



## **Optimax 2 LED with Multi-Fixture Driver Retrofit Instructions**

99-18078-I001



Copyright © 2011 by

ALL rights reserved. Information in this document is subject to change without notice. Companies, names and data used in examples herein are fictitious unless otherwise noted. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without express permission of Anthony Manufacturing Co., Inc.

Anthony products identified in this manual are designed and certified to meet  $\text{UL}$  for safety, and  $\text{NSF}$  for sanitation standards.

European products meet  $\text{CE}$  requirements.









Each customer is responsible for final site approval.

# TABLE OF CONTENTS

1. Preliminary Considerations .....	4
1.1. Safety .....	4
2. Components .....	5
2.1. Power Supply .....	5
2.2. Center Fixture .....	6
2.3. End Fixture .....	6
2.4. Mounting Clip.....	7
2.5. Foam Gasket.....	7
3. Removing Fluorescent Lighting .....	8
4. Anthony Recommended Mounting Arrangement .....	9
5. Orientation of End Fixtures .....	11
6. Mounting Power Supplies .....	12
7. Wiring Diagrams .....	14
7.1. One Door .....	14
7.2. Two Door .....	14
7.3. Three Door .....	14
7.4. Four Door .....	15
7.5. Five Door .....	15
7.6. Six Door.....	15
8. Revision History Page.....	16

## 1. Preliminary Considerations

### 1.1. Safety

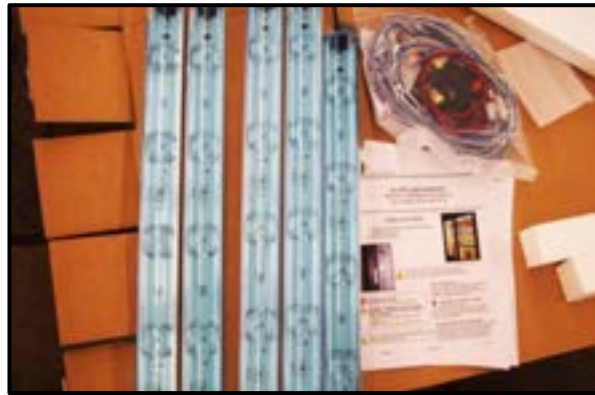
	<b>WARNING</b> – Risk of fire or electric shock. Luminaires wiring, ballasts, or other electrical parts may be damaged when drilling for installation of reflector kit hardware. Check for enclosed wiring and components.
	<b>WARNING</b> – Risk of fire or electric shock. Reflector kit installation requires knowledge of fluorescent lighting luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
	Only those open holes indicated in the photographs and/or drawings may be made or altered as a result of kit installation. Do not leave any other open holes in an enclosure of wiring or electrical components.
	Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
	<b>WARNING</b> – Risk of fire or electric shock. Install this kit only in the luminaires that has the construction features and dimensions shown in the photographs and / or drawings.
	<b>WARNING</b> – To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
	Installation of this retrofit assembly requires a person familiar with the construction and operation of fluorescent luminaire electrical systems and the hazards involved.
	For use inside a commercial refrigeration case with packaged foods only.



Power Supplies



Wire, Plug Assembly, Connnectors and Seal

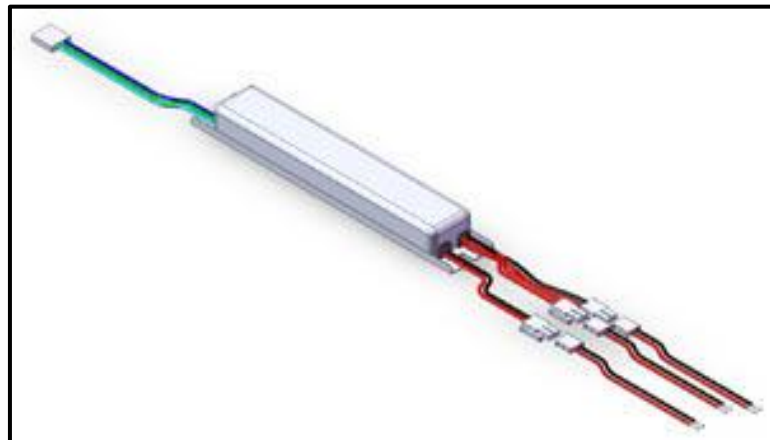


LED Light Fixtures

## 2. Components

**Note:** All parts are for the 101 frame. Other frames may require additional parts which can be purchased through the Anthony Service Department.

