Other Airflow Management Products

Improved Air Sealing Performance

Bypass airflow can have a significant impact on the cooling capacity and efficiency of any data center. Part of best practice design for raised floor data centers includes the elimination of by-pass air. By-pass air is any air delivered into the data center that is not consumed by the equipment and exhausted as waste heat. Some of the easiest and most commonly used products to reduce by-pass air include the use of containment systems, blanking panels, angular or directional air delivery, and air sealing grommets for all wire and cable penetrations in the floor.

KoldLok

Tate offers the full range of surface mount and flush mount KoldLok grommets in addition to the co-branded Tate KOLDLOK air sealing grommet. Tate KOLDLOK is a 8.75"x11" (22.2cm x 27.9cm) injection molded ABS plastic grommet designed to mount in a raised floor panel. Supplied with an optional rigid lid capable of supporting up to 250lbs (113kg) this grommet is designed to be installed at the same time as the raised floor. Tate has identified a standard cut-out location that works with any rack to ensure that the cutout is always in the proper location inside the back door.

HotLok

HotLok products consisting of blanking panels and rack mounted grommets reduce high intake air temperatures by preventing hot exhaust air from circulating to the front of the IT cabinets. This improves IT equipment reliability and supports cooling infrastructure optimization.

AisleLok

AisleLok products such as under rack panels and expandable air sealing tape are engineered to seal a variety of openings in the aisle, blocking bypass airflow and maximizing cooling performance. Properly managed airflow in the aisle increases efficiency, capacity and reliability.

KoldLok Surface Mount

Tate KoldLok w/ Optional Lid

HotLok Snap-In Blanking Panels

AisleLok Under Rack Panel

DATA CENTER AIRFLOW MANAGEMENT SOLUTIONS

Other Airflow Management Products

Rack Shield

The Tate Rack Shield isolation system is designed to capture subfloor supply and dedicate it to the IT hardware thermal load. The Rack Shield ensures that cold supply air will not spill from rack-to-rack across a row or around the ends.

Made with high-grade aluminum track and fire resistant clear panels on smooth rollers the Rack Shield can be created in several sizes depending on the area of isolation.


Rack Shield

CRAC Hood

The CRAC Hood extension is a ceiling return duct that connects the top of the CRAC unit directly to a ceiling return plenum greatly increasing cooling capacity and efficiency by capturing hot exhaust air and channeling it directly into the CRAC unit. The CRAC Hood will eliminate hot and cold air mixture helping to maintain the proper Delta T. It will also balance the thermal load by drawing air from one common source.

The Tate CRAC Hood is a recommended extension for both cold and hot aisle containment because it combines cost-effectiveness and ease of installation. Over the long-term the CRAC Hood will also reduce "total cost of ownership" by improving the efficience of the CRAC unit. The sturdy pre-painted metal frame is also equipped with a door system for AC units with pre-filters.
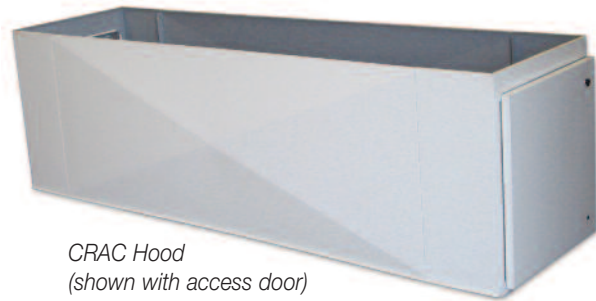
CRAC Hood
(shown with access door)

In-Floor Velocity Adjustor

The Velocity Adjustor™ is designed to slow subfloor air velocity so as to increase pressure. This simple scientific solution will balance subfloor pressure, enabling supply air to be delivered at any place in the data center. The Velocity Adjustor installs between subfloor stations. Careful placement is a must so as to properly affect the air stream and to ensure product longevity.
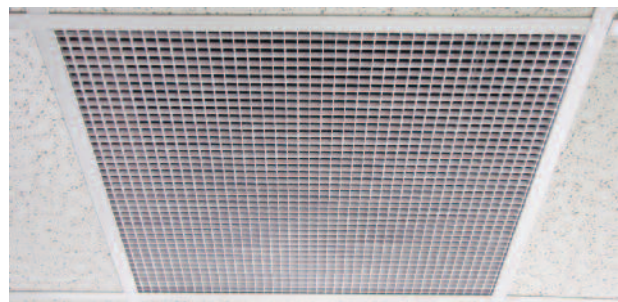
The Velocity Adjustor is made of Sandel "The fire fighting fabric". This completely non-flammable cover ensures that the Velocity Adjustor is completely safe to use in a supply plenum and comes in three sizes that accommodate most common subfloor height.

In-Floor Velocity Adjustor

In-Ceiling Return Grille

Tate's high volume ceiling return grille directs large volumes of hot exhaust air into the drop ceiling plenum enabling the hot air to exit freely minimizing mixing with the cooling air flow.

In-Ceiling Return Grille

Tate®