



## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### GENERAL INSTALLATION

#### WARNING

#### To Reduce Risk Of Death, Injury, Or Property Damage From Fire, Electric Shock And Other Hazards:

The service of equipment must be performed by qualified personnel.

Installation and maintenance must be performed by qualified personnel familiar with the construction and operation of this product and any hazards involved. All applicable local and national codes and ordinances must be followed.

Read this document before installing, servicing, or maintaining this equipment. These instructions do not cover all installation, service, and maintenance situations. If your situation is not covered, or, if you do not understand these instructions or need additional information, contact American Linear Lighting or your local American Linear Lighting distributor.

#### WARNING

#### Before Installing, Servicing Or Maintaining This Equipment, Follow These General Precautions To Reduce The Risk Of Electrocutation:

Make sure the equipment is properly grounded.

Always de-energize the circuit and/or equipment before connecting to, disconnecting from, or servicing the equipment.

#### To Prevent Luminaire Row From Over-Current:

By adding the input current of each luminaire section marked on the luminaire, the total current per power feed must not exceed the maximum line wire amperage rating in the luminaire and the power feed cord/wire amperage rating whichever is least.

#### CAUTION

#### It Is The Installers Responsibility To Ensure That Wall, Ceiling Or Junction Box Is Structurally Capable Of Supporting The Weight Of Luminaire/Luminaire Row.

### SECTION 1: FIXTURE MOUNTING

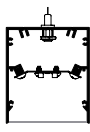
Pages 2 - 8



DIRECT  
2S



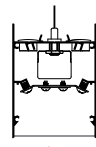
DIRECT / INDIRECT  
2SID



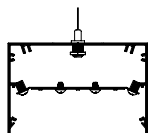
DIRECT  
3S



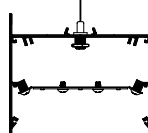
WALL WASH  
3S



DIRECT / INDIRECT  
3SID



DIRECT  
5S



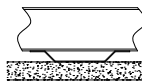
DIRECT / INDIRECT  
5SID

### SECTION TWO: OFF-GRID

Pages 8 - 10



SHEETROCK



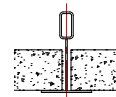
LATHE & PLASTER



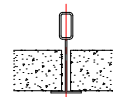
VARIOUS  
"HARD CEILING"

### SECTION THREE: ON-GRID

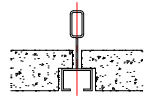
Pages 11 - 13



1" T-GRID  
(T1)



9/16" T-GRID  
(T9)



SCREW SLOT GRID  
(SC)

SAVE THESE INSTALLATION INSTRUCTIONS

## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### ROW MOUNTING

### CONTINUOUS ROW LUMINAIRE INSTALLATION

#### Cable Mounting "On Grid" (T1, T9 & SC):

Linear suspended luminaires intended for "On Grid" or "Tee Bar Ceiling" cable mounting are to be installed with (T1-1" T-Grid), (T9 9/16" T-Grid) or (SC Screw Slot Grid) Cable/Canopy Kits. Cable Kit assemblies are shipped separately and are provided with installation instructions. See installation instruction at the end of this document.

#### Cable Mounting "Off Grid" (HC):

Linear Suspended Luminaires intended for "Off Grid" OR "Hard Ceiling (HC)" cable mounting are to be installed with (HC) Cable/Canopy Kits. Cable kit assemblies are shipped separately and are provided with installation instructions. See installation instruction at the end of this document.

#### CAUTION:

Attempt to assemble a Continuous Row Luminaire on the ground and lifting row into the position may create stress at connection points and may result in damage and/or mechanical failure. It is best to perform the following tasks on a protective, elevated, stable surface to ease assembly and protect the fixtures. (Please also note this is to be done before attempting to suspend the fixture run).

#### Step One:

Remove the Bottom lens and LED/Reflector tray(s) from fixtures and store in order of run placement storing safely aside (FIG. 1). It is best to perform the following tasks on a protective, elevated, stable surface to ease assembly and protect the fixtures. (Please also note this is to be done before attempting to suspend the fixture run).

#### Step Two:

Locate and install End Cap Kits (FIG. 1A) and Joiner Kits (FIG. 1B). See the packing list for quantities per run. It is best to install the End Caps on the Starter and the Ender fixtures while they are laying on the elevated and stable surface.

Insert the End Cap into the housing, aligning it with the features in the extrusion (FIG. 1A). Press the End Cap firm to eliminate the gap between the housing and the End Cap. Screw the #10 screws to secure the end cap. For the best results, keep the screwdriver perpendicular to the housing, and force the screw towards the end of the mounting tab (towards the middle of the fixture) before you start driving it down.

Insert 4 alignment pins and 2 alignment tabs into the housing so that they are extending out towards the fixture to be joined by 1/2" (FIG. 1B). Attached the Joiner Bracket with two #10 screws positioning it so that the Center Tension Screw is located 1/16" from the edge of the housing (towards the middle of the fixture). Joining fixtures should mate easily leaving no gaps between housings. For 5" product family, product family, two joining brackets are required, see figure 1B and 3C.

Repeat this process for the balance of the fixtures in the run as needed. Complete each fixture in the run to assure the run can be assembled from right to left as intended.