### 2.1. Power Supply



Power Supply

Power Supply Part No. 60-17544-0001 – 500mA Low Power

## 2.2. Center Fixture



**Center Fixture**

Center Fixture Part No.	60-17447-0001 – 60" 4100K
	60-17447-0002 – 72" 4100K
	60-17447-0003 – 48" 4100K
	60-17447-1001 – 60" 5000K
	60-17447-1002 – 72" 5000K
	60-17447-1003 – 48" 5000K
	60-17447-2001 – 60" 3500K
	60-17447-2002 – 72" 3500K
	60-17447-2003 – 48" 3500K

## 2.3. End Fixture



**End Fixture**

2.3.1. Half Power End

End Fixture Part No.	60-17445-0001 – 60" 4100K
	60-17445-0002 – 72" 4100K
	60-17445-0003 – 48" 4100K
	60-17445-1001 – 60" 5000K
	60-17445-1002 – 72" 5000K
	60-17445-1003 – 48" 5000K
	60-17445-2001 – 60" 3500K
	60-17445-2002 – 72" 3500K
	60-17445-2003 – 48" 3500K

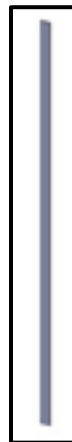
2.4. Mounting Clip



**Mounting Clip**

Clip Part No. 15-16378-0001 – Clip Mounting LED Fixture

2.5. Foam Gasket



**Foam Gasket**

Foam Gasket Part No. 70-11856-0013 – Foam Gasket Tape

### 3. Removing Fluorescent Lighting



**BEFORE YOU BEGIN**

Read instructions completely and carefully.



**WARNING: TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK OR INJURY, OBSERVE THE FOLLOWING:**

- 1) Use this unit in the manner intended by the manufacturer.
- 2) Before servicing or altering, switch power off.

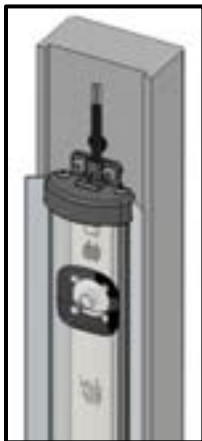


Turn power off before removing existing lighting system and follow appropriate lock out/tag out safety procedures.

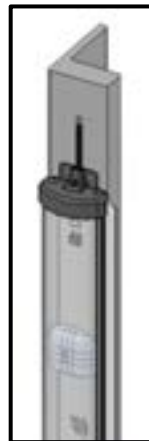
- Remove lenses, fluorescent lamps. Lamp holders, mounting clips and ballasts from existing lighting system.

**Note:** Remove and dispose of existing ballasts per any local or Federal guidelines.

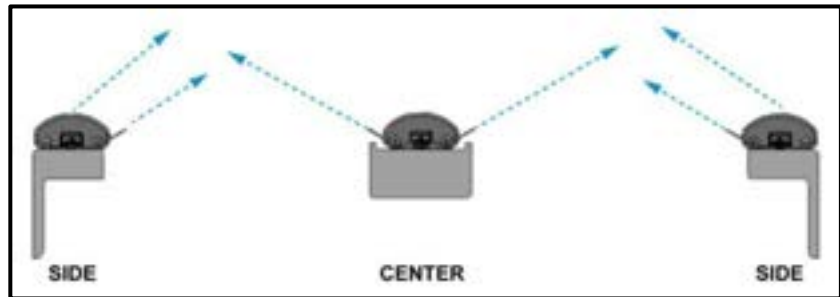
**Note:** Refer to case manufacturer’s instructions for any questions on removing the fluorescent system and ballast.



