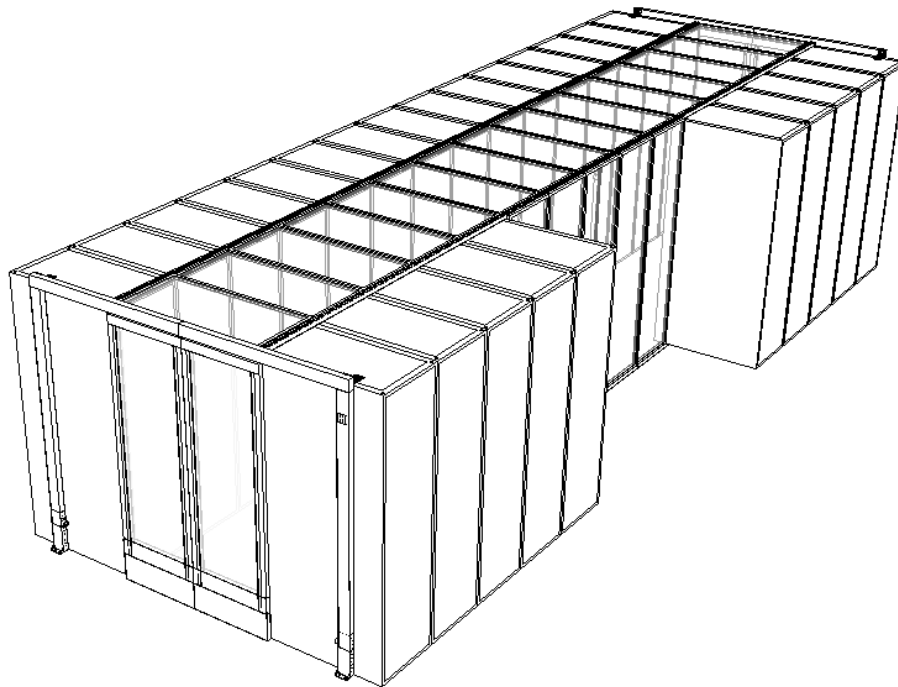




# **PolarPlex™ Drop-Away Panel Installation Guide**

**Version 2.0**  
**February 2014**



## **INTRODUCTION**

This document is the Installation Guide for Polargy's PolarPlex™ Drop-Away Panels.

### **Drop-Away Panel Installation Guide**

#### **Legal Information**

The information contained in this guide is subject to change without notice.

Polargy shall not be liable for technical or editorial errors or omissions contained herein; nor is it liable for any injury, loss, or incidental or consequential damages resulting from the furnishing, performance, or use of this material and equipment.

#### **Warranty**

Polargy guarantees manufactured products and each part or component thereof against all defects in material and/or workmanship. Polargy agrees to remedy any manufacturing defect either through replacement or repair at no charge provided that the defective unit is returned, transportation prepaid, to Polargy with a Return Material Authorization.

The warranty extends for a period of one year from the date of installation or initial use, provided that this period shall not exceed 18 months from the original date of shipment from Polargy.

Any product that has been repaired or replaced shall be similarly warranted on its repair or replacement for the remaining product warranty period or 90 days from the date of repair or replacement, whichever expires last.

This warranty does not extend to products that have been subjected to neglect, accident or improper use, nor to units that have been altered by non-Polargy personnel.

No warranties other than those set forth in this section are given or implied with respect to the products furnished. Polargy shall, in no event, be liable for consequential damages, for loss, damage or expense directly or indirectly arising from the use of the products, for any inability to use materials or from any other cause.

## **POLARPLEX™ DROP-AWAY PANELS**

### **INTRODUCTION TO THE POLARPLEX™ ROOF AISLE CONTAINMENT SYSTEM**

The PolarPlex™ Drop-Away Panels a Roofing Option for an Aisle Containment System. These unique panels are attached to the cabinets and are deployed horizontally across the aisles to create a tight containment barrier. The panels are made of an aluminum frame with a special translucent insert. The panels are UL-listed for use below sprinkler heads and the inserts are heat sensitive and promptly move out of their setting in high heat. The panels are custom sized for each installation.

### **SAFETY INFORMATION**

**WARNING:** COLD AISLE CONTAINMENT ROOF PANELS ARE DESIGNED TO BE SECURELY ATTACHED TO THE ROOF STRUCTURE OF THE INSTALLED CABINETS.