FIGURE 1A

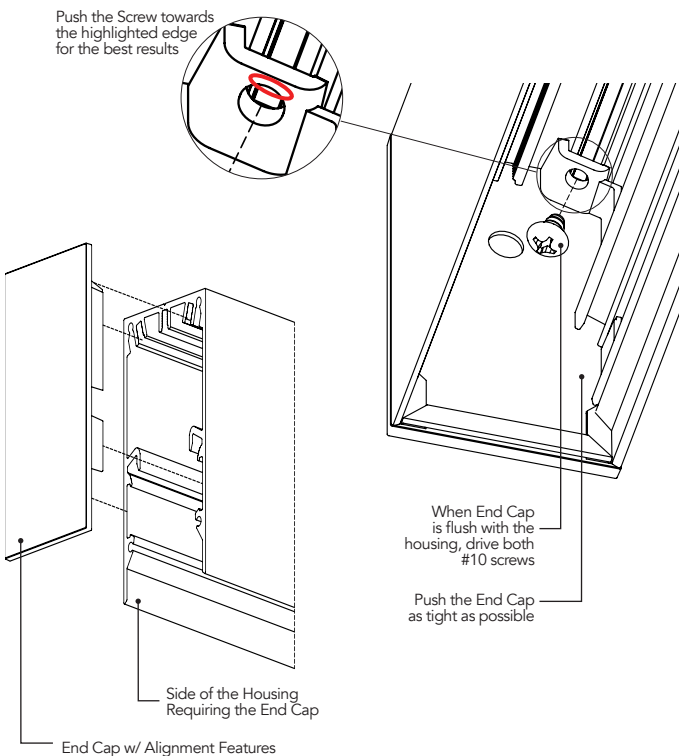
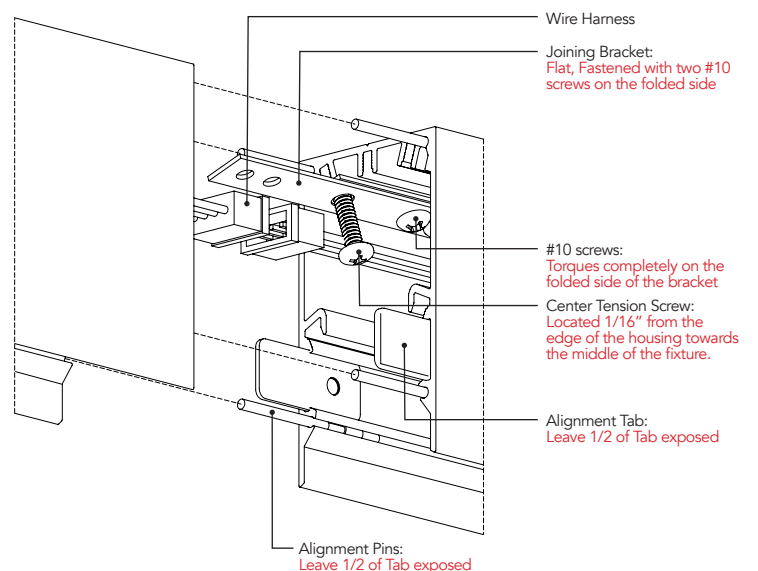


FIGURE 1B



## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### ROW MOUNTING

#### Step Three:

After locating the suspension cable locations as shown in the middle of this document "Row Information" and following the cable mounting instructions provided, suspend the **First Fixture** (FIG. 3) "RH End of Row Fixture" in the row. The first fixture in the Row must have all Joining Hardware installed (FIG. 1B) and one of the end caps (FIG. 1B, FIG. 3). Level the first fixture according to the customer's requirements and tighten the cable gripper upper nut to fix the 1/16" steel cable.

#### Step Four:

Position second fixture in a row (JOINER/INTERMEDIATE-ENDER) such that it aligns with the joint end of the first fixture and hang with joiner/intermediate cable assembly as illustrated in (FIG. 3). Plug wire harness(s) together and push the excess wire into the luminaire wiring chamber (FIG. 3). Push luminaires tightly together while making sure the alignment pins and tabs slide into the interior tracks of each luminaire. Adjust the height of the fixture/level with the first fixture (FIG. 3). When both fixtures are Leveled, screw in two #10 screws through the joining bracket plate (FIG. 3A). When both sides of the joining bracket are attached to both housings in the run with four #10 screws, tighten the Center Tention Screw on the joining bracket enough to hold luminaires snug to the mounting surface (FIG. 3B). Joining brackets are designed for a single-use. Contact the factory for the additional joining kits.

Continue to install and assemble row referencing step 4.

#### Step Five:

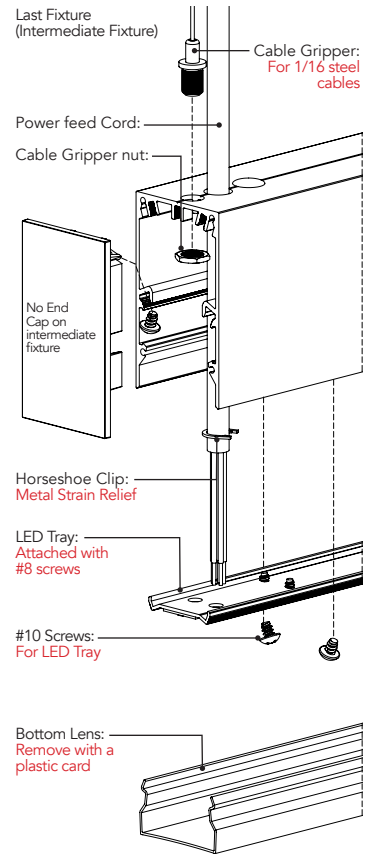
Remove 1/2" hole plug and install feed cord in the "LH End of Row Fixture" at the LH End. Lock the Horseshoe Clip (metal strain reliefs) at the end of the electrical wire after it's been inserted into the fixture as shown (FIG. 2). Leave 6" of feed cord inside of fixture for splicing to fixture. Connect feed cord to wire harness with wire nuts provided within the feed cord kits. Make a wire connection as required to meet the intended function. Install the End Cap on the last fixture (FIG. 1A)

