Polargy PolarPlexTM

P2 Sliding Door Specification

**PART 1 - GENERAL**

* 1. SUMMARY

1. This specification is for the PolarPlex™P2 Sliding Door.  
   1. SYSTEM DESCRIPTION
2. The Sliding Door is designed for data center aisle containment, either hot or cold. The door consists of a sheet metal frame and sliding door leafs, either single or double. The frame is supported with a direct attachment to floor and laterally supported with a header bracket directly to equipment racks or an alternate assembly.
   1. DESIGN REQUIREMENTS
3. Provide a sliding door at the end of each HACS/CACS. The sliding door should be a dual door, center opening or single sided with auto-close and hold open features. Doors shall also be adjustable in height and lite panel inserts shall be field replaceable.
   1. WARRANTY
4. The P2 Sliding Door shall be warranted against defects in materials and workmanship for a one-year period for the first 12 months after initial start-up or 18 months after ship date, whichever occurs first.

**PART 2 – PRODUCTS**

2.1 MANUFACTURERS

1. Basis of Design: Product specified is the PolarPlexTM P2 Sliding Door as manufactured by Polargy, Inc.
2. Substitutions: Proposed substitutions must be approved prior to bidding.

2.2 SLIDING DOORS

1. Aisle containment sliding doors shall have automatic closing.
2. Center opening aisle end containment door models shall have an aisle coverage width of 54” in order to accommodate variance and rack set backs on 4’ aisles.
3. Single aisle end containment door models shall have an aisle coverage width of 37.5” in order to accommodate variance and rack set backs on 36” aisles.
4. Sliding door shall have no threshold.
5. Sliding door shall close smoothly and quietly.
6. Sliding doors shall have a mechanism for holding the door in an open position; the mechanism shall be removable without tools in order to accommodate sites where operators prefer to make this feature temporary.
7. Sliding doors shall be adjustable in height to easily accommodate various height equipment racks and shall have an adjustment range to accommodate rack heights between 42U and 50U.
8. Center opening doors shall have a side extender panel option to cover 6’ and 8’ aisles. Side extender panels shall also be adjustable in height from 42U to 50U.
9. Sliding Doors shall have clear, twin-wall polycarbonate windows comprising over 75% of each door opening. Twinwall material shall be Class A fire-rated material.
10. Twin-wall panel shall be field replaceable in order to easily swap out damaged inserts with a replacement time of less than 20 minutes to minimize disruption to containment.
11. There shall be no brush gaskets at the bottom of the door to allow for pressure relief or make up air when airflow falls out of balance.

**PART 3 – EXECUTION**

3.1 PREPARATION

1. Examine sub-surfaces to receive work.
2. Cabinets to which doors are attached should be level and square and properly secured to the floor.
3. Any discrepancies need to be corrected prior to installation of the door.

3.2 INSTALLATION

1. Install aisle containment doors using the manufacturer’s installation instructions.
2. Doors must be secured to the frame of the equipment cabinets (or alternative structure) and to the floor.
3. Level and align doorframe prior to permanently fastening.
4. Installers shall provide appropriate floor installation hardware as defined by local code or the authority having jurisdiction (AHJ). Additional installation brackets may be required.

3.3 ADJUSTING AND CLEANING

1. Adjust doors for smooth operation, and, when closed, the door shall be centered on the aisle ends.
2. Clean doors with mild soap and water solution.

END OF SECTION