Center Mullion



End Mullion



Mullion Lighting Layout



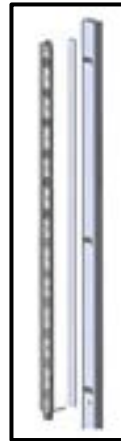
#### 4. Anthony Recommended Mounting Arrangement



Prior to drilling make sure that there are no existing components inside the mullion in the areas marked off for the designated holes.

1. Determine proper location for mounting clip placement.

**Note:** To maintain light uniformity throughout the case, LED light should be evenly centered in the case.



Mounting Clip Locations

2. Use a Philips screw driver to start threading #8 tapping screws (supplied).

**Note:** The clip location is one in the center of the fixture, and one 3" from each end of the fixture.

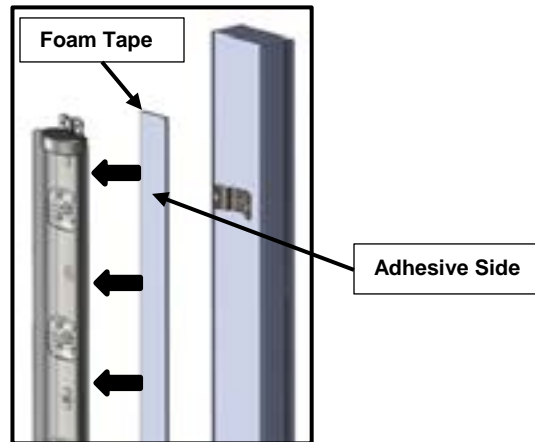
Place first mounting clip against inside of the display case so it is aligned with pre-drilled holes from the top.



Mounting Clip Alignment

3. Place second mounting clip against inside of the display case so it is installed in the center of the LED light.
4. Repeat for third mounting clip at the bottom of the LED light.

5. Peel off the liner of the foam tape and apply to the back of the LED light fixture.



Apply Foam Tape

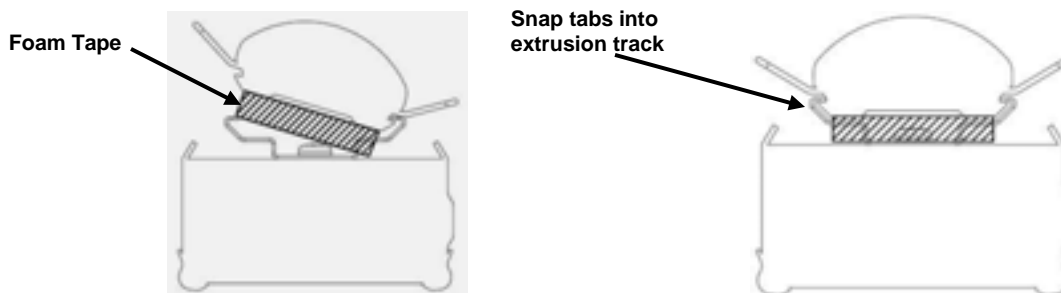
6. Align LED light with mounting clips so LEDs are facing display case interior.



Align LED Light

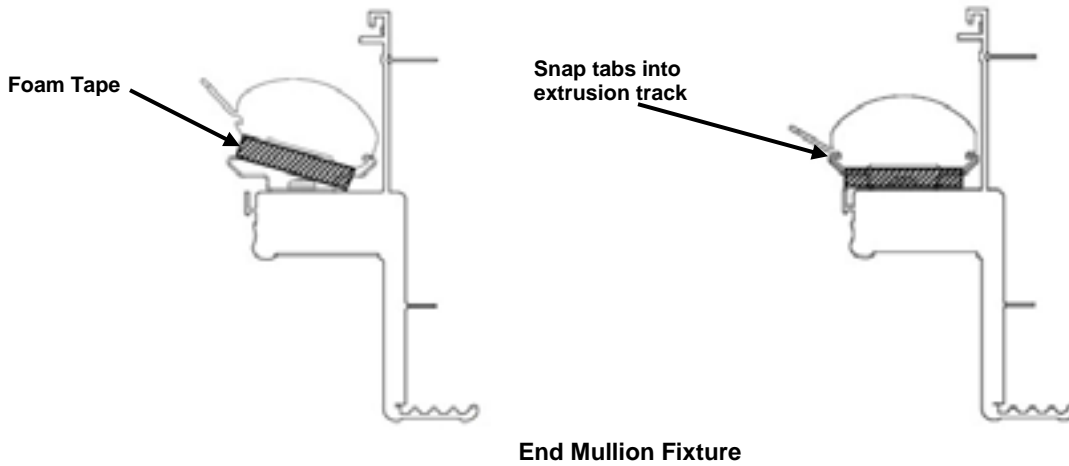
7. Snap LED light into mounting clips by placing one edge of LED light into groove and gently rotating until the opposite edge firmly locks into mounting clip.

