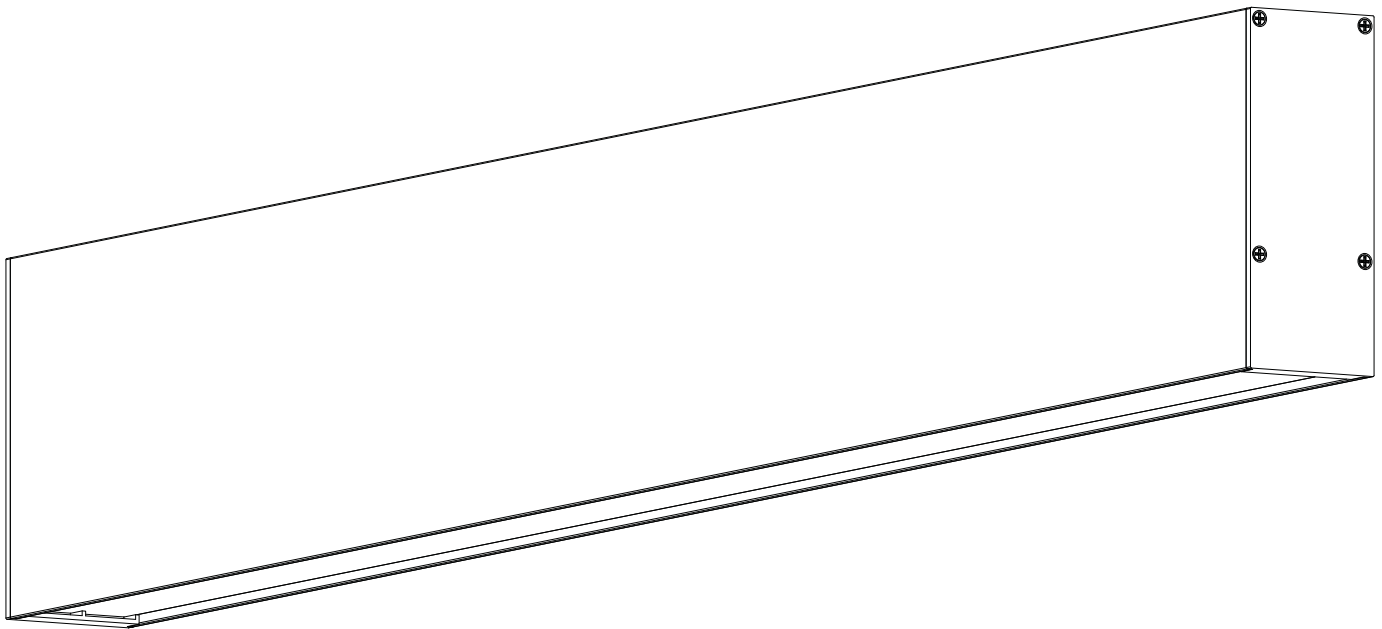


# QUANTUM 2 SQUARE 1436

## Installation Instructions

#CH-S-1436-KIT  
#CH-S-1436-2FT  
#CH-S-1436-4FT  
#CH-S-1436-6FT  
#CH-S-1436-8FT  
Custom #CH-S-1436



### Sections:

- Pg. 2 Fixture Kit Channel Preparation
- Pg. 5 Surface Mount Installation
- Pg. 7 Suspension Installation

Version 3



# QUANTUM 2 SQUARE 1436

## Fixture Kit Channel Preparation

### Cutting Instructions

**Please note: If you've purchased either a Standard Fixture or Custom Fixture, please skip to page 5 for surface mount installation instructions, page 7 for non-linear suspension installation instructions, or page 11 for linear suspension installation instructions.**

#### Tools Needed

- Miter Saw/Chop Saw
- Saw blade rated for aluminum (96-tooth-blade or higher recommended)
- Painters or Masking Tape
- Drill Bit: ¼"
- Tape Measure (or long ruler)
- Marker/Pen/Pencil
- Safety Glasses
- Recommended: Work Apron/Long Sleeve shirt
- Canned Air/Air Compressor
- Fine Tip (#1) Phillips Screwdriver or Bit
- Optional: Fine File (#2 or #4 recommended) or De-Burring Tool

#### Parts Needed

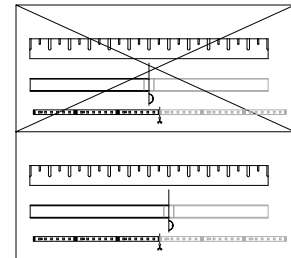
- #CH-S-1436-KIT
- CH-S-1436 Aluminum Channel
- Diffuser Lens
- Tape Light
- End Caps
- Grommet (optional)

#### Important!

- Wear safety glasses while cutting Quantum Channel!
- Have a question? Give us a call at 832-717-2710 or e-mail us at [designs@ledinspirations.com](mailto:designs@ledinspirations.com).

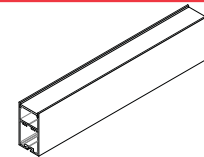
## 1 Determine Length to Cut

The LED tape light that comes with the CH-S-1436-KIT has a cut length of 3- $\frac{9}{32}$ ". To ensure that there are no dark spots or shadows at the ends, the channel cut length should be in increments of 3- $\frac{9}{32}$ ", plus about  $\frac{3}{8}$ " to account for the wire exit. See the [Cut Chart](#) on page 4 for cut increments.



