

DATA CENTER | ELITE SERIES

POLAR CAP 2

NFPA Compliant Retractable Roof System

The patented Subzero Engineering Polar Cap 2 is a containment roof system that attaches to the top of the racks and forms a ceiling that prevents hot and cold air from mixing.

Most data center containment systems rely on the heat generated from a fire related incident to release the containment system, as it can pose an obstacle to the fire suppression agent. The NFPA has determined that it is important to have a faster response time and more importantly, a testable system.

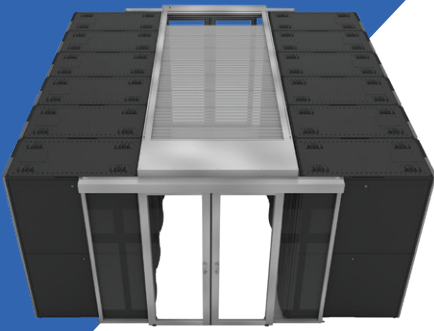
The Subzero Polar Cap 2 retractable roof system is a fully electric roof system that retracts into a metal housing when the fire suppression system is alarmed. Having a pre-action system that reacts to a smoke detector will ensure that the containment roof is fully retracted long before the fire suppression system is discharged.

The Polar Cap 2 can also be opened and closed when maintenance is required above the containment space. The Polar Cap 2 roof system is 5 feet wide (1524 mm) and can be made up to 30 feet long (9144 mm). The aluminum profile is less than 6" high (152.4 mm) and thus it presents no problem with obstructions above the cabinets.

For more information visit

subzeroeng.com

SUBZERO
ENGINEERING
A SENNECA COMPANY


Frame
30 Mil Polypropylene
Property
Material
Result
Physical Properties

Tensile Strength	Aluminum	22,000 psi
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Features

60" Width (1524 mm)
30' Max Length (9144 mm)

Physical Properties

2.5" (63.5 mm) Pleat
High Light Transfer Matte Finish
Light Transmittance 85%

+ Key Features

- Modular Design
- Retracting Cover
- Stock Sizes
- Custom Sizes

+ Fire/Electrical System Interface

(The electrical line, power supply, and fire panel connections are not provided by Subzero.)

Power Supply Connection

110/220VAC, 5A/2.5A, 50/60Hz Single Phase Supply*

*Subzero recommends connecting to a dedicated branch emergency backed up power supply circuit to insure that the Polar Cap 2 will operate during a facility power outage.

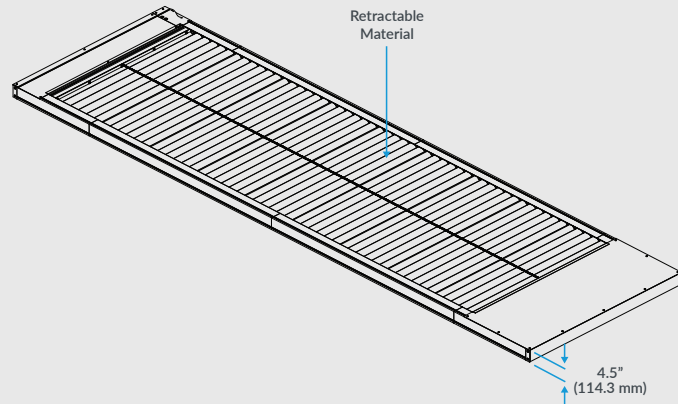
Fire System Interlock Connection

(Subzero recommends the fire protection contractor makes this connection.)

Polar Cap 2 provides a two-wire 24VDC signal that should be wired to customer's fire alarm control panel (FACP) normally open (N.O.) contact rated at 24VDC, .25A. Upon closure of the FACP N.O. contact, the Polar Cap 2 will automatically open to expose the server aisle to the fire extinguishing agent. Connection to a FACP "pre-act" contact will insure that the roof is fully open prior to the extinguishing agent discharge.

+ Hot Aisle Containment Disclaimer

Exposure to temperatures over 110°F will void the Warranty, and may cause the pleated polypropylene material to sag and not function properly.

Drawings
Isometric View NTS

Top/Plan View NTS
