

GLOBAL IFS®

Underfloor Air Distribution System

Perimeter Beam Terminal (PBT)



SYSTEM OVERVIEW

The Perimeter Beam Terminal (PBT) is a premium linear floor grille with integrated heating and cooling coil, designed for raised floor applications and ideal for perimeter ventilation. Using the PBT allows for conditioning of the perimeter zone without the use of an underfloor fan terminal.

Extruded aluminum bars provide crisp styling and exceptional strength. In addition to having various grille style options, these terminal units can be configured in either discrete or continuous applications.

The integrated cooling coil provides decoupled cooling at the perimeter, reducing perimeter zone dependence on plenum static and temperature reset.

Features

- Sizes range from 4 ft. to 10 ft. in 2 ft. increments
- Steel construction
- Plenum painted black
- 2 Pipe coil configuration
- Plug-and-play control board for single connection
- 5/8 in. OD pipe connections
- Stainless steel drain pan
- Removable end caps facilitate continuous or discrete grille

Energy Efficient Systems

The PBT assembly is rigorously tested and validated in an underfloor application.

The PBT series is tested in accordance with ASHRAE 70-2006.

Control enclosure is ETL certified.

Modular Design

The PBT heater is an integral component of the System.

Plug-and-play wiring allows for increased flexibility and ease of installation.

Power and control signals are delivered to each unit via a single daisy chained cable, with up to six units in a series.

Flexibility in Design

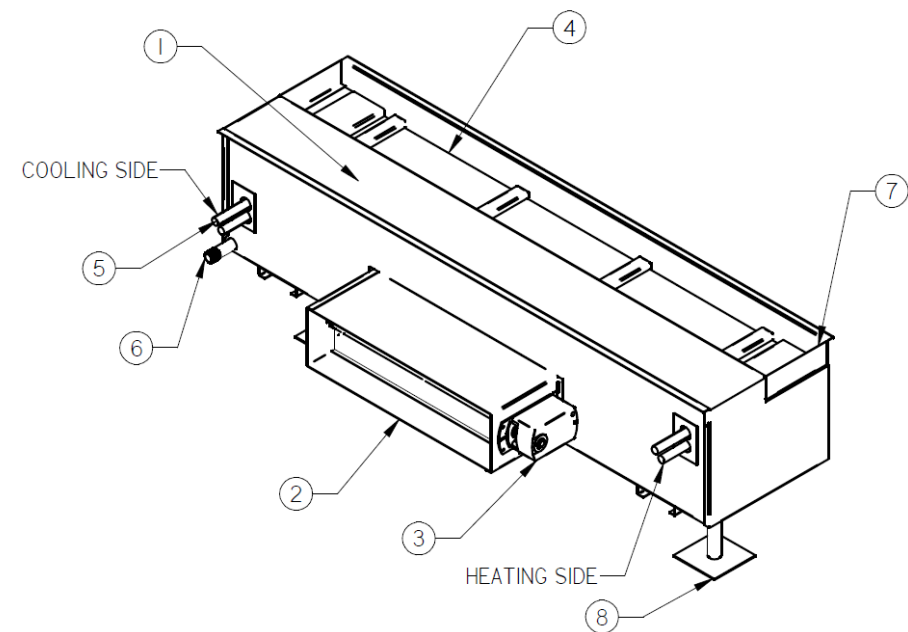
Hot water and electric coils available.

Options include various border styles, core configurations and constructions, fastening methods and directional vanes.

PRODUCT APPLICATION

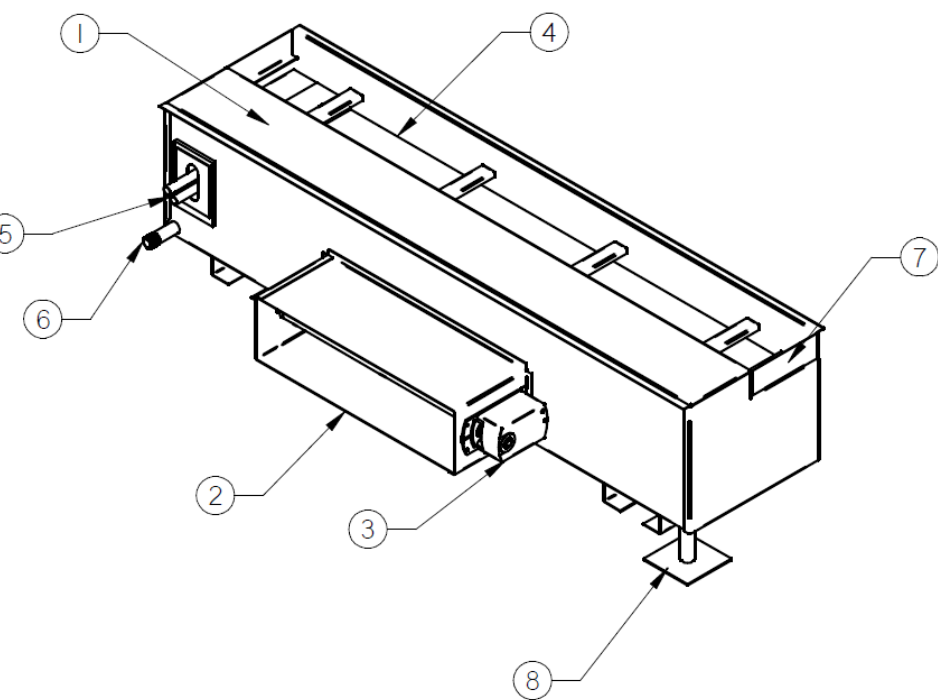
The PBT is especially suited to corridors and large windows where higher airflows and heating capacities are required. The PBT is recessed into the raised floor plenum and is designed to handle regular foot traffic. This makes them well suited for offices, lobbies, schools and universities with raised floor or trench systems along the perimeter. Due to its modular nature and ability to work with other VAV floor devices with Global IFS controllers, the PBT is also commonly used in conference rooms and offices where supplemental heat is necessary.