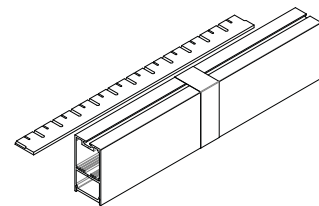
## 2 Prepare Lens for Cutting

Insert and snap the plastic lens flush with the end of the channel.



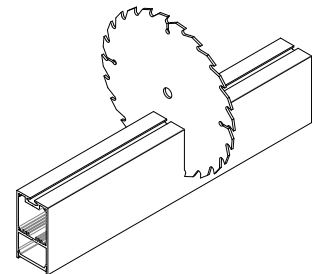
## 3 Measure, Tape, and Mark

Measure out the length you want to cut. Wrap both the channel and lens with masking/painters tape to hold them firmly together and protect them from scratching from the saw blade. Mark on top of the tape where you want to make your cut.



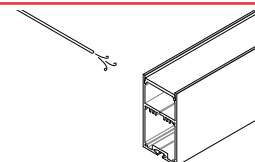
## 4 Cutting

Use a saw blade rated for aluminum, 96-tooth or higher recommended. Cut to the OUTSIDE of the mark. This will ensure the width of the sawblade does not subtract from the desired length. Cut slowly and evenly to ensure a clean cut. You may need to de-bur some edges with a file or de-burring tool.



## 5 Clean-Up

Use canned air or an air compressor to clear away the aluminum shavings from inside the channel.



# QUANTUM 2 SQUARE 1436

## Fixture Kit Channel Preparation Cont.

### 6 Drill hole for Wire

The low voltage wire may exit through either the End Cap or back of channel. Drill a 1/4" hole in the End Cap OR back of channel for the low voltage wire to exit.

**NOTE:** IF RUNNING YOUR LOW VOLTAGE WIRE OUT THE BACK OF THE CHANNEL, DRILL COMPLETELY THROUGH THE CHANNEL.

**OPTIONAL:** For a more professional installation, a grommet may be used in place of the heat shrink tubing to protect the wire exiting the channel.

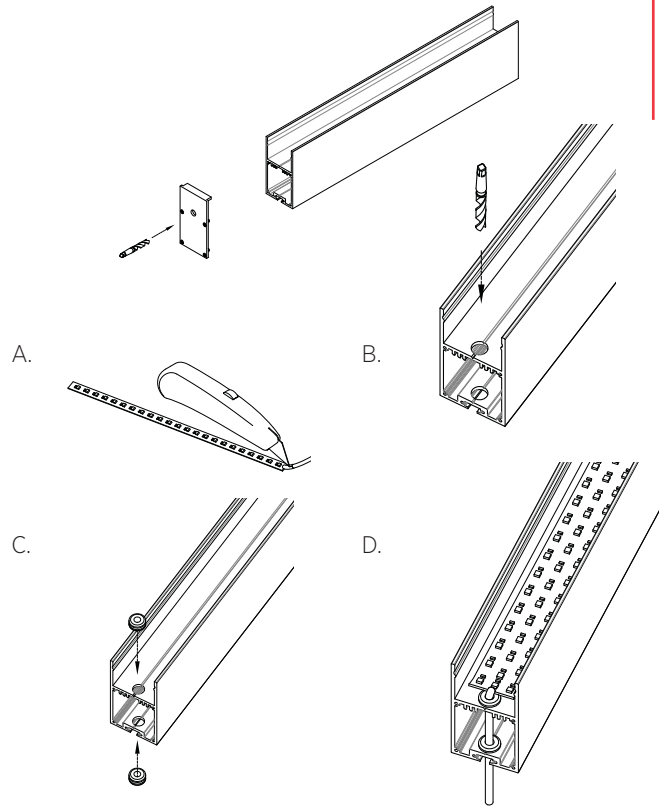
**A.** Using a utility knife, carefully remove heat shrink tubing where wire is soldered to tape light.

**B.** Drill a 5/16" hole centered 1/4"-5/16" from edge of channel completely through the back and inside of the channel.

**C.** Insert grommets into both holes.

**D.** Lay tape light over grommet and feed wire through grommets. Tape light should sit up on the grommet slightly.

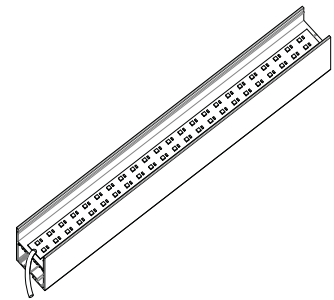
**CAUTION!** THE SOLDER POINTS SHOULD **NOT** MAKE CONTACT WITH THE ALUMINUM OF THE QUANTUM CHANNEL.



### 7 Install Quantum High Density LED Tape Light

• **Surface Mount Installation:** SKIP THIS STEP! Tape light will be installed during the surface mount installation.

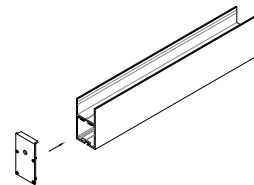
• **Suspended Installation:** Feed the crystal clear wire on the LED tape light through the 1/4" hole. Peel off the adhesive on the back of the LED tape light and stick it down inside the channel, centering the tape light with the channel.



