

Cold Aisle Containment System: DL Custom



DL Custom has dedicated design, engineering, manufacturing, professional services team that are hard at work delivering customized pre-configured, pre-integrated, or completely new custom cabinets, all with decreased lead time and cost and increased reliability and quality, allowing data centers to streamline customization and avoid costly, unsafe field modifications.



Data centers are mission-critical facilities that require constant operation because they are at the core of the customer-business relationship for industries such as finance, healthcare, and telecommunications.

Choosing the right cold aisle containment system can save 60% in annual cooling costs and reduce the amount of energy consumed. Increasing energy costs and the ramping up of energy consumption has forced many professionals in the data center industry to reconsider hot air versus cold air scenarios about containment. The separation of hot and cold air is one of the most promising energy efficiency measures available to new and legacy data centers today.

A cold-aisle containment system (CACS) controls the cold aisle airflow (cool air) which keeps the data center from becoming a hot-air chamber. Although this method is also very effective, it is important to note that this containment method requires the rows of server racks to be aligned in a consistent cold-aisle / hot-aisle arrangement.

Since you don't always have control over the building your data center is located, this may be your only option. While setting up a cold-aisle may be more expensive in the short term, it will pay off in energy savings over the life of the center. There are more cost-effective ways being designed to deal with the issues of raised floors and high ceilings, such as ceiling panels and end doors that mount to the adjoining racks to help the cold air from mixing with the warm expelled air circulating within the room.

Benefits of DL Custom CACS:

- DL Custom CACS works not only with DL Custom cabinets but any third part cabinets and racks
- DL Custom CACS application is easy to install and does not require drilling
- DL Custom CACS application is modular and can be customized to different configuration and hence flexibility.
- DL Custom CACS application provides Cooling Cost Reduction and high ROI sometimes even up to 67%
- DLC'S application ensures reduced intake temperatures increasing equipment lifespan
- Sliding or bifold doors complete the installation trapping the cold conditioned air inside the Enclosure. Free standing panels infill the gaps in the racks and form removable sections for future installations.

Conclusion:

A well-sealed cold aisle containment system not only offers a better thermal environment for the IT equipment but can also provide a longer ride-through time in case of cooling failure. DL Custom Cold Aisle Containment System offers almost five times longer ride-through time for the IT equipment than without it. It is expected that the IT equipment's ability to pull the air through the cooling unit increases with the proper sealing of the containment system.