**Note:** Ensure mounting clips lock into outer most edge of LED light aluminum extrusion.



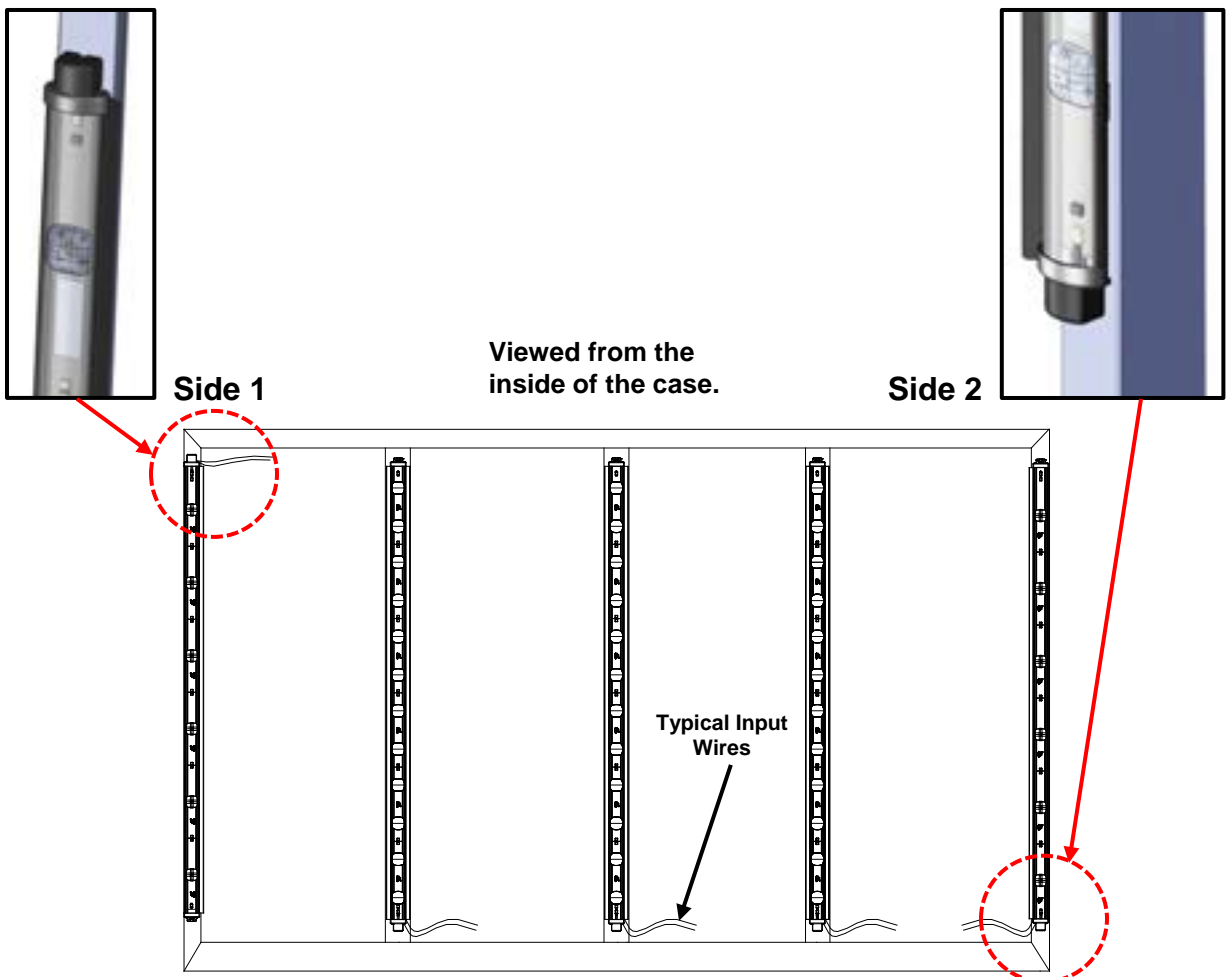
Center Mullion Fixture

**Note:** The foam tape is to provide better insulation, and to avoid the LED light fixture from sliding down when the doors are slamming.