### 8 Install End Caps

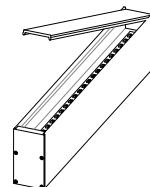
Using the End Cap screws, install the End Caps on each end of the channel.

**Pro Tip!** Use a fine-tip (#1) phillips screwdriver or bit to avoid stripping the small screws used with the end caps.



### 9 Install Diffuser Lens

Press and snap in the diffuser lens.



# QUANTUM 2 SQUARE 1436

## Cut Chart

The chart below shows optimized cut lengths that will allow the tape light to completely fill the channel and ensure no dark spots or shadows.

Overall Length	Cut Aluminum Length	Cut Lens Length	Cut LED Tape Light Length
0' 3-13/16"	0' 3-21/32"	0' 3-21/32"	0' 3-9/32"
0' 7-3/32"	0' 6-15/16"	0' 6-15/16"	0' 6-9/16"
0' 10-3/8"	0' 10-7/32"	0' 10-7/32"	0' 9-27/32"
1' 1-21/32"	1' 1-1/2"	1' 1-1/2"	1' 1-1/8"
1' 4-15/16"	1' 4-25/32"	1' 4-25/32"	1' 4-13/32"
1' 8-7/32"	1' 8-1/16"	1' 8-1/16"	1' 7-11/16"
1' 11-1/2"	1' 11-5/16"	1' 11-5/16"	1' 10-15/16"
2' 2-25/32"	2' 2-19/32"	2' 2-19/32"	2' 2-7/32"
2' 6-1/16"	2' 5-7/8"	2' 5-7/8"	2' 5-1/2"
2' 9-5/16"	2' 9-5/32"	2' 9-5/32"	2' 8-25/32"
3' 0-19/32"	3' 0-7/16"	3' 0-7/16"	3' 0-1/16"
3' 3-7/8"	3' 3-23/32"	3' 3-23/32"	3' 3-11/32"
3' 7-5/32"	3' 7"	3' 7"	3' 6-5/8"
3' 10-7/16"	3' 10-9/32"	3' 10-9/32"	3' 9-29/32"
4' 1-23/32"	4' 1-9/16"	4' 1-9/16"	4' 1-3/16"
4' 5"	4' 4-27/32"	4' 4-27/32"	4' 4-15/32"
4' 8-9/32"	4' 8-1/8"	4' 8-1/8"	4' 7-3/4"
4' 11-9/16"	4' 11-13/32"	4' 11-13/32"	4' 11-1/32"
5' 2-27/32"	5' 2-21/32"	5' 2-21/32"	5' 2-9/32"
5' 6-1/8"	5' 5-15/16"	5' 5-15/16"	5' 5-9/16"
5' 9-13/32"	5' 9-7/32"	5' 9-7/32"	5' 8-27/32"
6' 0-11/16"	6' 0-1/2"	6' 0-1/2"	6' 0-1/8"
6' 3-15/16"	6' 3-25/32"	6' 3-25/32"	6' 3-13/32"
6' 7-7/32"	6' 7-1/16"	6' 7-1/16"	6' 6-11/16"
6' 10-1/2"	6' 10-11/32"	6' 10-11/32"	6' 9-31/32"
7' 1-25/32"	7' 1-5/8"	7' 1-5/8"	7' 1-1/4"
7' 5-1/16"	7' 4-29/32"	7' 4-29/32"	7' 4-17/32"
7' 8-11/32"	7' 8-3/16"	7' 8-3/16"	7' 7-13/16"
7' 11-5/8"	7' 11-15/32"	7' 11-15/32"	7' 11-3/32"



Magenta = Channel  
 Cyan = End Caps  
 Green = Tape Light  
 Yellow = Lens  
 Red = Low Voltage Wire

# QUANTUM 2 SQUARE 1436

## Surface Mount Installation

**Please Note: If you purchased a Quantum 2 Fixture Kit (unassembled channel), see steps 1-6 in the Fixture Kit Channel Preparation section before beginning.**

### Tools Needed

- Power Drill
- Ruler/Straight Edge
- Fine Tip (#1) Phillips Screwdriver or Bit
- Pen/Pencil
- Wire Nuts/Butt Splices
- 3/8" Countersink Bit
- Drill Bits - 3/32"
- Wire Stripper
- Optional: Crimper (for Butt Splices)

### Parts Needed

- Assembled Channel
- 24v DC Driver
- 3-1/4" (or longer) Screws (Not Included)

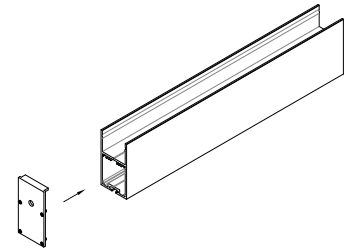
### IMPORTANT!

- Turn power **OFF** before installation!
- Longer channels will require two people to install.
- Have a question? Give us a call at 832-717-2710 or e-mail us at [designs@ledinspirations.com](mailto:designs@ledinspirations.com).

## 1 Install End Caps

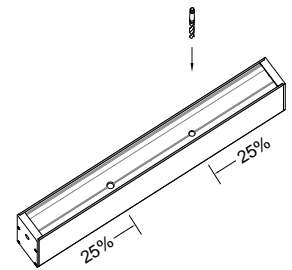
Using the End Cap screws, install the End Caps on each end of the channel.