DO NOT LEAVE ASSEMBLY UNSECURED TO CABINETS.

CABINETS MUST BE STABILIZED PRIOR TO AISLE CONTAINMENT ROOF SYSTEM ASSEMBLY.

CAUTION SHOULD BE EXERCISED TO ENSURE THE CABINET LOAD RATING IS NOT EXCEEDED.

### **INTENDED USE**

Drop-Away Roof Panels are for use only in a restricted service environment, such as a data center. Use indoors only, in environmentally controlled areas; do not use outdoors, in harsh environments, or in air-handling spaces. Not for use in plenums.

### **STORAGE OF DROP-AWAY ROOF PANELS**

Aisle Containment Drop-Away Panels should be stored indoors only in environmentally controlled areas. Do not store outdoors. Do not expose to high temperatures.

## INSTALLING THE DROP-AWAY ROOF PANEL SYSTEM

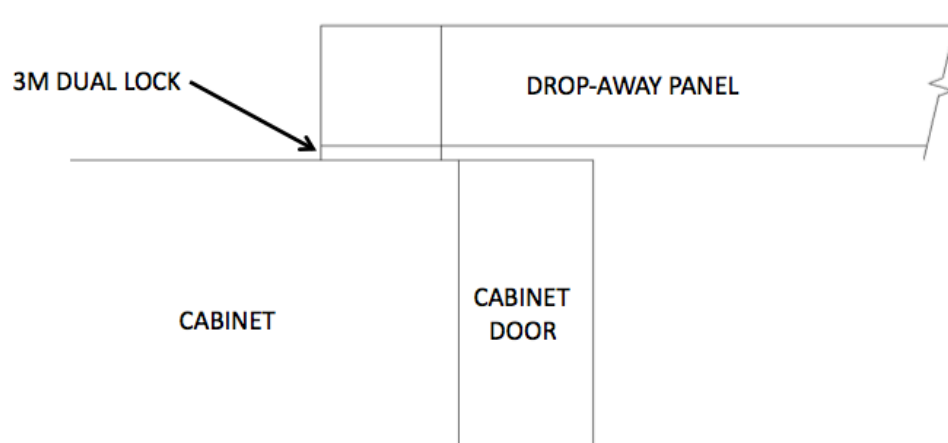
### Options

There are three options for installing the Drop-Away Panels:

1. Directly to the tops of the cabinets
2. Onto a Unistrut/L-Angle which is attached to the cabinets
3. Onto a Unistrut/L-Angle suspended from all-thread rod

### Direct to Cabinet Top Option #1

This option is simplest and typically is used when racks are uniform in height. Panels rest directly on the rack tops and are attached with corner tabs of 3M Dual Lock re-closable fastener.

