



## 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, state and federal 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.

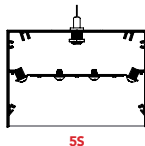
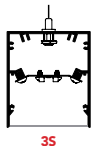
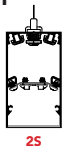
#### CAUTION

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

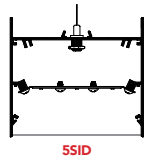
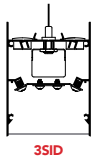
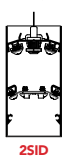
NOTE: The fixture markings can be found on labels positioned behind the direct lens. To access these labels, carefully pry off the direct lens from one end of the fixture using a flat tool or plastic card.

### SECTION ONE: FIXTURE MOUNTING Pages 2 - 8

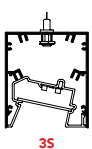
#### DIRECT



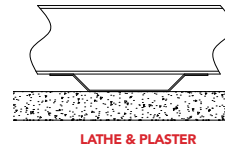
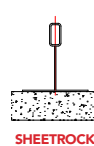
#### INDIRECT / DIRECT



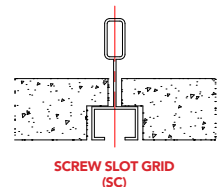
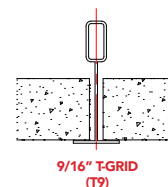
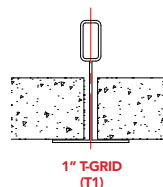
#### WALL WASH



### SECTION TWO: OFF-GRID Pages 8 - 10



### SECTION THREE: ON-GRID Pages 11 - 13



SAVE THESE INSTALLATION INSTRUCTIONS

## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### ROW MOUNTING

### CONTINUOUS LUMINAIRE INSTALLATION

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

Linear suspended luminaire intended for "On Grid" or "T-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 & JB):

Linear Suspended Luminaire 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

Attempting 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:

Attach 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 left to right as intended.

FIGURE 1A

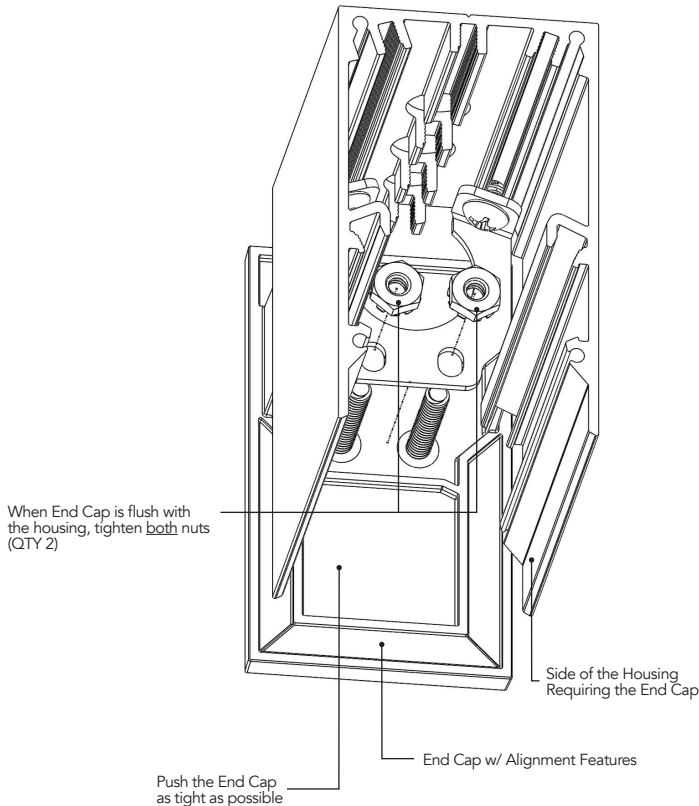
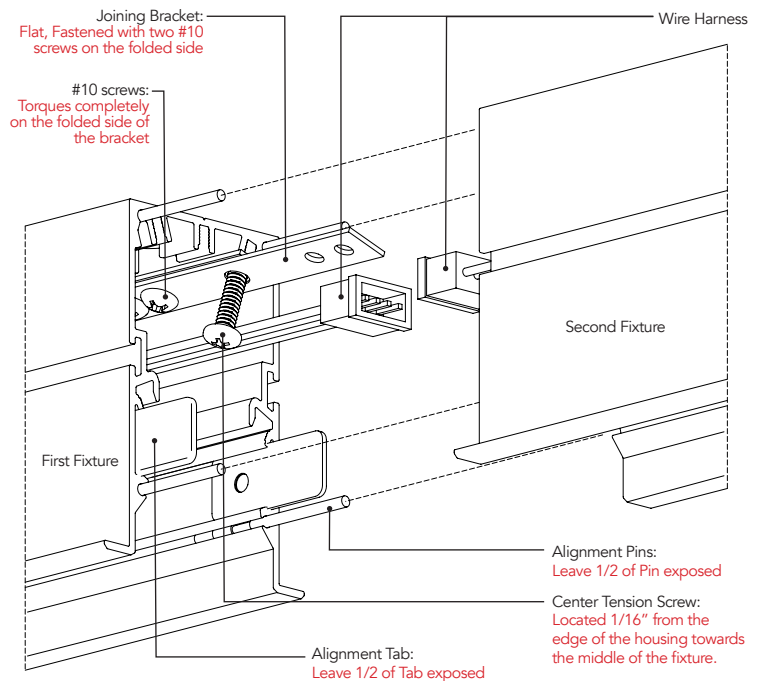