4-Pipe



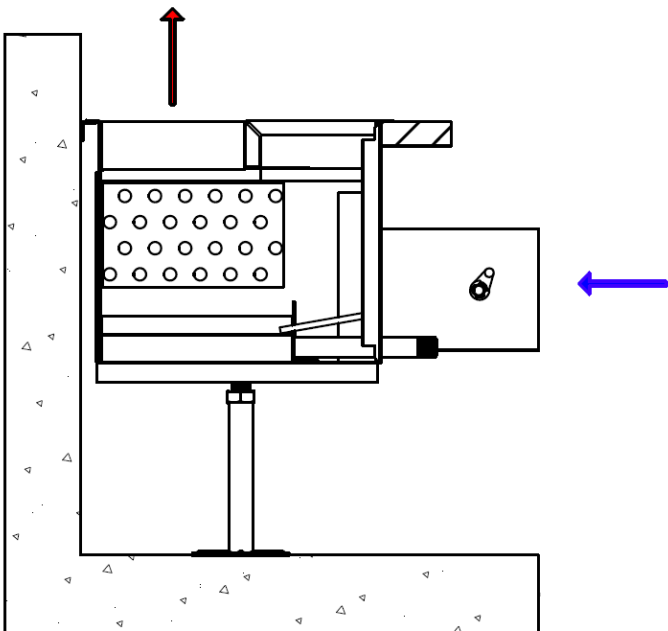
PARTS LIST	
ITEM	PART NAME
1	TOP COVER
2	MOTORIZED VAV DAMPER
3	24 VAC ACTUATOR (OPT)
4	4 PIPE WATER COIL
5	5/8" COPPER CONNECTION
6	DRAIN PIPE
7	REMOVABLE ENDCAP
8	PEDESTALS (ORDERED SEPARATELY)

2-Pipe

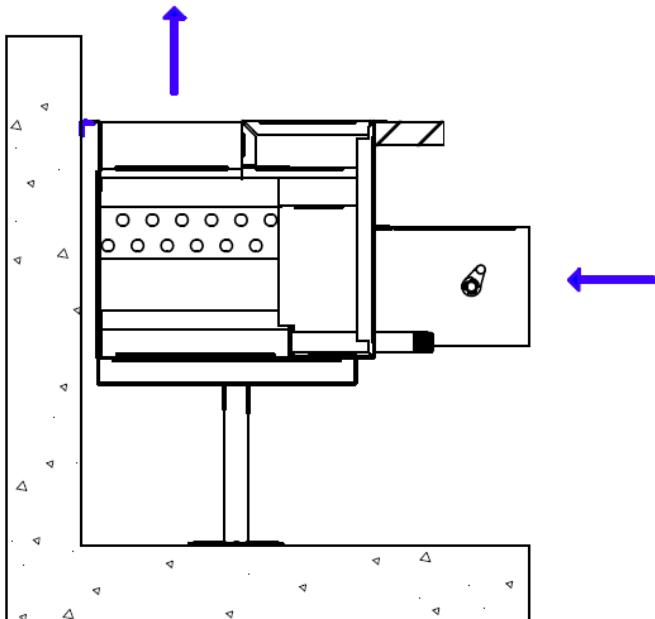


PARTS LIST	
ITEM	PART NAME
1	TOP COVER
2	MOTORIZED VAV DAMPER
3	24 VAC ACTUATOR (OPT)
4	2 PIPE WATER COIL
5	5/8" COPPER CONNECTION
6	DRAIN PIPE
7	REMOVABLE ENDCAP
8	PEDESTALS (ORDERED SEPARATELY)