**5. Orientation of End Fixtures**

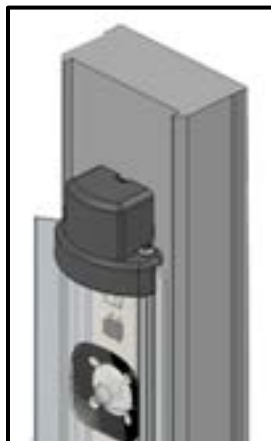
1. **Side 2** end fixture will remain the same orientation as the center light fixtures. **Side 1** end fixture must be flipped over for the correct orientation. Therefore, the installer must connect the wires at the top of the frame instead of the bottom as **Side 2**.



2. Make sure wires are not caught between light fixture and mounting surface.
3. Connect wires from the fixture to the black & red wires from the 2-conductor harness (supplied) using UL recognized 2-conductor 18 gage wire connector.



4. Tuck wire connectors underneath wire cover before snapping it to the end cap and make sure wire cover is locked into the end cap.

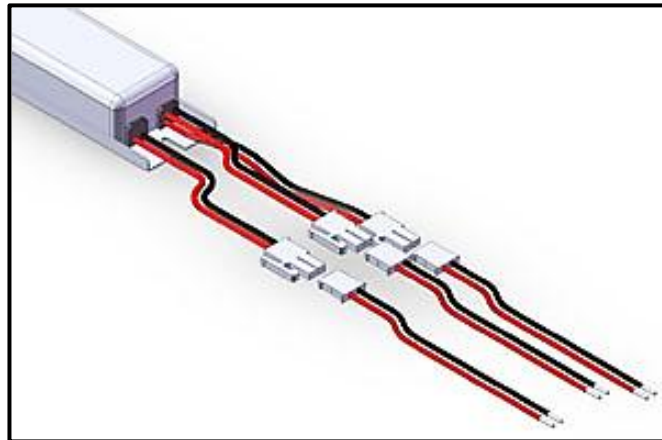


5. Remove protective film from lens.
6. Seal off the cutouts in the Mullions using insulating material.

## 6. Mounting Power Supplies

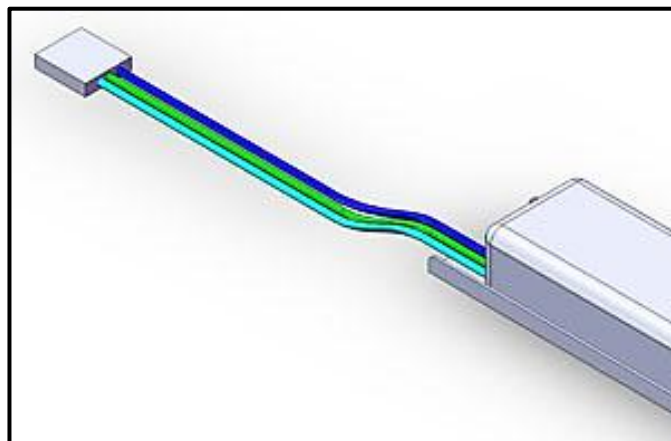
1. Install the power supply in the same location where ballast was fitted or in a general location for ease of wire connection using #8 tapping screws (2 places).