FIGURE 1B



## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### ROW MOUNTING

#### Step Three:

After locating the suspension cable locations as shown in the Fixture Row Layout pages 5-7 and following the cable mounting instructions provided, suspend the **FIRST/STARTER Fixture** (FIG. 3) "LH 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 luminaire 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 Tension Screw on the joining bracket enough to hold luminaire 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:

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 #8 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.

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

#### Step Six:

After the last fixture in the row is installed (ENDER) and the LED trays and lenses are reinstalled in the fixture run, refer to the appropriate Feed Cable/Canopy Assembly instructions. Instructions can be found on pages 8 - 13.

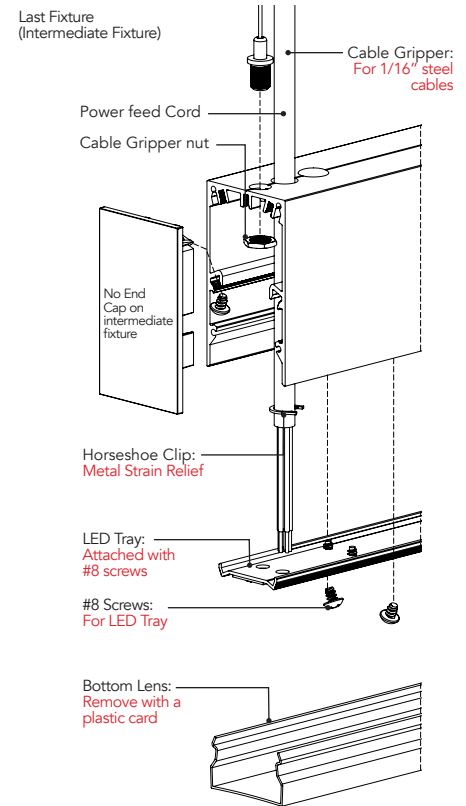


FIGURE 3

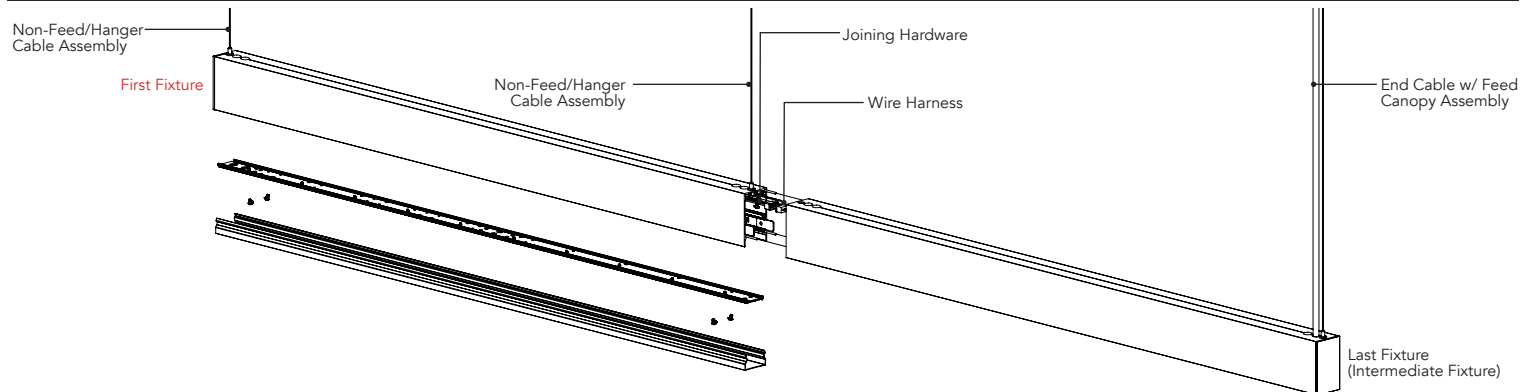


FIGURE 3A Shown in a cross-section for clarity

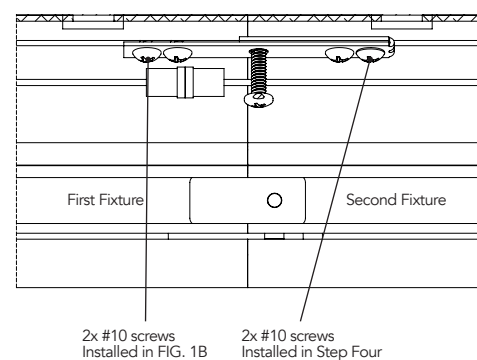


FIGURE 3B Shown in a cross-section for clarity

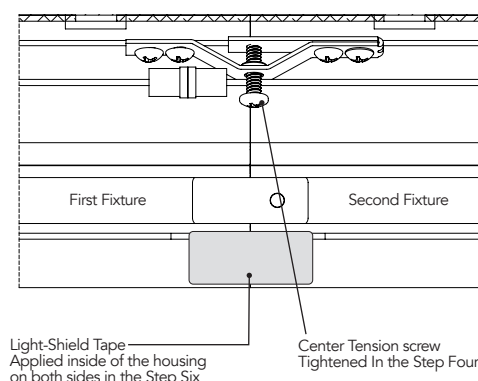
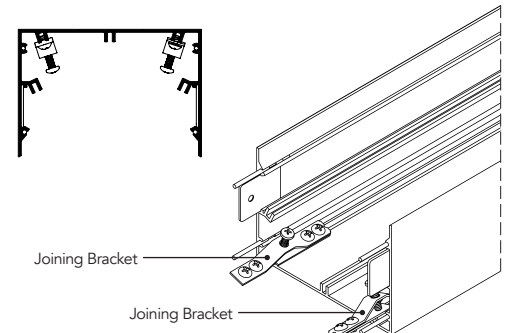


FIGURE 3C

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 luminaire intended for "On Grid" or "T-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.](#)

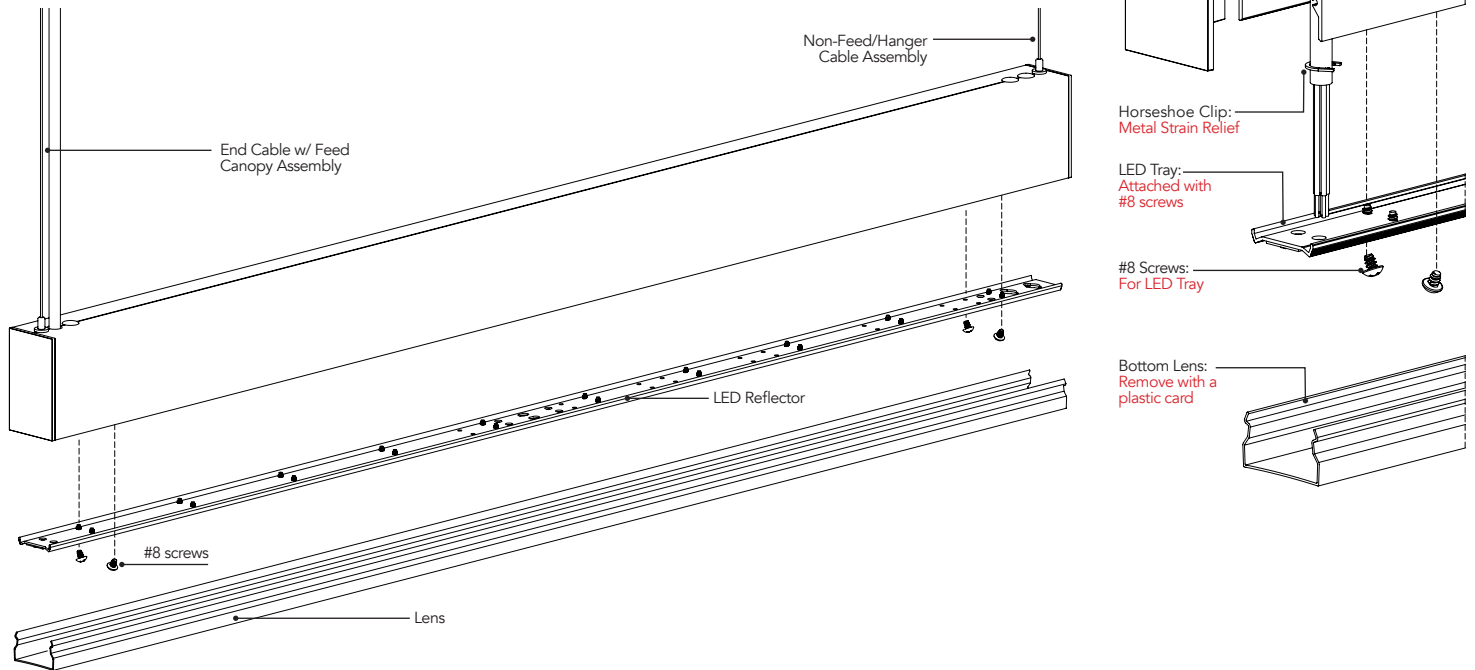
#### Step One:

After locating the suspension cable locations as shown in the Fixture Row Layout Pages 5-7 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 Two:

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 #8 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. Reinstall the lens and energize the fixture.

FIGURE 4A

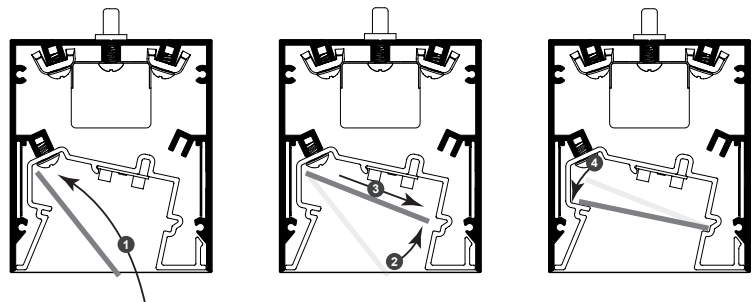


### WALL WASH LENS INSTALLATION (3" Direct Only)

The Lift and Shift lens installation is done in 4 easy steps.

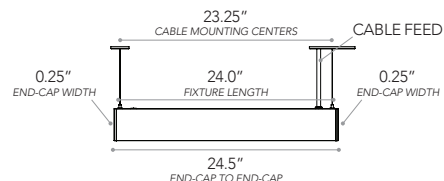
[The textured side of the lens must point downwards.](#)

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.

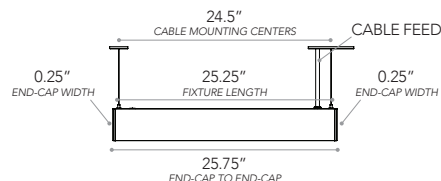


# FIXTURE ROW LAYOUT: SINGLE UNIT    2' - 4' - 6' - 8' - 10' - 12'

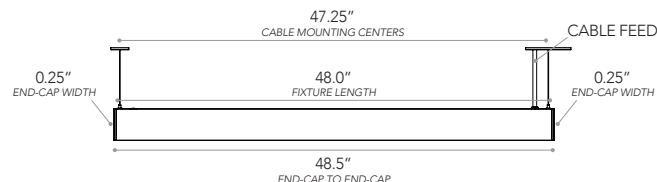
2' FIXTURE ( DIRECT )



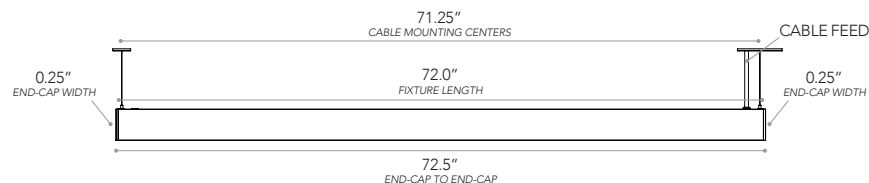
2' FIXTURE ( INDIRECT / DIRECT )