#### Step Six

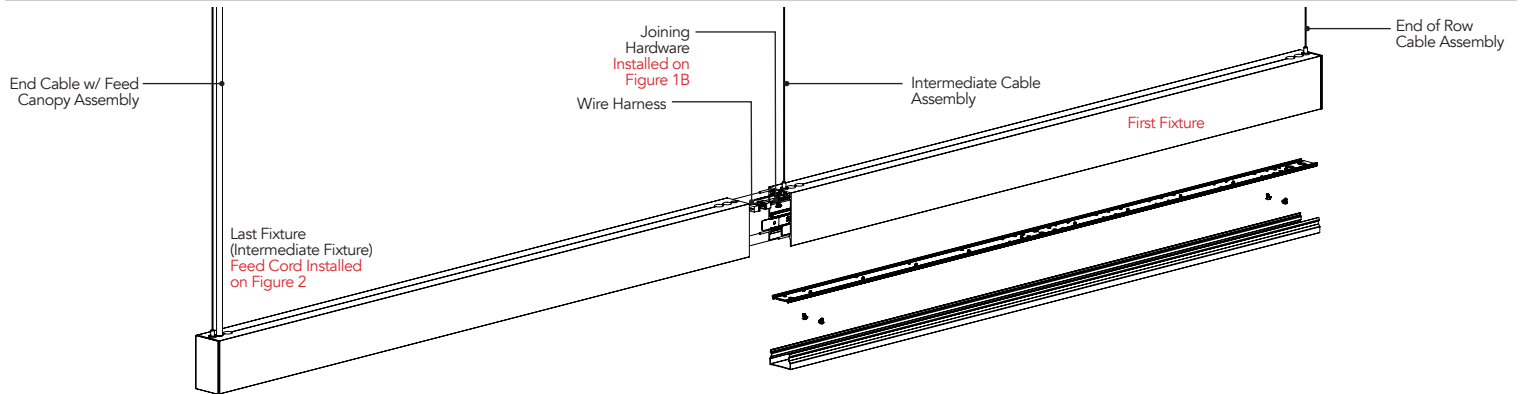
Reassemble LED/Reflector tray in reverse fashion and ensure that there are no wires bound by the reflector as this will cause the lens to not fit correctly. For 2" wide product line only: When reinstalling the LED tray, hold it firm in the housing tracks, screw the first screw with just a few revolutions, move to the middle, and to the last screw before screwing the first screw all the way in. Not following this step will cause the LED Tray to slide out of position and interfere with the end cap or the next fixture in a row. Please refer to Page 4 for the Wall Wash lens installation.

Power up the row and apply the Light Shield Tape below the joining tab (FIG. 3B). Do not let the bottom of the tape to show below the edge of the housing. Reinstall lens(es) when all tape pieces are applied.

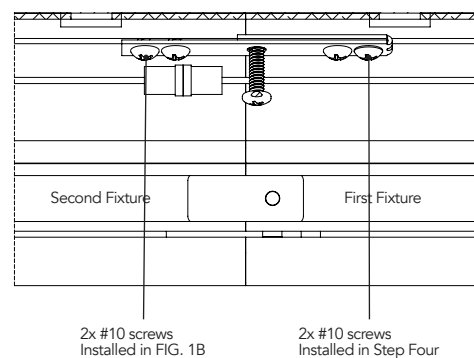
**FIGURE 2**



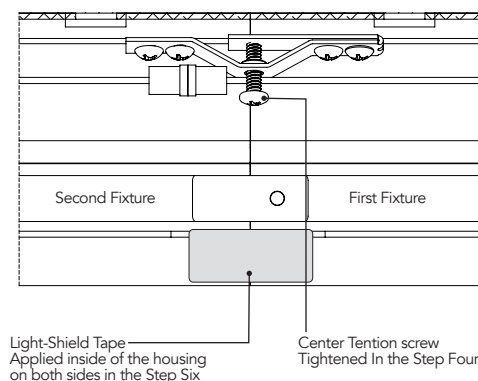
**FIGURE 3**



**FIGURE 3A** Shown in a cross-section for clarity

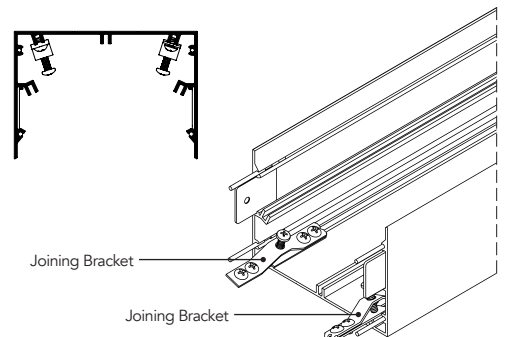


**FIGURE 3B** Shown in a cross-section for clarity



**FIGURE 3C**

Two joining brackets are required for 5" product family



## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### INDIVIDUAL LUMINAIRE MOUNTING

#### Cable Mounting "On Grid" (T1, T9 & SC):

Linear suspended luminaires intended for "On Grid" or "Tee Bar Ceiling" cable mounting are to be installed with (T1-1" T-Grid), (T9 9/16" T-Grid) or (SC Screw Slot Grid) Cable/Canopy Kits. Cable Kit assemblies are shipped separately and are provided with installation instructions. See installation instruction at the end of this document.

#### Cable Mounting "Off Grid" (HC):

Linear Suspended Luminaires intended for "Off Grid" OR "Hard Ceiling (HC)" cable mounting are to be installed with (HC) Cable/Canopy Kits. Cable kit assemblies are shipped separately and are provided with installation instructions. See installation instruction at the end of this document.

#### Step One:

Remove the Bottom lens and LED/Reflector tray(s) from fixtures and store in order of run placement storing safely aside (FIG. 4A). It is best to perform the following tasks on a protective, elevated, stable surface to ease assembly and protect the fixtures.

#### Step Two:

After locating the suspension cable locations as shown in the middle of this document "Row Information" and following the cable mounting instructions provided, suspend the fixture (FIG. 4A) Level the fixture according to the customer's requirements and tighten the cable gripper upper nut to fix the 1/16" steel cable.

#### Step Three:

Reassemble LED/Reflector tray in reverse fashion and ensure that there are no wires bound by the reflector as this will cause the lens to not fit correctly. For 2" wide product line only: When reinstalling the LED tray, hold it firm in the housing tracks, screw the first screw with just a few revolutions, move to the middle, and to the last screw before screwing the first screw all the way in. Not following this step will cause the LED Tray to slide out of position and interfere with the end cap or the next fixture in a row. Power up the row and reinstall the lens.

