

## AIR BAFFLE SYSTEM

“GETS THE AIR WHERE IT’S NEEDED, AND BLOCKS IT WHERE IT’S NOT.”

PLENAFORM® is a flexible, snap together, airflow baffle system which helps to solve dynamic thermal imbalances in Data Centres.

PLENAFORM® is scored both vertically and horizontally so sections can be removed or added onto to meet any height or width requirement. All angles of bend radius may be attained, including inside and outside mounting to raised floor pedestals.

Continuous punch out hole pattern allows attachment to any style raised floor pedestal at any height or width location with cable ties.

PLENAFORM® is die cut from a flame retardant polypropylene compound that is inert, non-conductive, and non-hygroscopic.

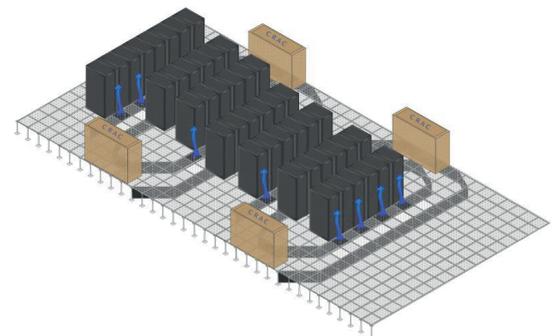
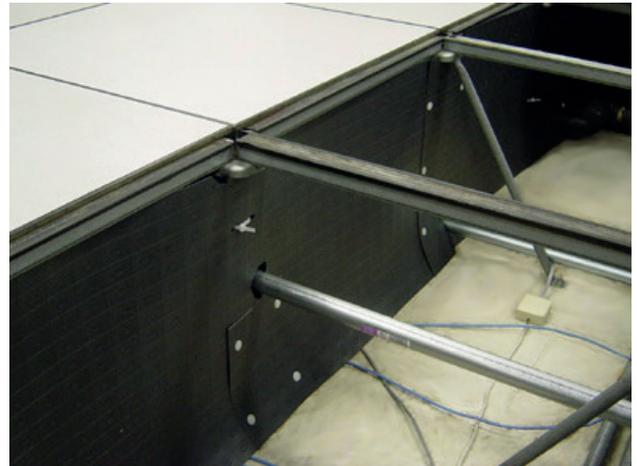
Today’s high density server farms, are requiring more power and cooling than ever before. The Data Centre evolution of an all air cooled environment has become a real challenge for facility managers to deal with these heat related issues, cooling inefficiencies and increased server densities. The challenge facility managers face is how to get the air that is beneath a raised floor through the perforated tiles and into the front intakes of rack mounted vertically integrated server housings that are producing the heat.

PLENAFORM® is a passive and contributory holistic solution that can be easily installed as an effective “VUF” or vertical under floor partitioning system, to direct airflow within the plenum space. PLENAFORM® directs the source of the cold air from the CRAC units to where the air is or is not needed.

Velocity is the time rate of motion, therefore velocity pressure is the pressure caused by air in motion. When air from a CRAC unit is forced through a partitioned airflow space, static pressure is created. Without dedicated partitioning, as the air moves further away from a CRAC unit, the air velocity decreases. To maintain velocity pressure to particular ‘hot zones’, PLENAFORM® helps to maintain the static pressure further away from a CRAC unit and is a simple solution to cool thermal hot spots in information technology equipment centres.

It is of utmost importance for today’s Data Centre Facility Manager and design engineer to develop a master plan when laying out equipment in relationship to the CRAC placements. The ideal objective should be to create un-obstructed dedicated airflow paths to the equipment. Open floor penetrations must also be sealed to manage airflow more effectively.

## PRODUCT OVERVIEW



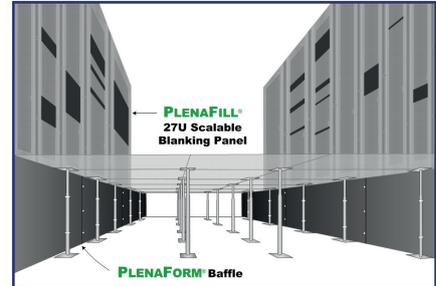
## Features & Benefits

- Easy to Install - Right Out of the Box!
- Control and Balance Data Centre Airflow.
- Separate Hot Aisles from Cold Aisles.
- No Installation Tools Required.
- On-Site Configurable (Width and Height).
- Fits ANY Raised Floor Pedestal.
- Reduces Energy Consumption and Operating Costs.
- An Inert, Non-Conductive and Non-Hygroscopic Material.
- Flammability rating of UL V-0 per UL94.
- RoHS and WEEE Compliant.
- An Energy Saving and Thermal Tuning Tool.

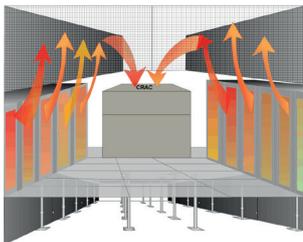
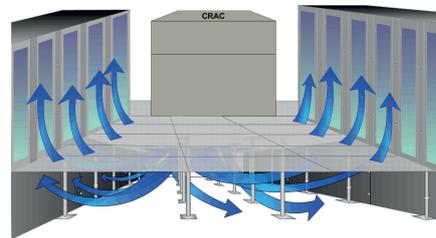
Creating dedicated "hot and cold aisles" or "rack and row" Data Centre equipment placement configurations with PLENAFORM® increases the static pressure, delivering a higher volume of cooling through perforated tiles and at a further distance from the CRAC units. The Venturi effect is attained, whereby more air pressure rises in the dedicated cold aisles. By installing PLENAFORM® under floor partitions, airflow distribution may be directed more efficiently from the CRAC units for maximum equipment air cooling or air blocking requirements in a data centre raised floor plenum space.

Installing PLENAFORM® to direct airflow from the "source of the air" plenum level, a Data Centre Manager can better achieve a thermally tuned Data Centre. Integrating PLENAFORM® into the Data Centre design helps to mitigate thermally associated risk to equipment hardware.

The key word here is high density computing and PLENAFORM® helps to solve thermal imbalances in your Data Centre environment simply and inexpensively!



PLENAFORM® SYSTEMS "Keeping Data Centers Simply Cool"™



PLENAFORM® can also be installed in the ceiling plenum. Create dedicated return air paths in the ceiling plenum for more efficient heat return from the hot aisles to the CRAC unit intake heads.

You can even make CRAC extension intake heads with PLENAFORM® to the drop ceiling.

## Ordering Information

<b>Part Number:</b>	49-PF-2448-12
<b>Description:</b>	12 PLENAFORM® Baffles 88 cable ties and 44 rivets
<b>Dimensions:</b>	24"h x 48"w x .040"d 610mm x 1219mm x 1mm
<b>Weight (per sheet):</b>	Approx. 1.75lbs (0.79Kg)
<b>Shipping Weight: (Pack of 12 sheets)</b>	25lbs (11.4Kgs)



**49-PF-RR**  
Pack of 44 Snap Rivets



**49-PF-TIE**  
Pack of 88 Cable Ties



**49-PF-Combo**  
44 Snap Rivets &  
88 Cable Ties



**49-PF-111-4**  
Rivet Screwdriver



**49-PF-PP**  
PlenaPop Hole Puncher