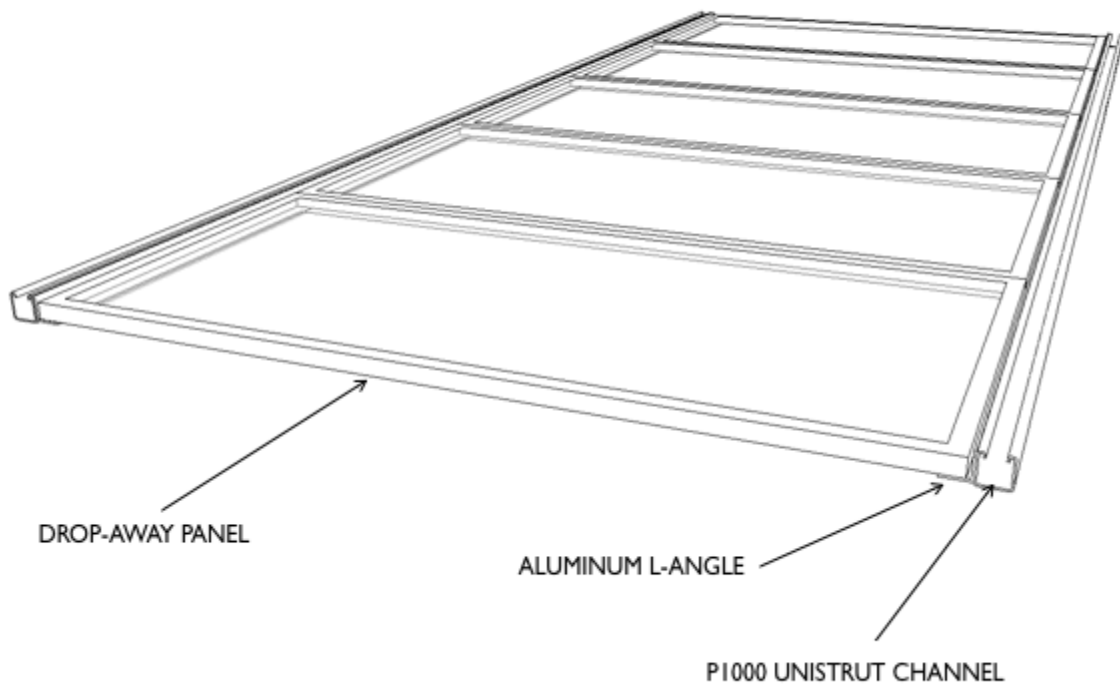


### Unistrut/L-Angle Options #2 and #3

These options are used when racks are uneven in height or when one wants to be able to remove racks without removing the roof panels.

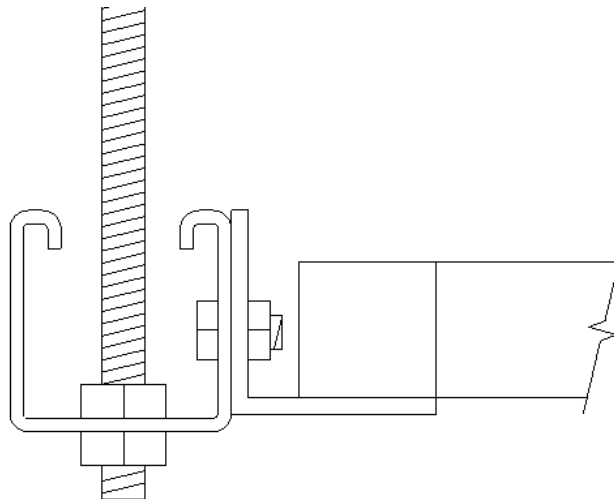
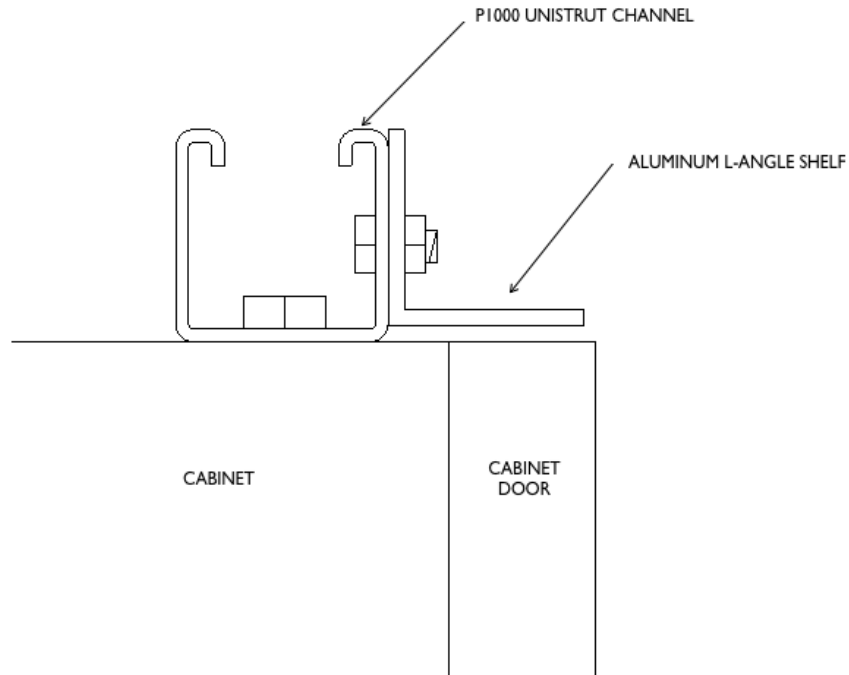
The following basic components are used for these options:

1. Drop-Away Panels (Sized to project)
2. Aluminum L-Angle for Panel Shelf (2 sets, one for each side of aisle)
3. P1000 Unistrut and All-thread Rod (provided by others)
4. Miscellaneous nut and bolt hardware (provided by others)



