

GLOBAL IFS[®]

Underfloor Air Distribution System

Linear Ducted Plenum (LDP)



SYSTEM OVERVIEW

The Linear Ducted Plenum (LDP) is designed for a raised floor system requiring perimeter conditioning—cooling, heating or both. The LDP is suitable for light foot traffic when used in conjunction with the Linear Bar Grille (LBG) with heavy-duty construction. The LDP is the most basic plenum option for the linear bar grilles and features a side duct collar that can be used either for constant volume cooling applications or ducted to an underfloor fan box. In doing so, the fan box can provide either constant volume or variable volume cooling and heating to a cluster of floor grilles.

Features

- Drop-in installation
- Removeable end caps
- Floor supported and pedestal supported plenum styles available
- Plenum lengths from 12 inch to 48 inch
- Plenum widths from 6 inch to 10 inch
- Inlet sizes: 6 inch round, 8 inch oval, 10 inch oval
- Acoustic lining

Modular Design

The LDP is an integral part of the Global IFS System. See Perimeter Zone applications on P. 7 of this catalog.

The drop-in installation allows for increased flexibility, everything can be done from the room side and takes only seconds to install or rearrange.

Removable end-caps are supplied with each unit allowing either discrete or continuous grille appearances.

Flexibility in Design

Floor supported plenum, to be used with 1000 series LBG.

Pedestal supported plenum, to be used with 125/187 series LBG for a flangeless appearance.

Plenum's available in various lengths and widths.

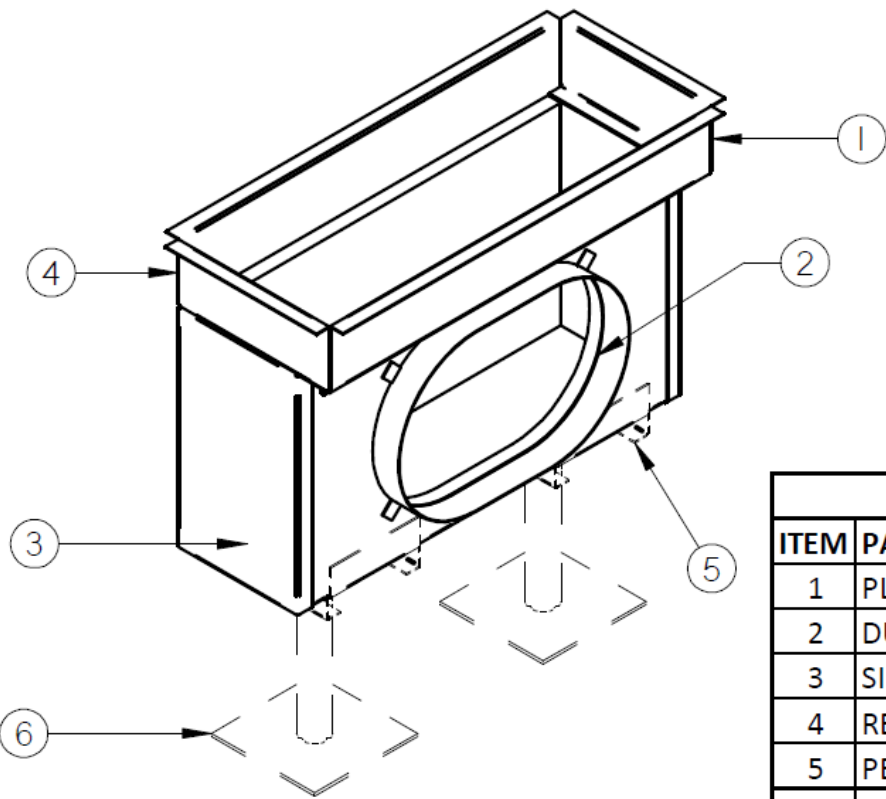
Various inlet sizes available.

PRODUCT APPLICATION

The LDP is used alongside an underfloor fan terminal to provide conditioned air to perimeter zones via a ducted inlet. The LDP can be configured for both continuous and discrete applications using removable end-caps. These plenum's are perfect for applications with high perimeter loads in either heating or cooling. These can include long runs of glass in offices, lobbies, schools and universities with raised floor systems.

Floor Tile Support-Flanged Trough

(LBG Border 1000 Style)