**Pro Tip! Use a Fine Tip (#1) Phillips Screwdriver or Bit to avoid stripping the small screws used with the end caps.**



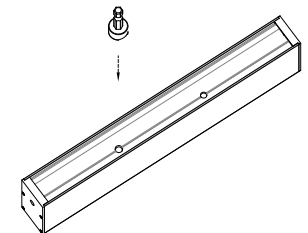
## 2 Mark and Drill Holes

To determine where to drill, come in 25% from each end of the overall length of the channel and mark the locations. Drill each hole using a 3/32" drill bit. (Example: For an 8' fixture, drill holes 2' in from each end of the channel.)



## 3 Countersink

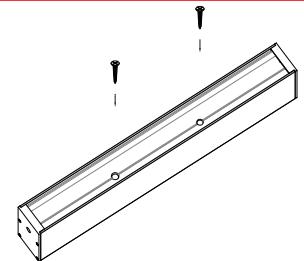
To ensure the tape light sits flat, use a 3/8" countersink bit to countersink the holes on the inside of the channel where the tape light will be installed.



## 4 Screw onto surface

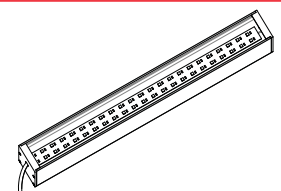
Screw the channel onto the surface. Use long screws (3-1/4" or longer) that will go all the way through the channel.

**Pro Tip! Use drywall anchors when installing into drywall.**



## 5 Install Tape Light

Feed the crystal clear wire on the LED tape light through the 1/4" hole. Peel off the adhesive backing on the back of the LED tape light and stick it down inside the channel, centered as well as possible.

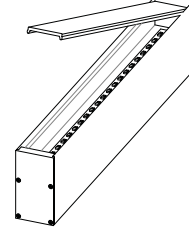


# QUANTUM 2 SQUARE 1436

## Surface Mount Installation Cont.

### 6 Install Diffuser Lens

Press and snap in the diffuser lens



### 7 Run Low Voltage Wire to the 24v DC Driver

If the 24v DC driver is within 9-10 feet of the channel:

The Quantum High Density Tape Light comes with 10 feet of crystal clear wire that can be wired directly to the driver.

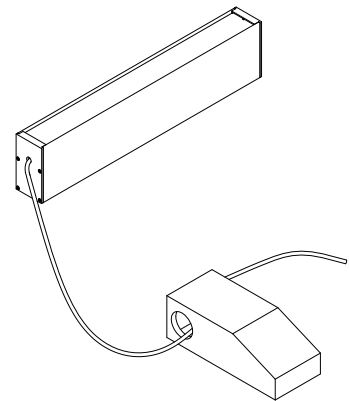
If the 24v DC driver is 10 feet or further from the channel:

Use at least 18 AWG low voltage wire to extend the 10 foot crystal clear wire. Wire the low voltage crystal clear wire into the 24v DC driver.

If the 24v DC driver is more than 30 feet away from the channel:

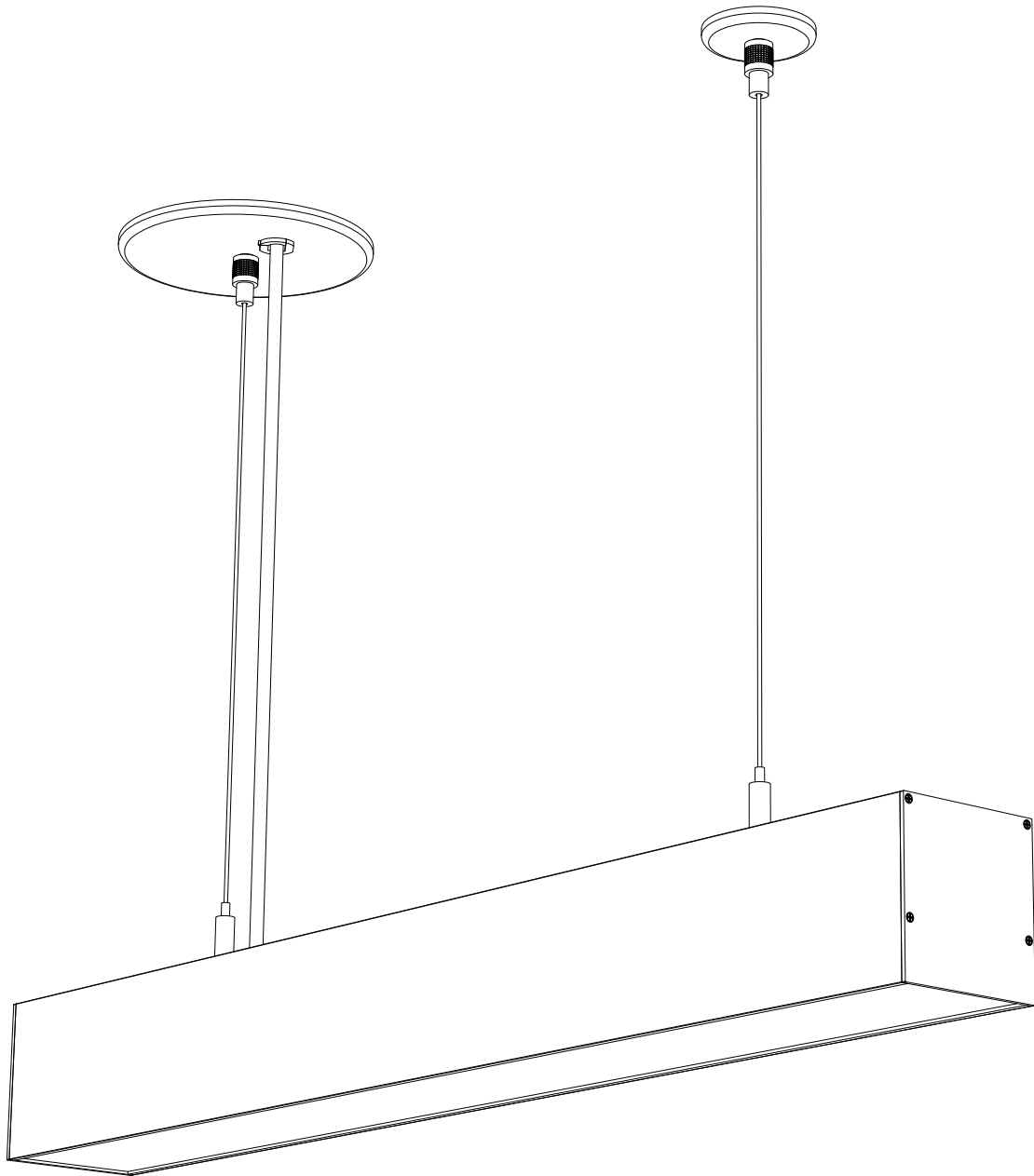
Please contact our Design Department at 832-717-2710 or [designs@ledinspirations.com](mailto:designs@ledinspirations.com) so we may recommend the correct wire size to use.