FIGURE 4A

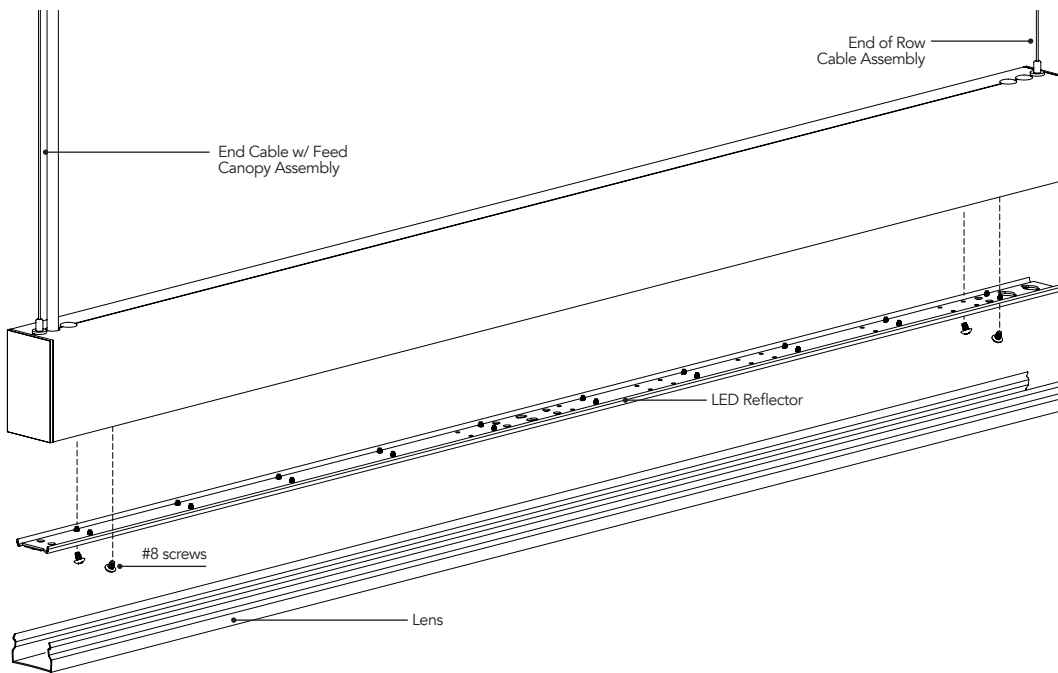
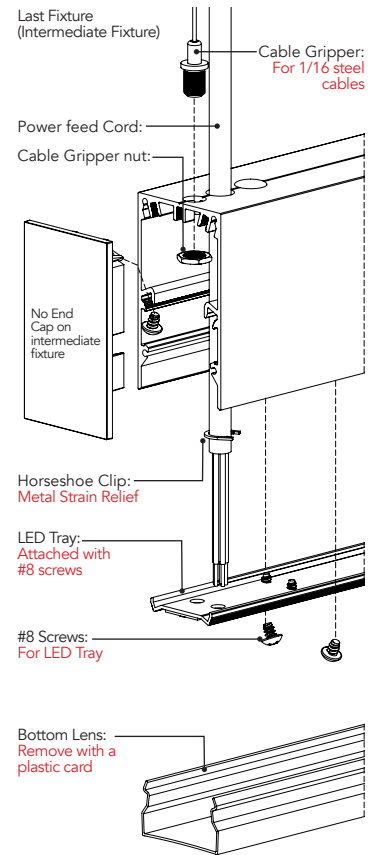


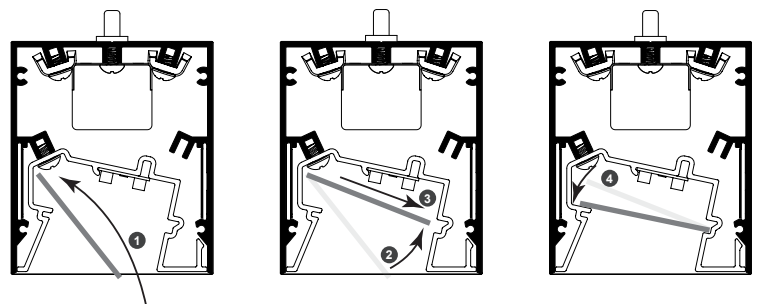
FIGURE 4



#### Wall Wash lens installation (3" DIRECT ONLY):

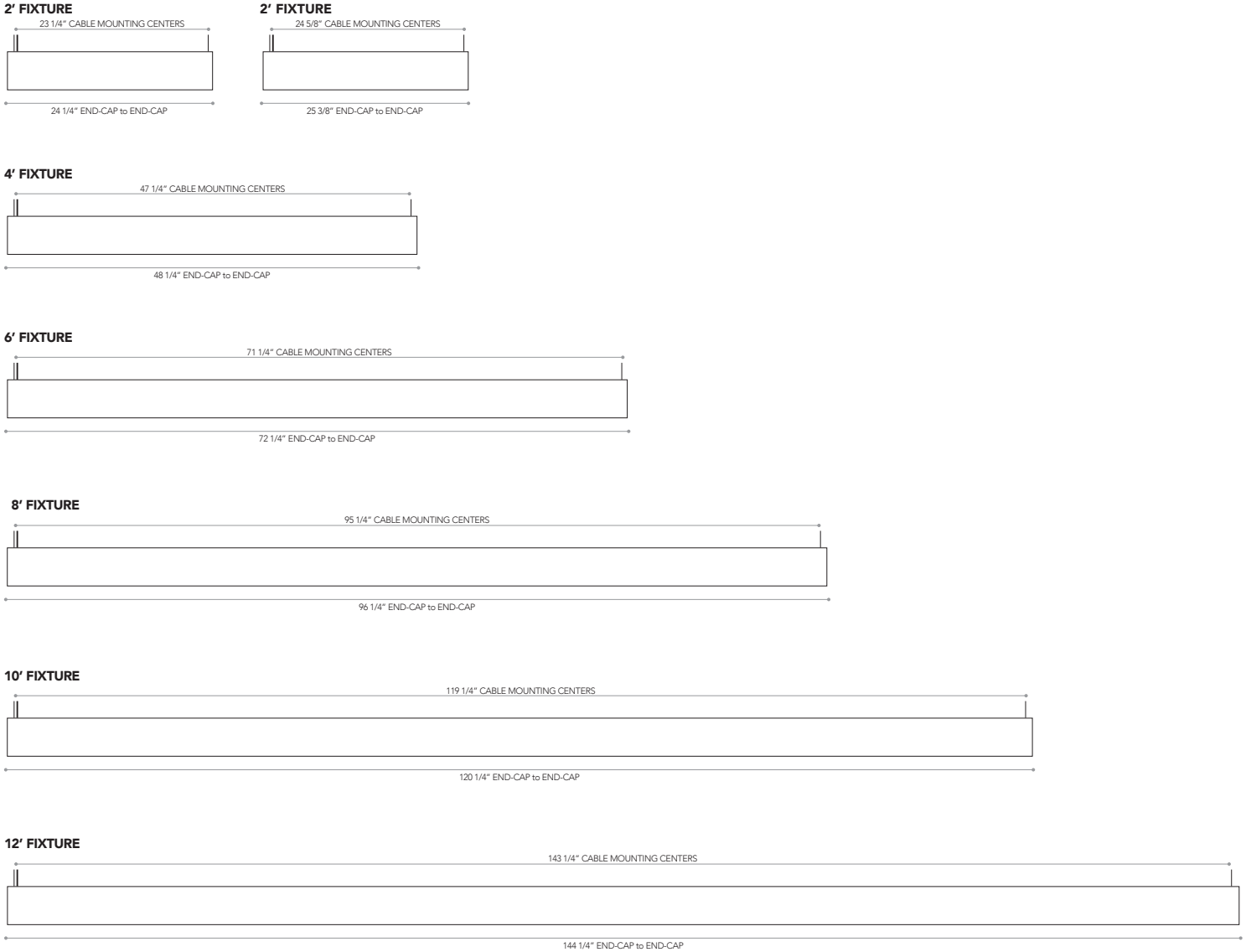
The Lift and Shift lens installation is done in 4 easy steps.  
The textured side of the lens must point downwards.

