Aisle Containment Solutions

Siemon Aisle Containment Solutions are available in cold aisle containment (CAC) and hot aisle containment (HAC) with roof or vertical panels that can be easily attached to Siemon floor standing cabinets in a pod configuration to improve efficiency and expand the capacity of a data center. By either containing cold air supply to provide targeted cooling to active equipment and isolating it from the rest of the room (CAC), or by guiding hot air exhaust for efficient return to cooling systems (HAC), Siemon Aisle Containment Solutions prevent the mixing of hot and cold air in the data center. Siemon’s CAC solution is also available as an active containment solution. This allows higher temperature return air to improve the efficiency of existing cooling systems and reduce energy costs while preventing overprovisioning of air conditioning units. These passive containment solutions also cost effectively increase capacity by allowing greater heat densities without costly supplemental cooling. Custom size panels, door kits and several accessories are available to meet a wide variety of spaces and environments, including wall mount brackets for installation of a single cabinet row against a wall and riser brackets for greater headroom when using 42U cabinets.

HAC Standing Top and End Panels
Sized to match width of cabinet and height to suspended ceiling, these panels guide hot air to overhead air return.

CAC Roof Panels
These panels form a horizontal roof across the aisle to contain cold air for targeted cooling to active equipment.

Angled Support Brackets
Provide lateral support to vertically mounted HAC standing top panels

Self-closing or Manual Doors
Used to close off the end of the aisle with an integral frame design for smooth operation

Made to Order
Custom size CAC roof and HAC standing top and end panels with polycarbonate inserts

Easy to Retrofit
Easily attaches to cabinets to leverage existing perimeter cooling and hot aisle/cold aisle arrangement

Thermal Insulation
Robust seals and self-closing or manual doors ensure optimal isolation between hot and cold air
Active Aisle Containment Solutions

Siemon’s cold aisle containment (CAC) solution is also available in an active solution that features automatically opening roof panels to facilitate access for sprinkler systems and other fire suppression systems in the event of a fire. Offering compliance to NFPA 75 standards for fire protection of information technology equipment, Siemon Active Cold Aisle Containment panels incorporate electromagnets to control the position of the panels. These magnets utilize 24VDC power and are compatible with most standard DC power supplies deployed in the data center environment. The power supply connects to the facility fire alarm control panel or smoke sensor output to ensure that the panels automatically open during an alarm event. The active roof panels are compatible with all Siemon floor standing cabinets, with custom sizes and technical support available upon request.

Electromagnets
Powered via 24VDC allow panels to open in the event of an alarm*

*Contact Siemon for recommended controller option.

<table>
<thead>
<tr>
<th>Panels Closed</th>
<th>Panels Opened</th>
<th>Compatibility</th>
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<tbody>
<tr>
<td>Panels stay closed and sealed to maintain cold aisle in normal operation</td>
<td>Facilitates access to room sprinkler systems in the event of a fire</td>
<td>Compatible with all Siemon standing cabinets with custom sizes available</td>
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Access
Open panels enable access to room fire suppression systems to meet code requirements
Ordering Information

Siemon hot and cold aisle containment systems are configured via a collaborative design process with Siemon Data Center Design Services based on the specific floor plan, clearances, cabinet sizes and door requirements. Depending on the type of aisle containment system, Siemon provides a unique single part number and price for the bill of materials required to configure the system, which can include any of the following components:

- Single or double self-closing or manual doors
- Vertical panels and angle support brackets
- Cold aisle containment roof panels
- Riser brackets to raise roof panels for increased clearance
- Active containment roof panels and end brackets
- Filler panels for spaces where cabinets are not present
- Wall-mount brackets for single-row deployments
- Accessory items such as expanding tape to seal gaps

Siemon Data Center Design Services can configure aisle containment systems to meet any size and type of data center and cooling strategy, providing a bespoke solution under one part number that can be reordered as the data center grows and expands. Please contact your regional Siemon Data Center Design Services for more information and to configure your custom hot or cold aisle containment solution.

Because we continuously improve our products, Siemon reserves the right to change specifications and availability without prior notice.