**PRO TIP! The positive (hot) wire is marked with a white line on the crystal clear wire.**



# QUANTUM 2 SQUARE 1436

## Suspension Installation



### Sections:

- Pg. 8 Canopy Junction Box Installation
- Pg. 9 Canopy-Drywall Ceiling Installation
- Pg. 10 Canopy-T-Bar/Drop Ceiling Installation
- Pg. 11 Cable/Gripper Spacing

# QUANTUM 2 SQUARE 1436

## Suspension Installation Cont.

### Canopy-Junction Box

Used with either Drywall or T-Bar/Drop Ceilings, this anchors the first end of the channel to a standard junction box and provides for electrical connections.

#### 1 Install Cable

Insert the  $\frac{1}{16}$ " cable into the Cable Coupler and pull completely through.

#### 2 Attach Crossbar

Screw the  $\frac{1}{4}$ " bolt completely into the crossbar and attach the crossbar to the junction box with the bolt sticking down.

#### 3 Connect Wires

Run the low voltage wires from the channel up through the  $\frac{5}{8}$ " hole and connect to the low voltage wires from the driver.

#### 4 Attach Canopy

Position the center hole of the canopy onto the  $\frac{1}{4}$ " bolt and screw the cable coupler (with  $\frac{1}{16}$ " cable installed) onto the  $\frac{1}{4}$ " bolt.

#### 5 Install Exit Gripper

Loosen the screw in the bottom of the Exit Gripper and slide into the slot in the rear of the Quantum channel.

**NOTE:** SCREWS FOR THE EXIT GRIPPERS ARE PRE-INSTALLED INTO THE REAR SLOTS OF CUSTOM CHANNELS. REMOVE THE SCREWS THAT COME INSTALLED IN THE EXIT GRIPPERS AND SCREW THE EXIT GRIPPERS INTO THE PRE-INSTALLED SCREWS.