1. Lift the lens into the housing towards the mounting screw.
- 2-3. Swing the lens into the housing aiming it towards the retaining groove and slide into the groove.
4. Allow the lens to rest on the surface opposite of the retaining groove.



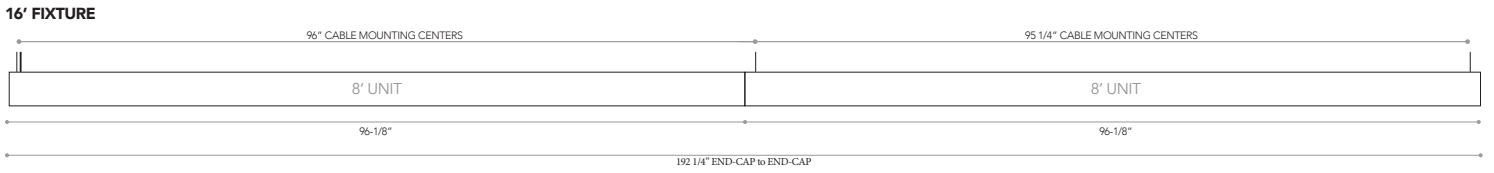
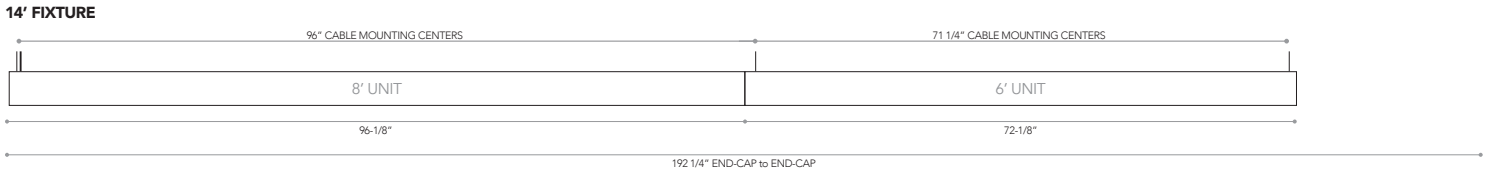
## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### FIXTURE ROW LAYOUT: SINGLE UNIT 2' - 4' - 6' - 8' - 10' - 12'

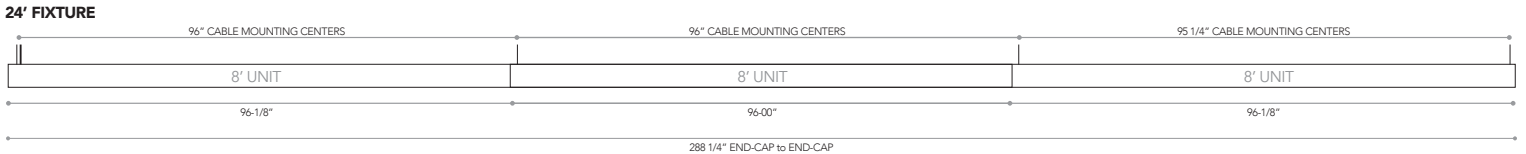
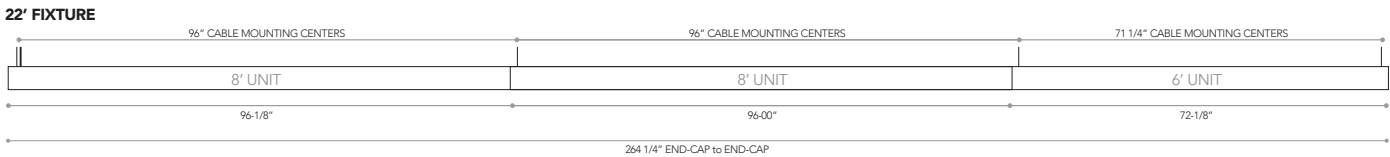
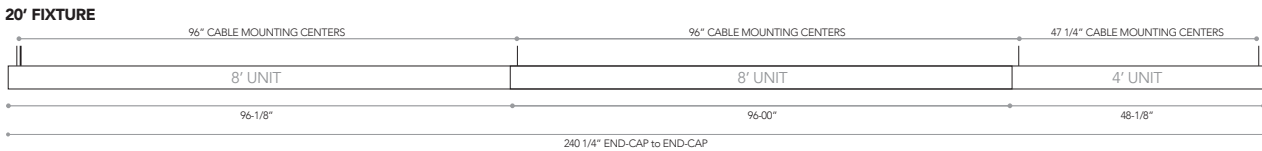
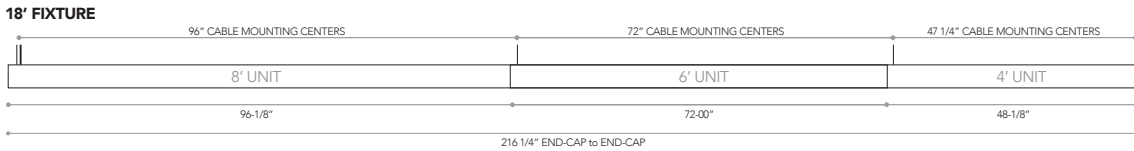


## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### FIXTURE ROW LAYOUT: TWO UNITS 14' - 16'



### FIXTURE ROW LAYOUT: THREE UNITS 18' - 20' - 22' - 24'



## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### FIXTURE ROW COMPONENTS

ROW LENGTH	2' - UNIT	4' - UNIT	6' - UNIT	8' - UNIT	10' - UNIT	12' - UNIT	JOINER KITS	END CAPS	END-CAP TO END-CAP
2'	1	-	-	-	-	-	-	-	24-1/4"
4'	-	1	-	-	-	-	-	-	48-1/4"
6'	-	-	1	-	-	-	-	-	72-1/4"
8'	-	-	-	1	-	-	-	-	96-1/4"
10'	-	-	-	-	1	-	-	-	120-1/4"
12'	-	-	-	-	-	1	-	-	144-1/4"
14'	-	-	1	1	-	-	1	2	168-1/4"
16'	-	-	-	2	-	-	1	2	192-1/4"
18'	-	1	1	1	-	-	2	2	216-1/4"
20'	-	1	-	2	-	-	2	2	240-1/4"
22'	-	-	1	2	-	-	2	2	264-1/4"
24'	-	-	-	3	-	-	2	2	288-1/4"
26'	-	1	1	2	-	-	3	2	312-1/4"
28'	-	1	-	3	-	-	3	2	336-1/4"
30'	-	-	1	3	-	-	3	2	360-1/4"
32'	-	-	-	4	-	-	3	2	384-1/4"
34'	-	1	1	3	-	-	4	2	408-1/4"
36'	-	1	-	4	-	-	4	2	432-1/4"
38'	-	-	1	4	-	-	4	2	456-1/4"
40'	-	-	-	5	-	-	4	2	480-1/4"
42'	-	1	1	4	-	-	5	2	504-1/4"
44'	-	1	-	5	-	-	5	2	528-1/4"
46'	-	-	1	5	-	-	5	2	552-1/4"
48'	-	-	-	6	-	-	5	2	576-1/4"
50'	-	1	1	5	-	-	6	2	600-1/4"
52'	-	1	-	6	-	-	6	2	624-1/4"
54'	-	-	1	6	-	-	6	2	648-1/4"
56'	-	-	-	7	-	-	6	2	672-1/4"
58'	-	1	1	6	-	-	7	2	696-1/4"
60'	-	1	-	7	-	-	7	2	720-1/4"
62'	-	-	1	7	-	-	7	2	744-1/4"
64'	-	-	-	8	-	-	7	2	768-1/4"
66'	-	1	1	7	-	-	8	2	792-1/4"
68'	-	1	-	8	-	-	8	2	816-1/4"
70'	-	-	1	8	-	-	8	2	840-1/4"
72'	-	-	-	9	-	-	8	2	864-1/4"

**Note 1**  
Suspended Mount Fixtures have Cable Mounting Holes 1/2" from End-Cap

## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### OFF-GRID MOUNTING

#### NON FEED CABLE/CANOPY ASSEMBLY

##### Step One:

Determine mounting cable spacing centers from the Fixture Row Layout Pages 5-7.

##### Step Two:

Install 1/4-20 studs projecting from the finished ceiling line 1/2".

##### Step Three:

Insert cable supplied in the kit through ceiling coupler in the kit and attach to 1/4-20 stud securely. Remove threaded canopy support ring from coupler and slide canopy then support ring over cable and up to finished ceiling line. Tighten support ring to locate canopy in place.

##### Step Four:

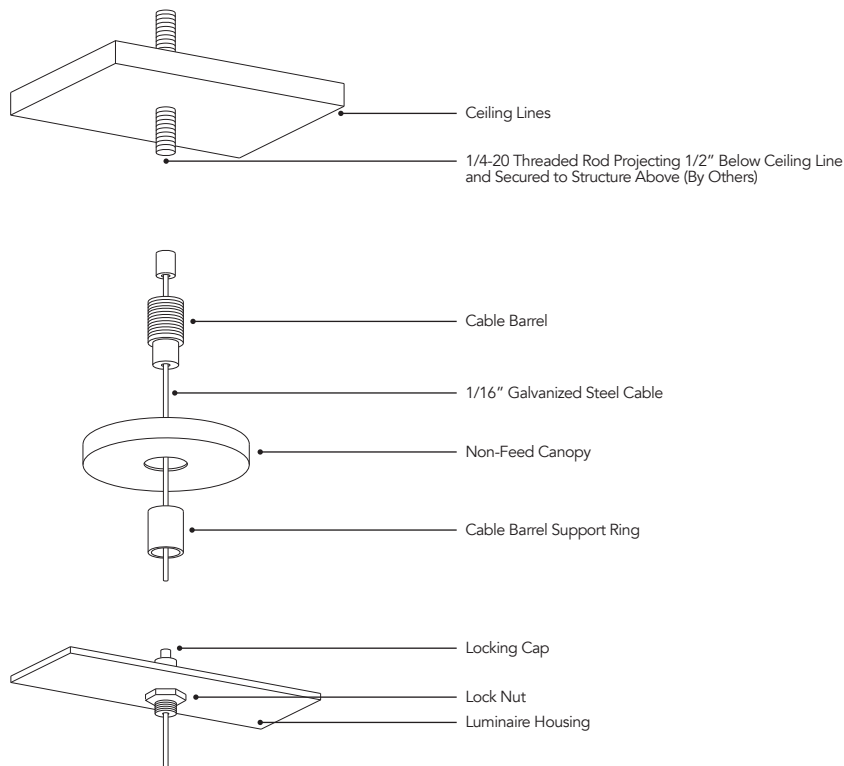
Raise luminaire to cable assembly and route cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the cable to enter fitting. Feed the cable through the adjustable fitting until the desired mounting height is attained. The luminaire will be retained at the last point of adjustment. Tighten locking cap onto retainer stem.