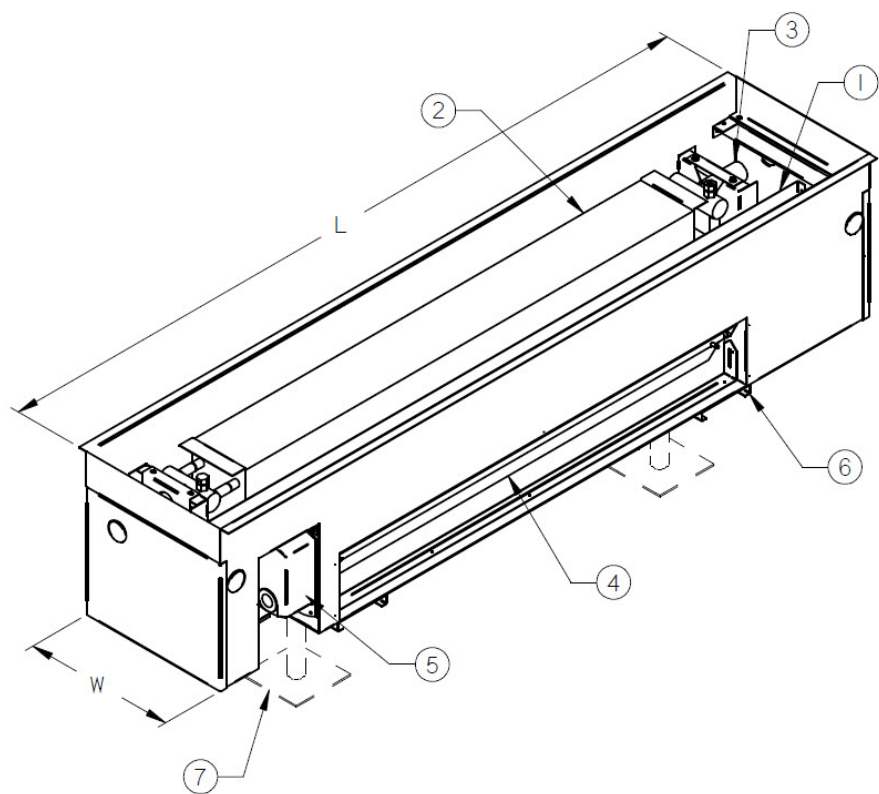
Heating Airflow



Cooling Airflow



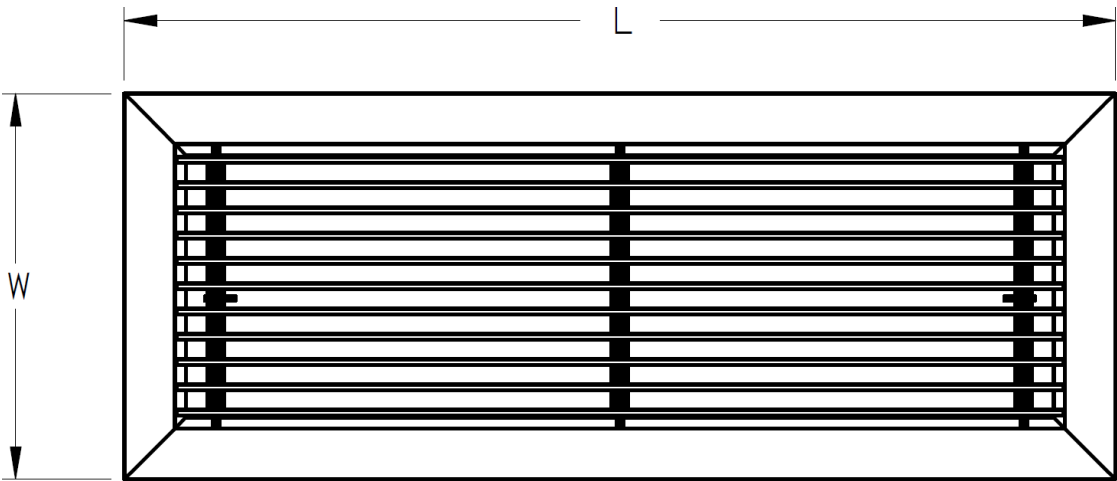
DIMENSIONAL DATA



Rough Opening (L x W)	Actual Dimensions		Pedestal Bracket Qty (Opt.)
	Length	Width	
48" x 12"	47.875" (1216mm)	11.875" (302mm)	2
72" x 12"	71.875" (1826mm)	11.875" (302mm)	3
96" x 12"	95.875" (2435mm)	11.875" (302mm)	4