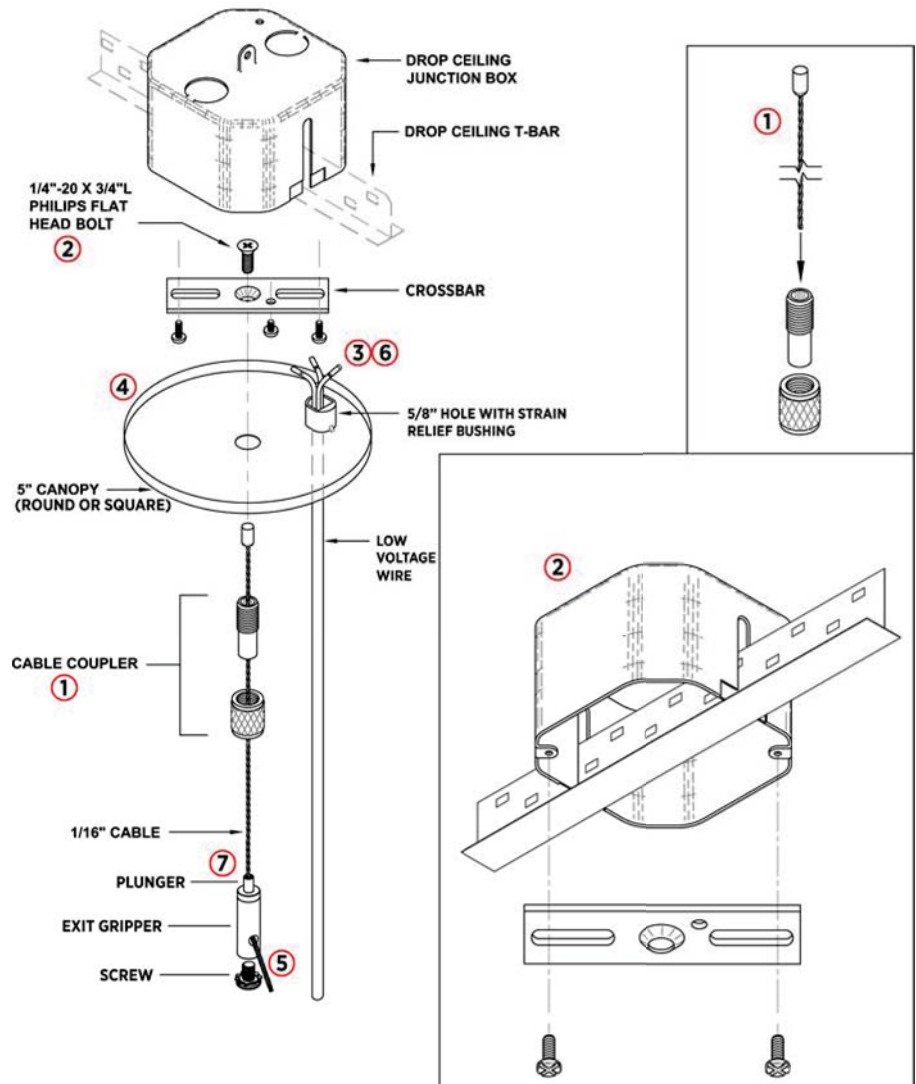
#### 6 Install Strain Relief Bushing

Push most of the wire slack up into the junction box. Clip the Strain Relief Bushing onto the wire and push up into the  $\frac{5}{8}$ " hole to secure.

#### 7 Insert and Trim Cable

Push down on the top "plunger" of the Exit Gripper to release the locking mechanism, and slide the cable down and out through the side exit hole.

Once the fixture is leveled, trim away excess cable.





# QUANTUM 2 SQUARE 1436

## Suspension Installation Cont.

### Canopy-Drywall Ceiling

Used with the Canopy-Junction Box on Page 8 to anchor the second end of the Quantum channel to a Drywall Ceiling.

#### 1 Install Anchor

Screw Drywall Anchor into ceiling.

**NOTE:** FOR APPLICATIONS WHERE A DRYWALL ANCHOR IS NOT SUITABLE, THE TOGGLE BOLT/WINGS MAY BE USED.

#### 2 Install Cable Coupler Base

Insert the Drywall Anchor Screw into the Cable Coupler Base and screw into the Drywall Anchor.

#### 3 Install Cable

Insert the 1/16" cable into the Cable Coupler Cap and pull completely through.

Screw the Cable Coupler Cap into the Cable Coupler Base.

#### 4 Install Exit Gripper

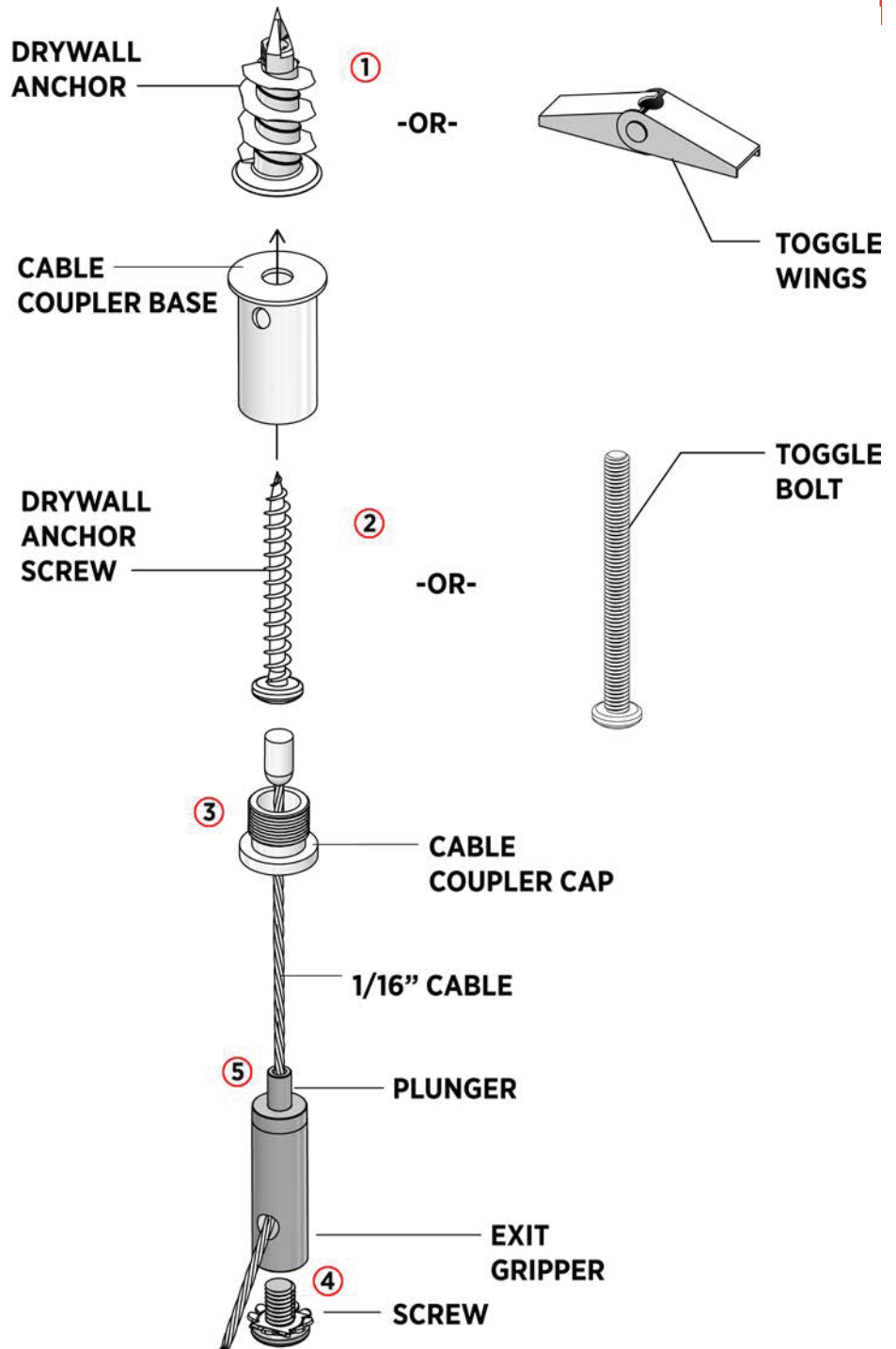
Loosen the screw in the bottom of the Exit Gripper and slide into the slot in the rear of the Quantum channel.