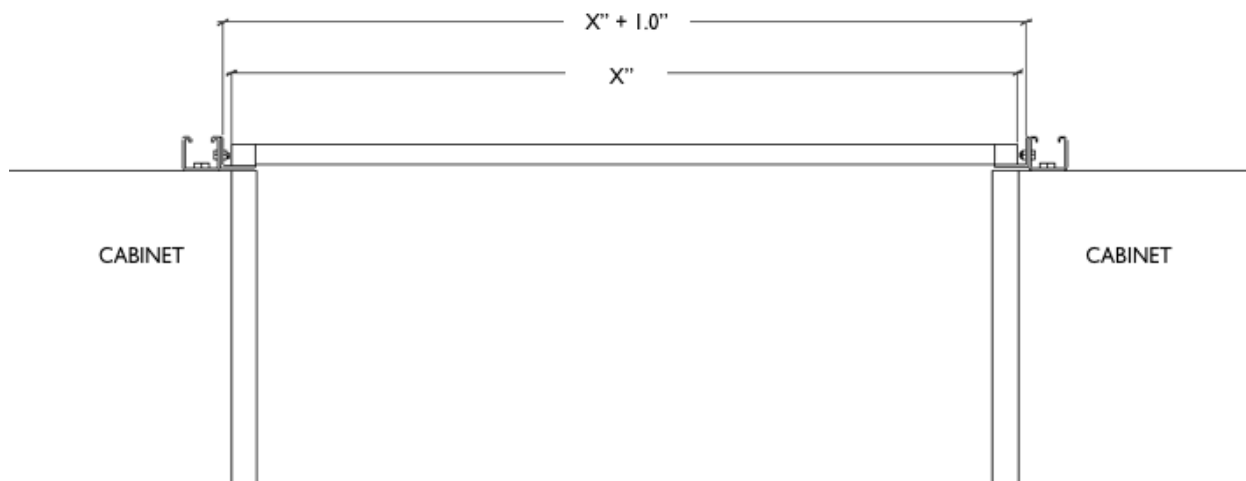
### Basic Supporting Framework Design

- 1) The Drop-Away Panels are supported by a two piece framework of an Aluminum L-Angle (the shelf) attached to Unistrut.
- 2) The 1.5" x 1.5" Aluminum L-Angle is bolted to the P1000 Unistrut.
- 3) The L-Angle is bolted flush to the top of the Unistrut channel so that there is a small 0.125" gap below the L-Angle so that it does not interfere with the cabinet door.
- 4) This L-Angle/Unistrut combination is either bolted to the tops of the cabinets or suspended with All-thread.



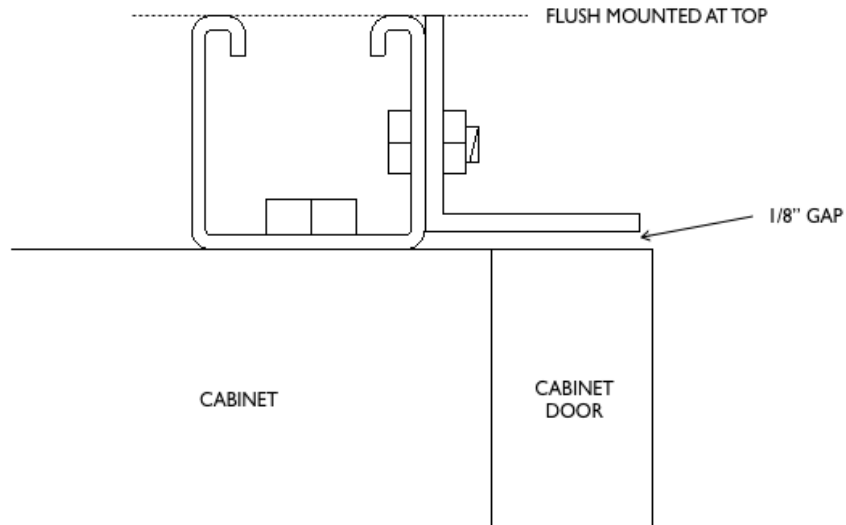
### Determining the Supporting Frame Layout

- 1) Drop-Away Panel Length, previously determined, is used to set the spacing between rows of the P1000 Unistrut/Panel Shelf L-Angle.
- 2) Add 1.0" to the length of the panel to determine the distance between inside edges of the P1000 Unistrut.
- 3) For example, if the panels are 54.0" long, then set the distance between the inside edges of the P1000 Unistrut at 55.0".