2. Connect light wires connectors to driver using wire plug assemblies (supplied)



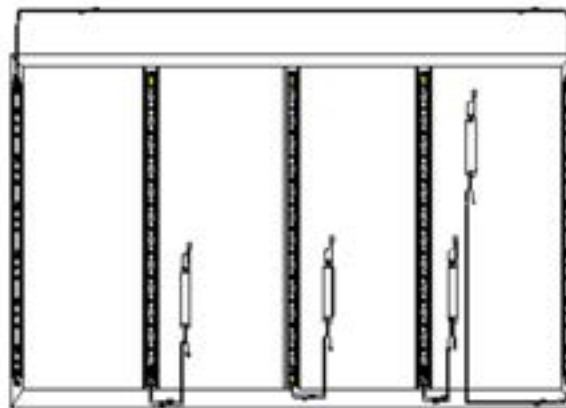
**Connect Light Wires**

3. Connect blue (+) and white/blue (-) and green/yel (-) wire assembly plug from the input side of the power supply to the original load and neutral wires from the frame using the wire assembly connector.



**Connect Wire Assembly Plug**

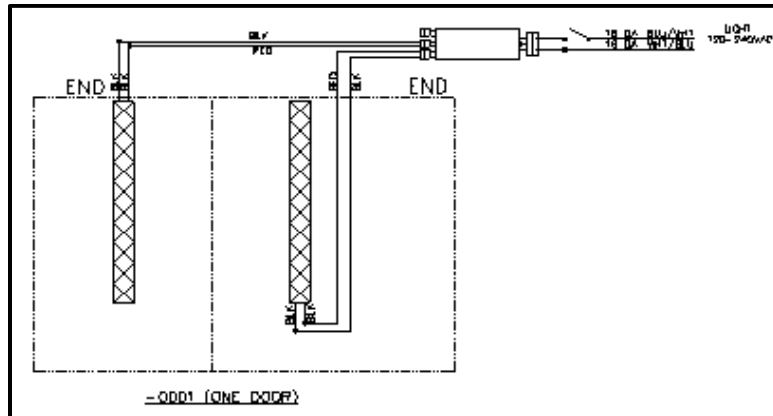
Typical Installation (4-Dr Frame Shown)