**NOTE:** SCREWS FOR THE EXIT GRIPPERS ARE PRE-INSTALLED INTO THE REAR SLOTS OF CUSTOM CHANNELS. REMOVE THE SCREWS THAT COME INSTALLED IN THE EXIT GRIPPERS AND SCREW THE EXIT GRIPPERS INTO THE PRE-INSTALLED SCREWS.

#### 5 Insert and Trim Cable

Push down on the top "plunger" of the Exit Gripper to release the locking mechanism, and slide the cable down and out through the side exit hole.

Once the fixture is leveled, trim away excess cable.



# QUANTUM 2 SQUARE 1436

## Suspension Installation Cont. Canopy-T-Bar/Drop Ceiling

Used with the Canopy-Junction Box on Page 8 to anchor the second end of the Quantum channel to a T-Bar/Drop Ceiling.

### 1 Install Clip

Attach IDS clip onto T-Bar by snapping the two pieces together.

**NOTE:** THE 1/4" BOLT SHOULD BE PRE-INSTALLED INTO THE IDS CLIP. IF NOT, SCREW THE 1/4" BOLT INTO THE IDS CLIP BEFORE ATTACHING TO T-BAR.

### 2 Install Cable

Insert the 1/16" cable into the Cable Coupler and pull completely through.

### 3 Attach Canopy

Position the hole of the canopy onto the 1/4" bolt and screw the cable coupler (with 1/16" cable installed) onto the 1/4" bolt.

### 4 Install Exit Gripper

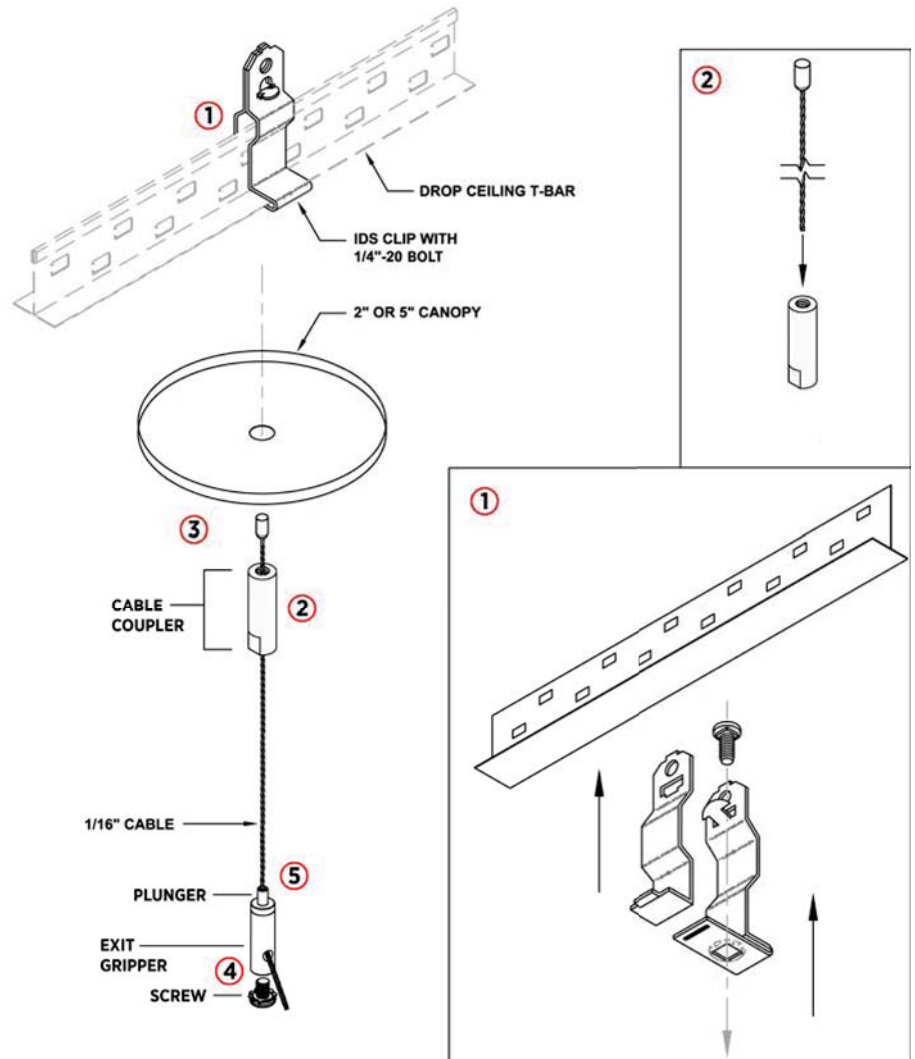
Loosen the screw in the bottom of the Exit Gripper and slide into the slot in the rear of the Quantum channel.