**Note: If It Becomes Necessary To Re-Adjust Luminaire Height, Loosen Locking Cap, And Depress Retainer Stem While Adjusting To The Desired Position.**

### CAUTION:

**Be Certain To Support Luminaire Independently Of Cables When Depressing Retainer Stem.**

FIGURE 5





## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### OFF-GRID MOUNTING

#### FEED CABLE/CANOPY ASSEMBLY

##### Step One:

Determine mounting cable spacing centers from the Fixture Row Layout Pages 5-7 and locate a 4" octagonal junction box at the location indicated for incoming wire feed point.

##### Step Two:

OPTION 1 Install cross strap support bracket to the junction box with screws by others. Be sure the junction box can support luminaire/luminaire row in accordance with local codes as illustrated.

OPTION 2 Drill a 5/16" dia hole in the roof of the junction box. Position and secure a 1/4-20 threaded rod (by others) to structural support above so that it passes through the hole drilled in the junction box and extends 1/2" below the finished ceiling line.

##### Step Three:

Insert cable supplied in the kit through ceiling coupler in the kit and attach to 1/4-20 stud securely. Remove threaded canopy support ring from coupler and slide canopy then support ring over cable and up to finished ceiling line. Loosely tighten the support ring to locate canopy in place.

##### Step Four:

Raise luminaire to cable assembly and route cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the cable to enter fitting. Feed the cable through the adjustable fitting until the desired mounting height is attained. The luminaire will be retained at the last point of adjustment. Tighten locking cap onto retainer stem.

**Note: If It Becomes Necessary To Re-Adjust Luminaire Height, Loosen Locking Cap And Depress Retainer Stem While Adjusting To The Desired Position.**

### CAUTION:

**Be Certain To Support Luminaire Independently Of Cables When Depressing Retainer Stem.**

##### Step Five:

Remove canopy support ring and route feed cord from luminaire through the grommeted hole in the canopy and into the junction box. Connect feed cord to incoming power feed wires within a j-box with appropriate connectors and install cord restraint as illustrated.

##### Step Six:

Raise the canopy finished ceiling line and locate with canopy support ring. Attach supplied tie straps around feed cord and cable at minimum of 36" on center.

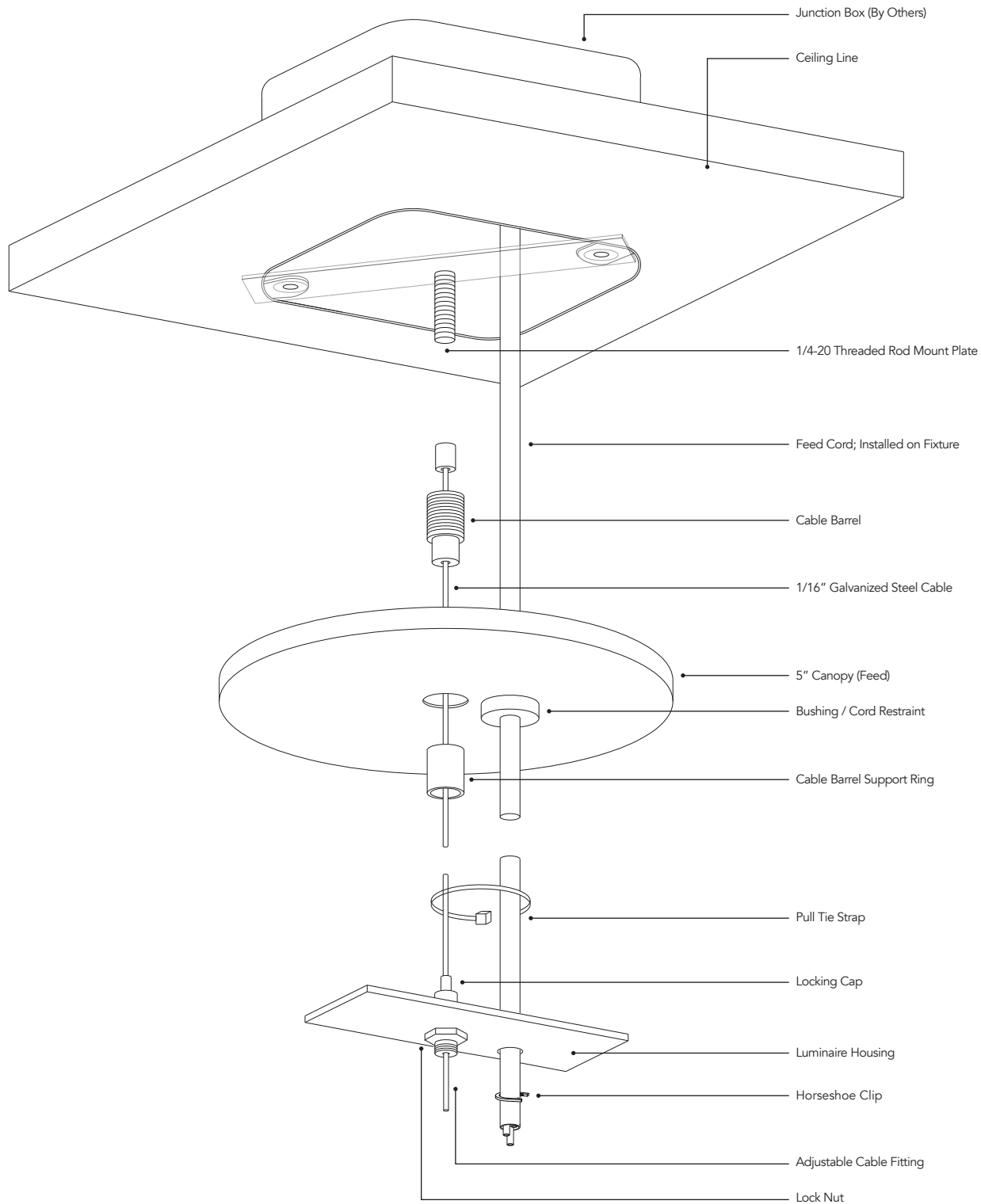
ENERGIZE AND CHECK FOR PROPER OPERATION.

