0.8  |                |                |                |
| Width                        |              | 7.25 / 18.4    |                |                |                |

| Technical Data          |                            |                |                |                |                |
|-------------------------|----------------------------|----------------|----------------|----------------|----------------|
| Model                   |                            | STFC-CL-HO-L28 | STFC-CL-HO-L42 | STFC-CL-HO-L56 | STFC-CL-HO-L70 |
| Air Flow<br>(CFM / LPS) | 10V                        | 46 / 22        | 94 / 44        | 141 / 67       | 188 / 89       |
|                         | 8V                         | 41 / 19        | 79 / 37        | 120 / 57       | 158 / 75       |
|                         | 6V                         | 32 / 15        | 63 / 30        | 95 / 45        | 126 / 59       |
|                         | 4V                         | 23 / 11        | 43 / 20        | 66 / 31        | 85 / 40        |
|                         | 2V                         | 14 / 7         | 24 / 11        | 38 / 18        | 48 / 22        |
| Coil                    | FPI                        | 12             |                |                |                |
|                         | Active Length<br>(in / cm) | 14.125 / 36    | 29.5 / 75      | 43.75 / 111    | 59 / 148       |
|                         | Connection                 | 1/2 FNPT       |                |                |                |
| Blower Fan              |                            | Single         | Dual           | Single + Dual  | 2X Dual        |
| EC Motor                | Rated Current<br>(A)       | 0.32           | 0.27           | 0.59           | 0.54           |
|                         | Rated Voltage<br>(VDC)     | 24             |                |                |                |
| Noise Level<br>dBA      | 10V                        | 38             | 38             | 40             | 42             |
|                         | 8V                         | 36             | 33             | 38             | 40             |
|                         | 6V                         | 30             | 29             | 32             | 34             |
|                         | 4V                         | 26             | 27             | 29             | 31             |
|                         | 2V                         | 24             | 25             | 27             | 29             |

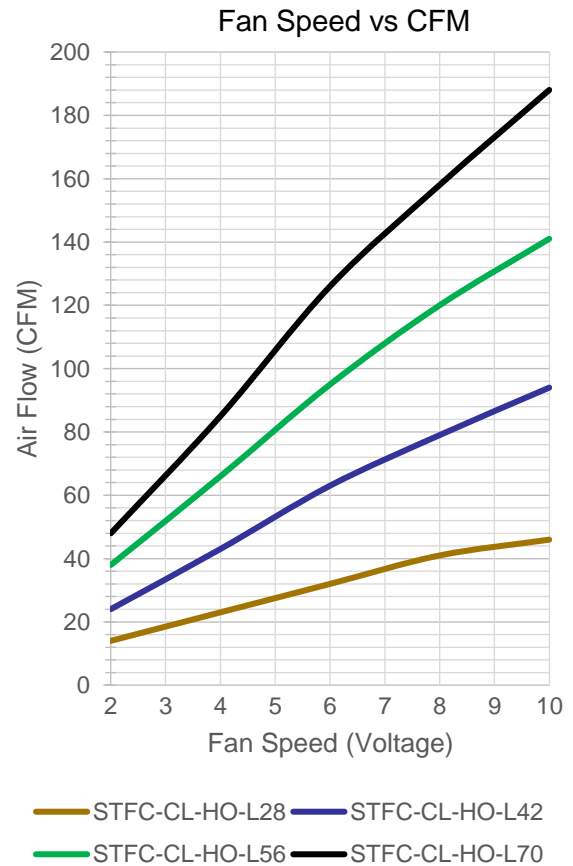
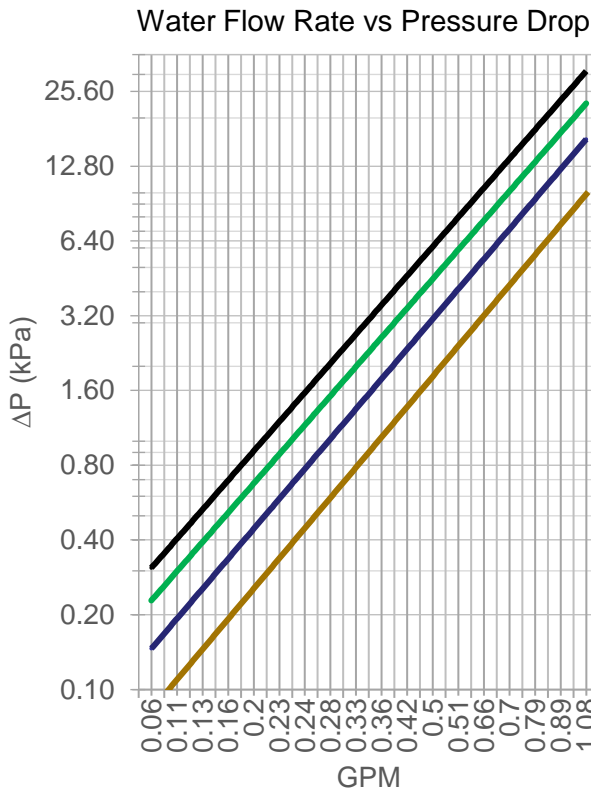