**NOTE:** SCREWS FOR THE EXIT GRIPPERS ARE PRE-INSTALLED INTO THE REAR SLOTS OF CUSTOM CHANNELS. REMOVE THE SCREWS THAT COME INSTALLED IN THE EXIT GRIPPERS AND SCREW THE EXIT GRIPPERS INTO THE PRE-INSTALLED SCREWS.

### 5 Insert and Trim Cable

Push down on the top "plunger" of the Exit Gripper to release the locking mechanism, and slide the cable down and out through the side exit hole.

Once the fixture is leveled, trim away excess cable.



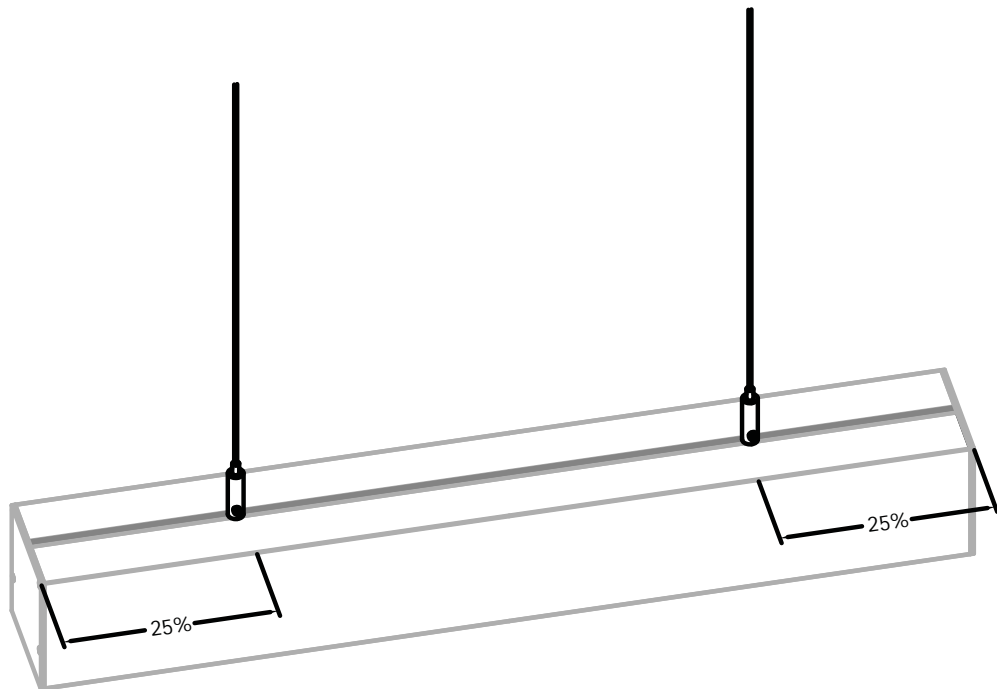
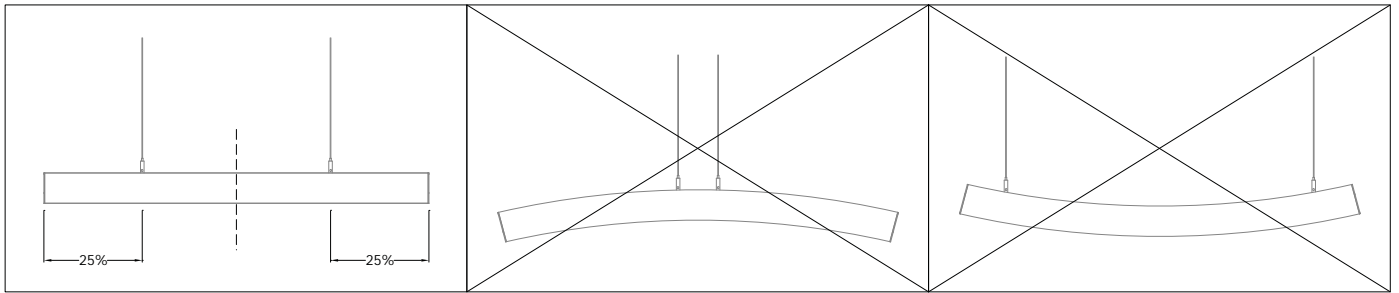
# QUANTUM 2 SQUARE 1436

## Suspension Installation Cont.

### Cable/Gripper Spacing

#### \* Cable/Gripper Spacing

Make sure the Exit Grippers are secured to the channel spaced 25% from each end. This will ensure that the channel will not sag or bow.



# QUANTUM 2 SQUARE 1436

## NOTES