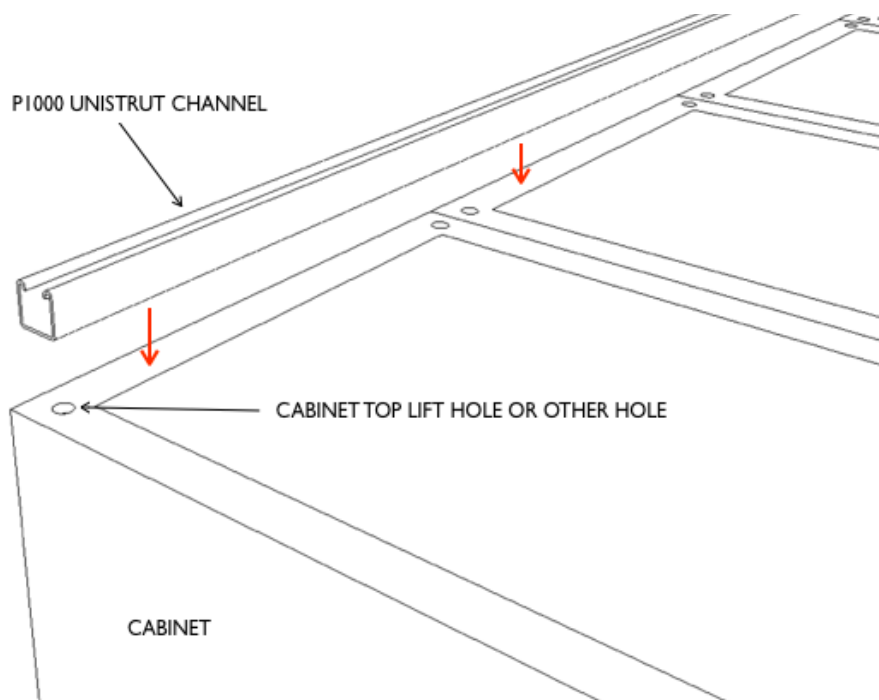


## Installing the Supporting Frame

- 1) Attach the Aluminum L-Angle to the Unistrut such that there is a 1/8" gap below the bottom of the L-Angle.



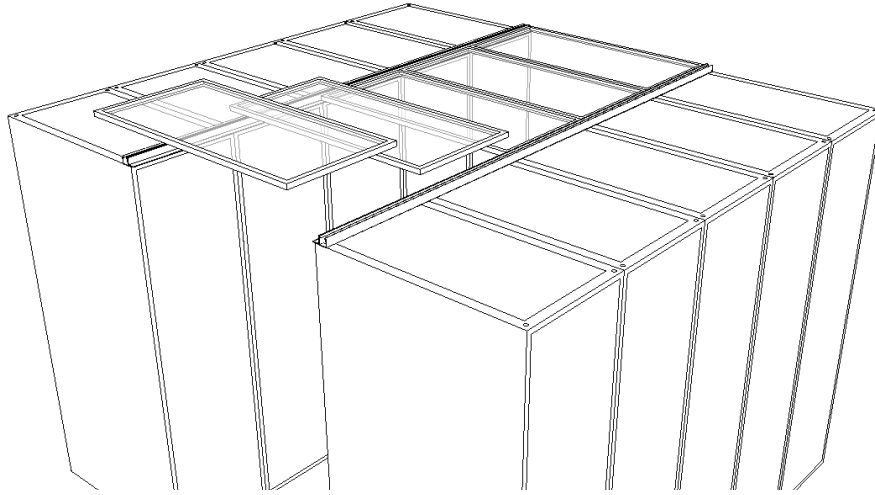
- 2) Attach the P1000 Unistrut to the tops of the cabinets or suspend and support it from the ceiling. For cabinet mounted Unistrut, sometimes, existing cabinet top holes can be used, other times new holes may need to be drilled.





### **Installing the Drop-Away Panels for Unistrut/L-Angle Options**

- 1) The Drop-Away Panels are simply lifted into place and set onto the L-Angle shelves.
- 2) The Drop-Away Panels rest on the horizontal edge of the L-Angles and are captured by the vertical edges of the L-Angles so that they do not fall out.
- 3) Optional 3M Dual Lock tabs are available to further secure the panels.



Revision 2.0

## **Polargy Contact Information**

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