FIGURE 6 ON NEXT PAGE

## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### OFF-GRID MOUNTING

FIGURE 6



## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### ON-GRID MOUNTING

#### NON FEED CABLE/CANOPY ASSEMBLY

##### Step One:

Determine mounting centers from the Fixture Row Layout Pages 5-7.

##### Step Two:

Installation of IDS clip onto T-BAR at appropriate locations (REF. STEP 1 AND FIG. 7)

- A. Assemble 1/4-20 stud and clip. Start stud into the recessed square hole, grasp clip in hand and depress tab a with a thumb. Pull stud into place and release TAB A.
- B. Separate clip into its two parts by bending at TAB B.
- C. Place PART X on T-BAR and insert the base tab on part into the slot. Close PARTS X and Y together locking with TAB C.

##### Step Three:

Secure IDS clip to structural support above with minimum #12 gauge support wire in accordance with local codes. (REF FIG. 8)

##### Step Four:

Insert cable supplied in the kit through ceiling coupler in the kit and attach to 1/4-20 stud on IDS clip securely. Remove threaded canopy support ring from coupler and slide canopy then support ring over cable and up to finished ceiling line. Tighten support ring to locate canopy in place.

##### Step Five:

Raise luminaire to cable assembly and route cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the cable to enter fitting. Feed the cable through the adjustable fitting until the desired mounting height is attained. The luminaire will be retained at the last point of adjustment. Tighten locking cap onto retainer stem.

**Note: If It Becomes Necessary To Re-Adjust Luminaire Height, Loosen Locking Cap And Depress Retainer Stem While Adjusting To The Desired Position.**

### CAUTION:

**Be Certain To Support Luminaire Independently Of Cables When Depressing Retainer Stem.**

FIGURE 7

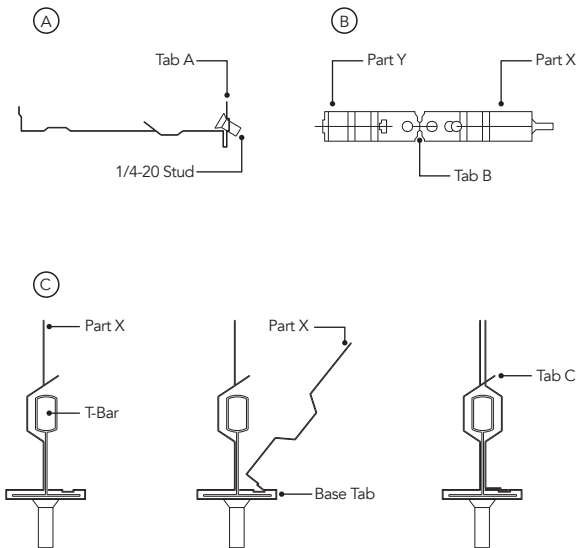
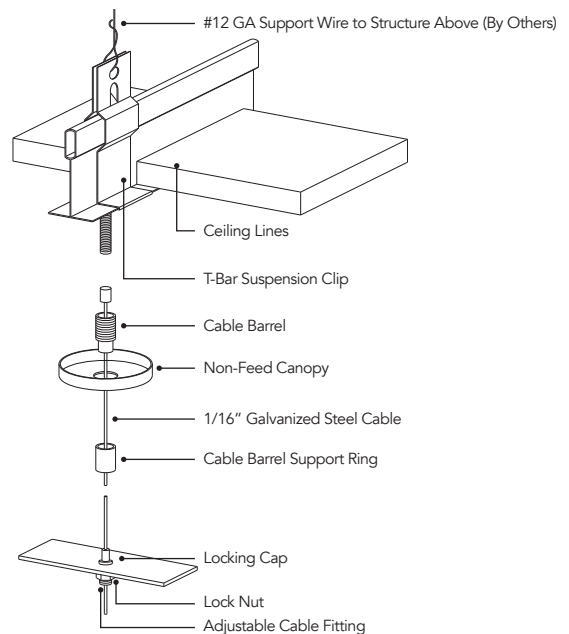


FIGURE 8



## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### ON-GRID MOUNTING

#### FEED CABLE/CANOPY ASSEMBLY

##### Step One:

Determine mounting cable spacing centers from the Fixture Row Layout Pages 5-7.

##### Step Two:

Installation of IDS clips onto T-BAR at appropriate locations on T-BAR. Follow instruction sequence #2 and 3 from the previous page.

##### Step Three:

Install Greenfield connector or equal (by others) onto the junction box. Attach Junction Box and Junction Box support bracket to IDS clip with 1/4-20 nut and bolt provided as illustrated.

##### Step Four:

Support Junction Box support bracket (By Others) to structural support above with minimum #12 gauge support wire in accordance with local codes as illustrated.

##### Step Five:

Cut a 3/4" dia. hole in ceiling tile aligned with Greenfield connector protruding from Junction Box. Insert cable supplied in the kit through ceiling coupler in the kit and attach to 1/4-20 stud on IDS clip securely. Remove threaded canopy support ring from coupler and slide canopy then support ring over cable and up to finished ceiling line. Tighten support ring to locate canopy in place.

##### Step Six:

Raise luminaire to cable assembly and route cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the cable to enter fitting. Feed the cable through the adjustable fitting until the desired mounting height is attained. The luminaire will be retained at the last point of adjustment. Tighten locking cap onto retainer stem.

**Note: If It Becomes Necessary To Re-Adjust Luminaire Height, Loosen Locking Cap And Depress Retainer Stem While Adjusting To The Desired Position.**

### CAUTION:

**Be Certain To Support Luminaire Independently Of Cables When Depressing Retainer Stem.**

##### Step Seven:

Route feed cord from luminaire through the grommeted hole in the canopy and into Junction Box. Connect feed cord to incoming power feed wires within Junction Box with appropriate connectors and install cord restraint as illustrated. Attach supplied tie straps around feed cord and cable at a minimum of 36" on center.

-ENERGIZE AND CHECK FOR PROPER OPERATION.

FIGURE 9 ON NEXT PAGE

## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### ON-GRID MOUNTING

FIGURE 9