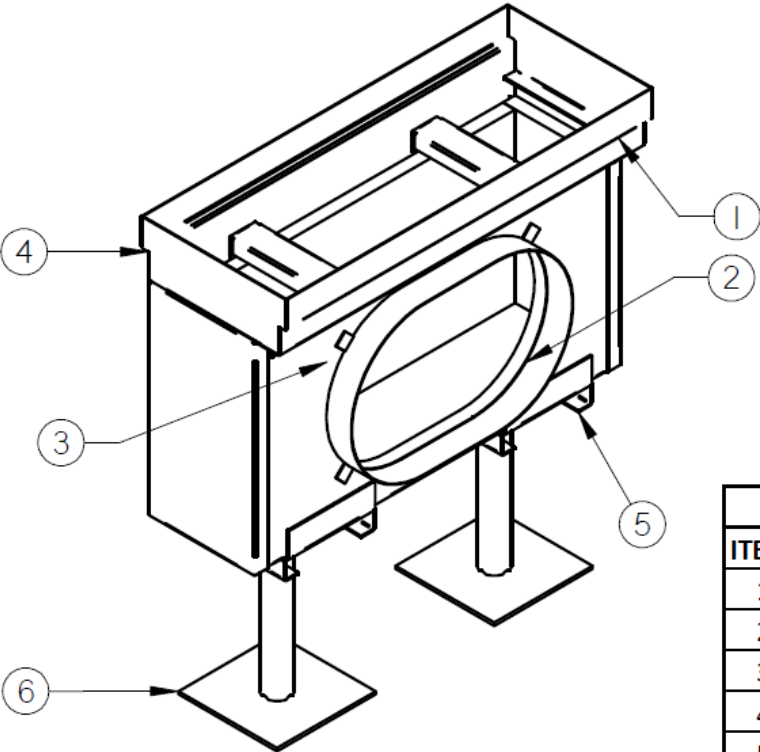


PARTS LIST	
ITEM	PART NAME
1	PLENUM
2	DUCT INLET
3	SIDE CAPS
4	REMOVABLE END CAPS
5	PEDESTAL SUPPORT BRACKET (OPT FOR FTS)
6	PEDESTAL (OPT, ORDERED SEPARATELY)

PRODUCT APPLICATION

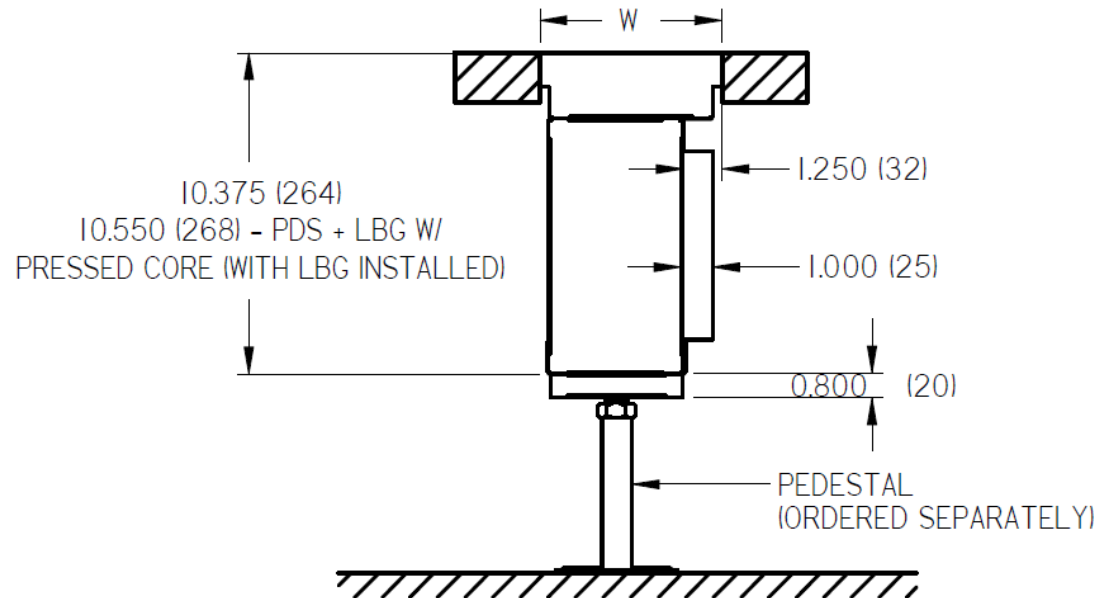
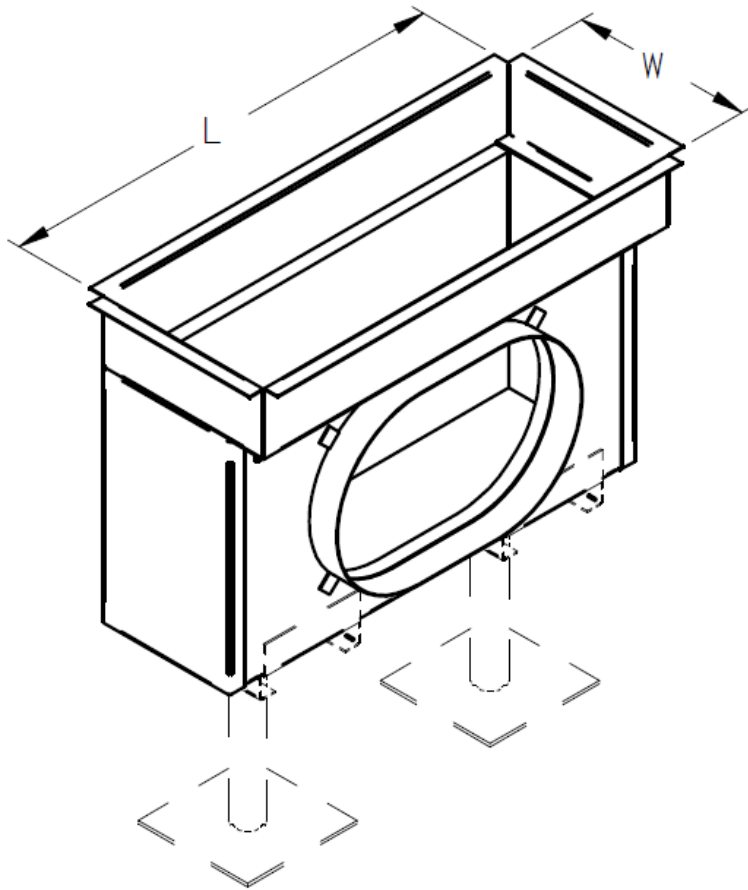
Pedestal Support-Unflanged Trough

