E-Mail Newsletter

January 2005 Volume 1, Number 1

OMNI-LT Low Temperature Diffuser

Perforated & Drop face are also available

RILT Linear Low Temperature Diffuser is shown.

HILT Linear diffuser is also available in 2' & 4' lengths

HCRD down flow diffuser is available in 2' & 4' lengths

- Thermal Core technology was developed by applying the latest scientific knowledge of air jet behavior. Computerized mathematical modeling was used to develop prototype models that were then tested in the most modern laboratories.
- One of the most important characteristics of this diffuser is it's ability to deliver low temperature air directly into the conditioned space.
- Although the diffusers were designed around cold air distribution, their efficiency and performance have been proven in temperature ranges of 35 to 140 degrees F.
- They will provide an ADPI (Air Performance Index) of 100 meaning perfect mixing if properly applied satisfying ASHRAE 62-1999 Indoor Air Quality Standard
- The 62-1999 Standard Calls for increased ventilation rates if perfect mixing is not achieved. Conventional diffusers do not achieve perfect mixing

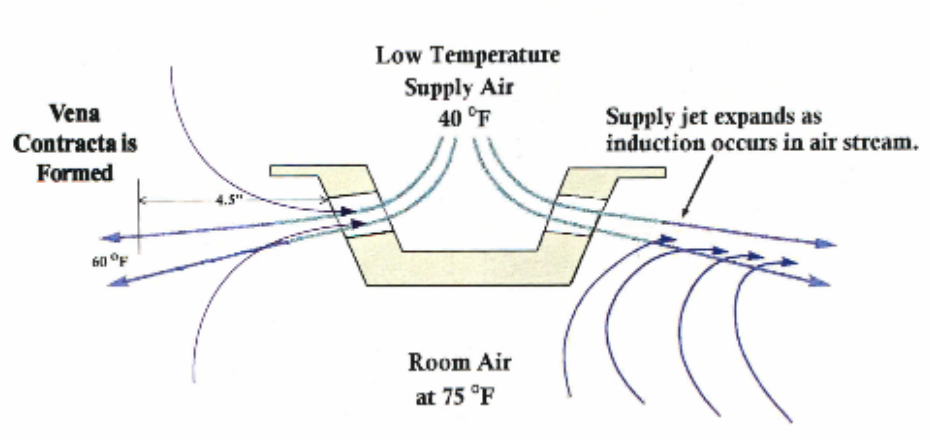
Vena Contracta is formed pulling room air back into the jet nozzle.

Induction continues throughout its throw due to the high mass and velocity of the individual jets.

These two principles account for the very high induction ratio This picture illustrates this induction.

Freeman Hospital Joplin, MO enjoys the benefits of having Thermal Core Diffusers

Thermal-imaging was used to study the exact air distribution envelope, the interaction of the primary air stream with the room ambient air, and the resultant thermal gradients.



- Highest Induction Ratio in the industry at : 37:1 (Four to five times higher than high performance conventional diffusers).
- The diffusers will not dump.
- The diffusers avoid condensation formation
- All data is certified by Energistics – a division of Cerami Associates Independent Laboratory and the Titus Laboratory

(Springfield, MO)
(St, Louis, MO)

St. Johns Hospital design team (C&R Health Care Planning St, Louis, MO) is utilizing low temperature air systems and has successfully found that Thermal Core diffusers are a key component for delivering this air directly to the space.

HCRH Horizontal Low Temperature Diffuser shown

Project: Waynesville High School Waynesville, MO

Engineer: Malone, Finkle, Eckhardt & Collins

Springfield, MO

This school has a unique Triple Deck Multi-Zone DX system known as a (ThermoZone System) which provides supply air as low as 40 F if needed in the primary zones.

- **We believe with creative thought, up to date tools and experience an ideal system solution can be determined for each application.**
- **Thermal Core diffusers are one of the most important pieces of the system it allows lower temperature air to be delivered directly into the space.**
- **They will provide an ADPI (Air Performance Index) of 100 meaning perfect mixing if properly applied satisfying ASHRAE 62-1999 Indoor Air Quality Standard**
- **The 62-1999 Standard Calls for increased ventilation rates if perfect mixing is not achieved. Conventional diffusers do not achieve perfect mixing**

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