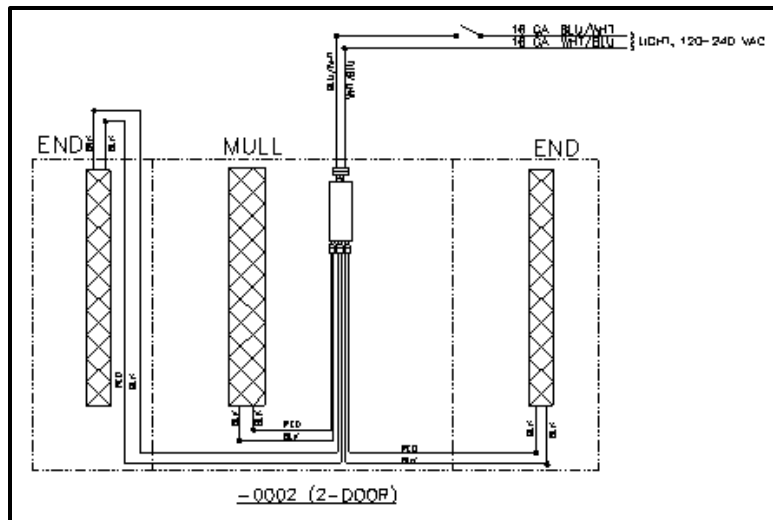
**View from the Inside of the Case**

## 7. Wiring Diagrams

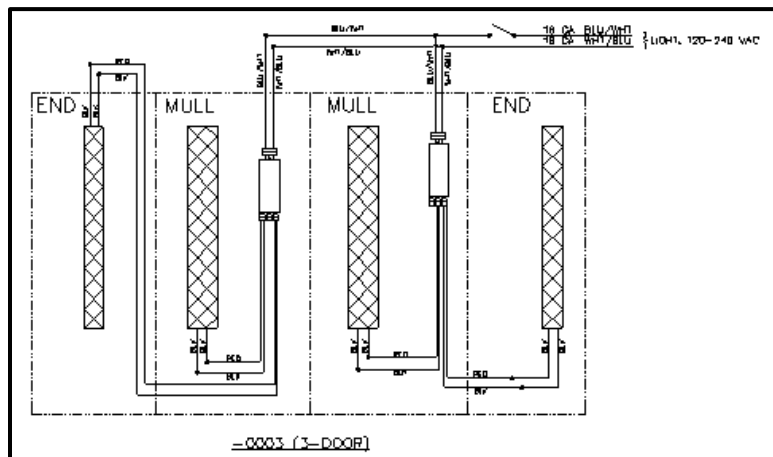
### 7.1. One Door



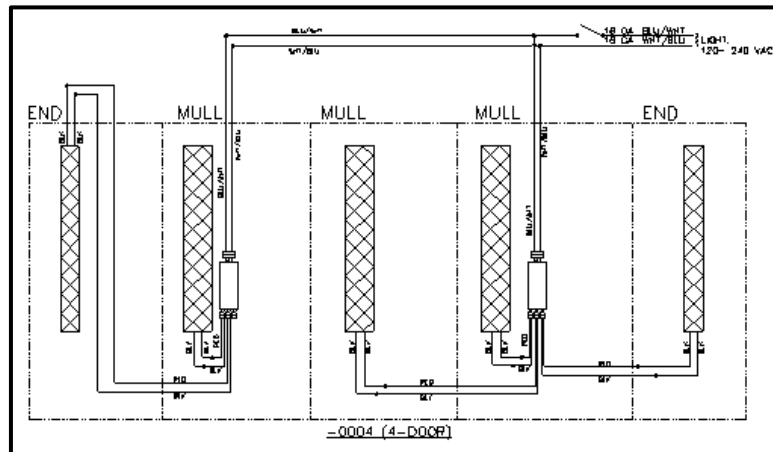
### 7.2. Two Door



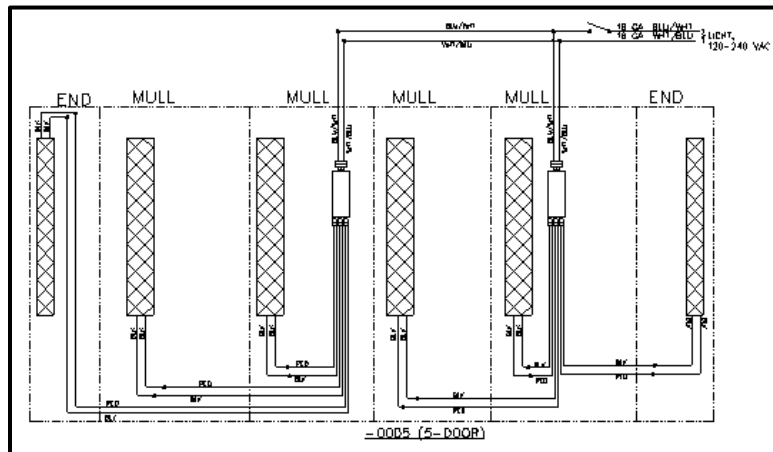
### 7.3. Three Door



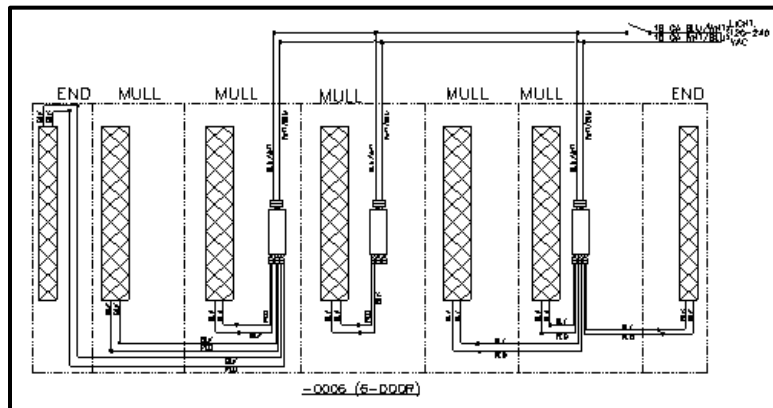
7.4. Four Door



7.5. Five Door



7.6. Six Door



## 8. Revision History Page

REV	ORIGINATOR	DESCRIPTION OF CHANGE	EFFECTIVE DATE
A		Initial Release	01/21/2010
B	S. Fisher	Reformat from Framemaker to Word	03/29/2013