(LBG Border 125/187 Style)



PARTS LIST	
ITEM	PART NAME
1	PLENUM
2	DUCT INLET
3	SIDE CAPS
4	REMOVABLE END CAPS
5	PEDESTAL SUPPORT BRACKET
6	PEDESTAL (ORDERED SEPARATELY)

DIMENSIONAL DATA



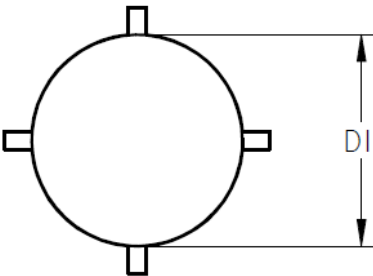
Nominal Size	Actual Dimensions	
	Minimum	Maximum
Width (W)	6" (152mm)	10" (254mm)
Length (L)	12" (305mm)	48" (1219mm)
Height	10.375" (264mm)	10.55 (268mm)

****LBG ORDERED SEPARATELY. Nominal Grille Height= 0.125"(3mm) Height**

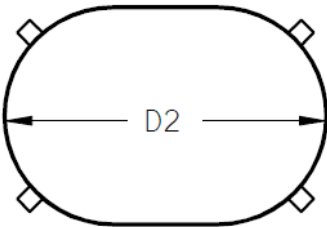
DIMENSIONAL DATA

Duct Inlet Options

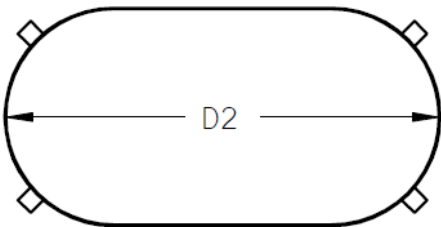
6" Round
5.875"
(149mm)



8" Oval
6" x 8.937"
(152 x 227mm)

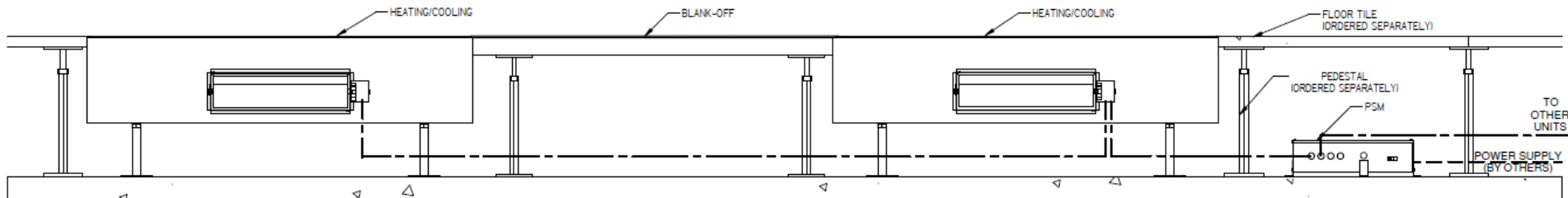


10" Oval
6" x 12.078"
(152 x 307mm)

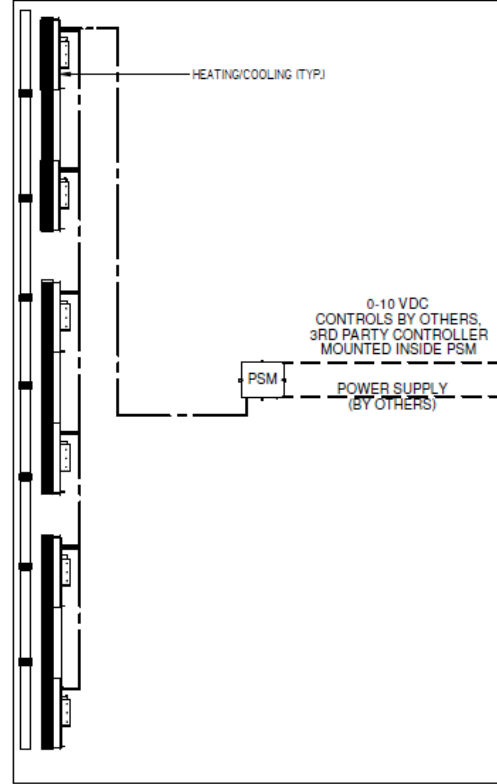


TYPICAL PERIMETER ZONE DETAIL

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)