# SIGMA Trench Fan Coil

Forced Air Floor Level Low Flow Hydronic Heater

| Performance Data              |     |                |                |                |                |
|-------------------------------|-----|----------------|----------------|----------------|----------------|
| Model                         |     | STFC-CL-HO-L28 | STFC-CL-HO-L42 | STFC-CL-HO-L56 | STFC-CL-HO-L70 |
| Water Flow Rate (GPM / LPS)   |     | 0.24 / 0.015   | 0.5 / 0.032    | 0.79 / 0.05    | 1.08 / 0.068   |
| Heating Capacity (MBH / kW) * | 10V | 2.4 / 0.7      | 5 / 1.5        | 7.9 / 2.3      | 10.8 / 3.2     |
|                               | 8V  | 2 / 0.6        | 4.2 / 1.2      | 6.6 / 1.9      | 8.9 / 2.6      |
|                               | 6V  | 1.6 / 0.5      | 3.3 / 1.0      | 5.1 / 1.5      | 7 / 2.1        |
|                               | 4V  | 1.1 / 0.3      | 2.3 / 0.7      | 3.6 / 1.1      | 5 / 1.5        |
|                               | 2V  | 0.6 / 0.18     | 1.3 / 0.38     | 2.0 / 0.59     | 2.8 / 0.82     |

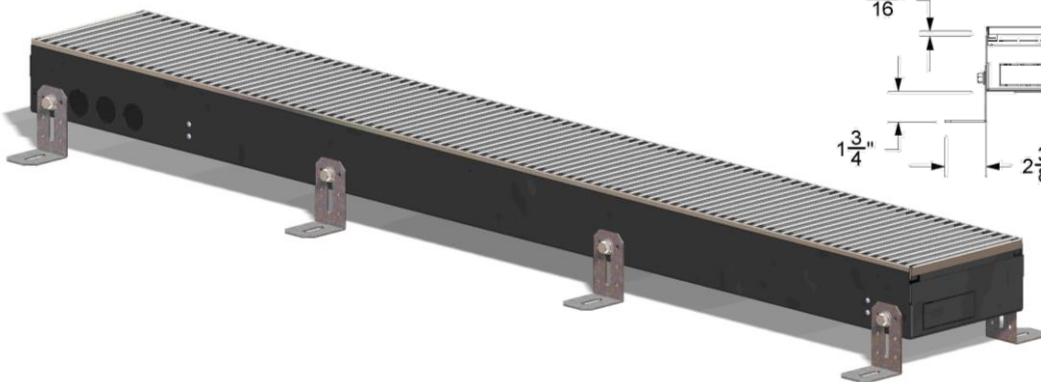
| * Conditions  |           |
|---------------|-----------|
| EAT (°F / °C) | 60 / 15.5 |
| EWT (°F / °C) | 130 / 54  |
| LWT (°F / °C) | 110 / 43  |