DIMENSIONAL DATA

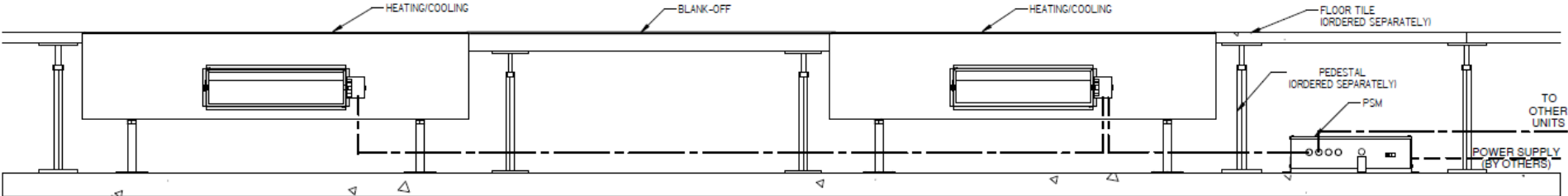
LBG Dimensions (LBG ordered separately)



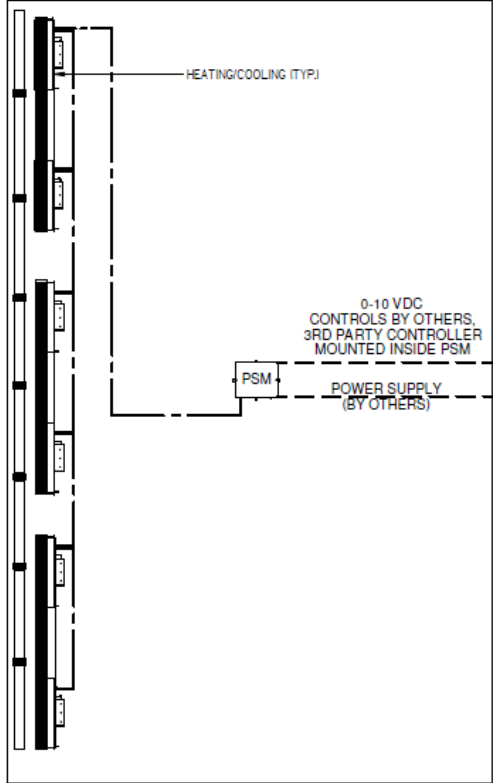
Rough Opening (L x W)	Grille Size
48" x 12" (1219 x 305mm)	47 ¾" x 5 ¾" (1213 x 146mm)
72" x 12" (1829 x 302mm)	71 ¾" x 5 ¾" (1822 x 146mm)
96" x 12" (2438 x 305mm)	95 ¾" x 5 ¾" (2432 x 146mm)

TYPICAL PERIMETER ZONE DETAIL

PERIMETER ZONE



PERIMETER ZONE PLAN VIEW



- NOTES:**
1. VARIABLE AIR VOLUME UNITS DAISY CHAINED WITH M-CABLES
 2. ALL CABLES USED IN PLENUM MUST MEET PLENUM RATING REQUIREMENTS
 3. STANDARD CABLE LENGTH OF 25 FT (15 AND 35FT CABLES AVAILABLE AS NEEDED)

- POWER SUPPLY MODULE (PSM):**
- PLUG AND PLAY BOARD FOR USE WITH ZONE CONTROLLERS BY OTHERS
 - ZONE CONTROLLERS FIELD INSTALLED BY BAS CONTRACTOR
 - CONTROL DAMPER POSITION PROPORTIONALLY BASED ON 0-10 VDC INPUT SIGNAL
 - SEPARATE SIGNALS FOR COOLING ONLY AND HEAT/COOL UNITS
 - MAX 6 UNITS PER LINE
 - 6-PIN MTA CONNECTOR, ACCEPTS COMMON OR UNIQUE 0-10 VDC INPUT SIGNAL PER CONNECTOR

- OPTIONS:**
- ☐ 50VA TRANSFORMER, 2 MTA CONNECTORS (MAX 10 DEVICES)
 - ☐ 50VA TRANSFORMER, 1 MTA CONNECTOR (MAX 10 DEVICES)

- WIRING:**
- PLACE PSM UNDER TILE NEAR CENTER OF ZONE. COORDINATE LOCATION
 - AVOID PLACING UNDER FURNITURE
 - WIRE EACH PORT TO THE CLOSEST AVAILABLE UNIT, THEN PROCEED WITH DAISY CHAINING ADDITIONAL UNITS

- PERIMETER UNIT:**
- ☐ PBT
 - ☐ PNT
 - ☐ PFT
 - ☐ HHT

- POWER SUPPLY:**
- ☐ 115V
 - ☐ 240V
 - ☐ 277V

WIRE LEGEND

- BY ELECTRICAL CONTRACTOR
- MODULAR PLUG & PLAY CABLES (BY GIFS)