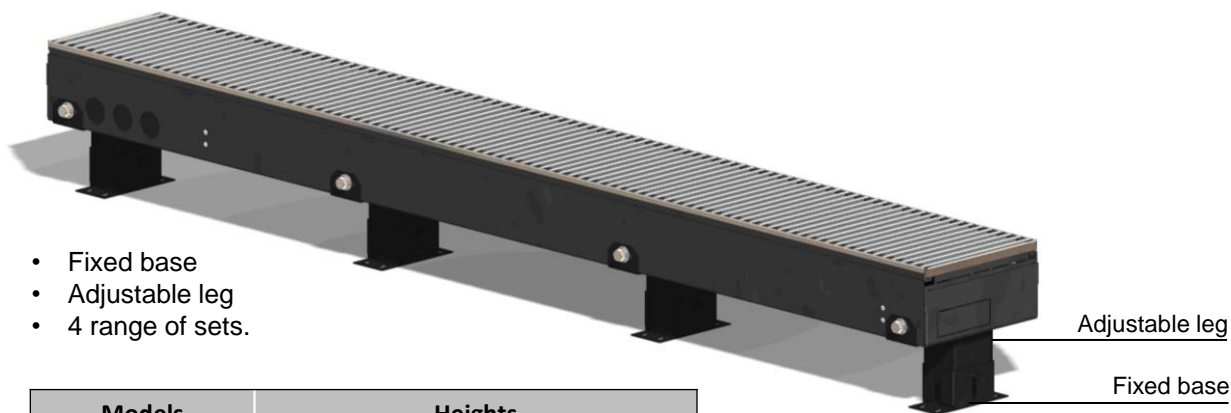
# **SIGMA Trench Fan Coil**

Forced Air Floor Level Low Flow Hydronic Heater

## Leveling Leg



## Adjustable Pedestal



- Fixed base
- Adjustable leg
- 4 range of sets.

| Models    | Heights                             |
|-----------|-------------------------------------|
| AP-W7-H01 | 2.5in – 3.375in / 6.3cm – 8.5cm     |
| AP-W7-H02 | 3.5in – 4.75in / 8.9cm – 12.0cm     |
| AP-W7-H03 | 4.875in – 8.375in / 12.4cm – 21.2cm |
| AP-W7-H04 | 8.5in – 11.75 / 21.6cm – 29.8cm     |

## Corner Bar Grille



90 Degree



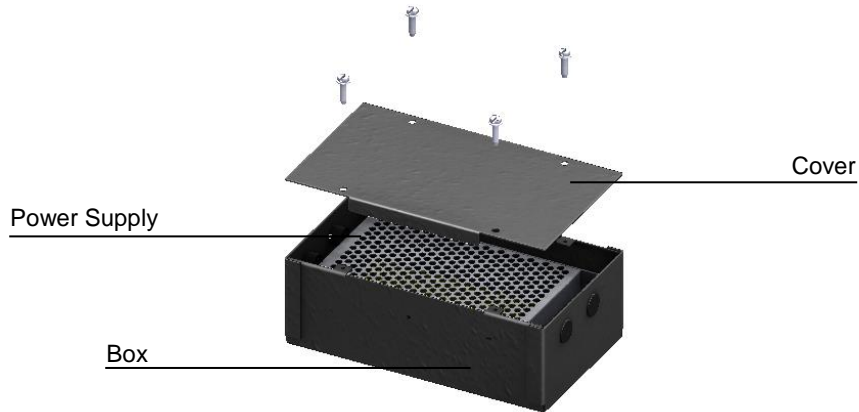
135 Degree



# SIGMA Trench Fan Coil

Forced Air Floor Level Low Flow Hydronic Heater

## 24VDC Power Supply



## Suggested Control Wiring (0-10VDC Variable Speed Control BAS option with ON/OFF contacts)