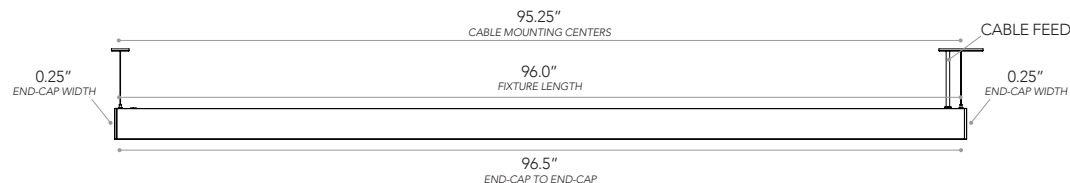
4' FIXTURE



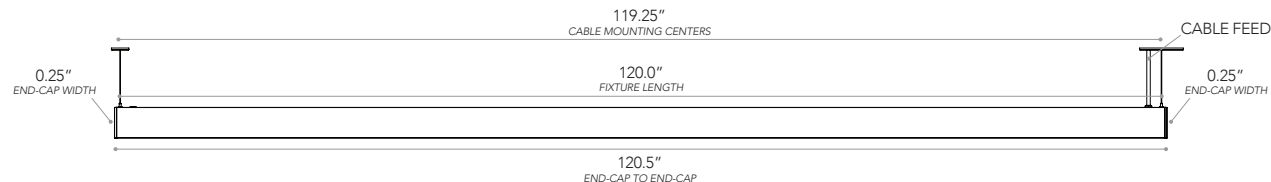
6' FIXTURE



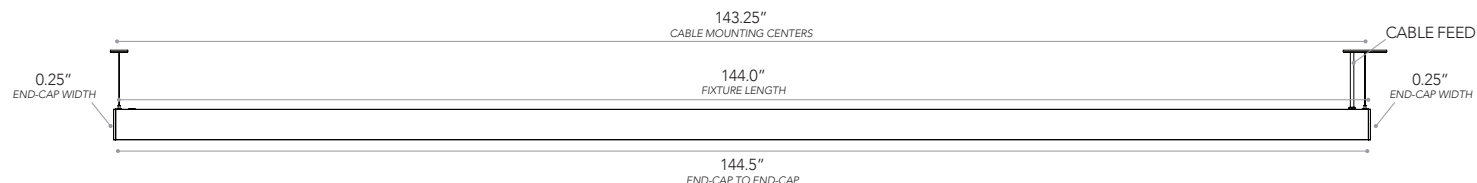
8' FIXTURE



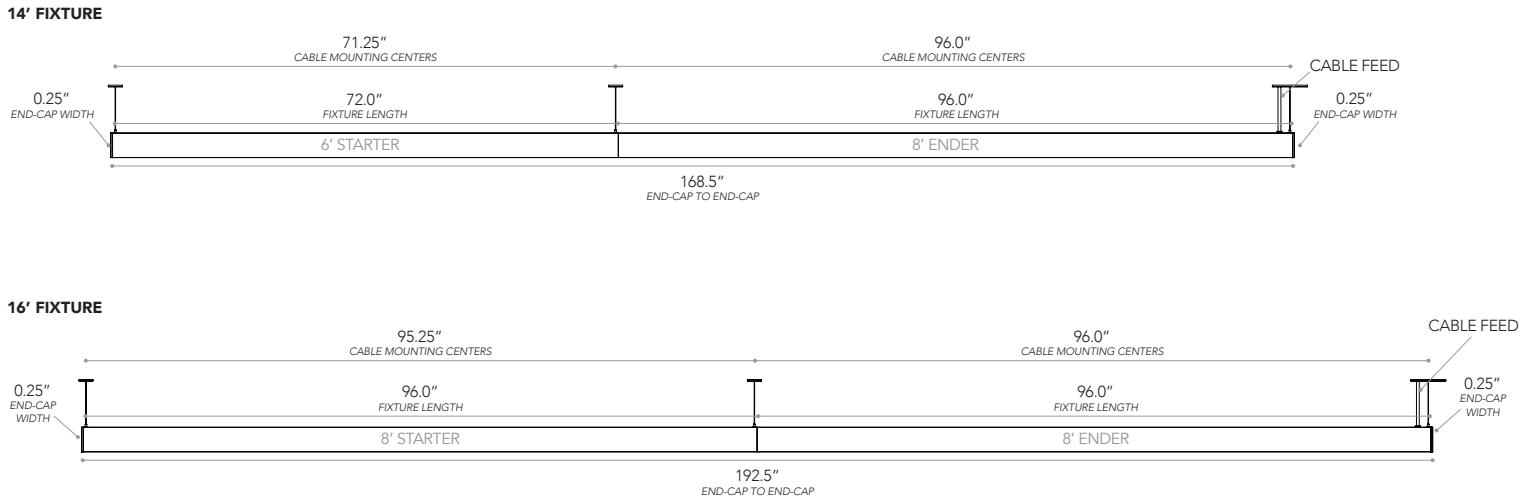
10' FIXTURE



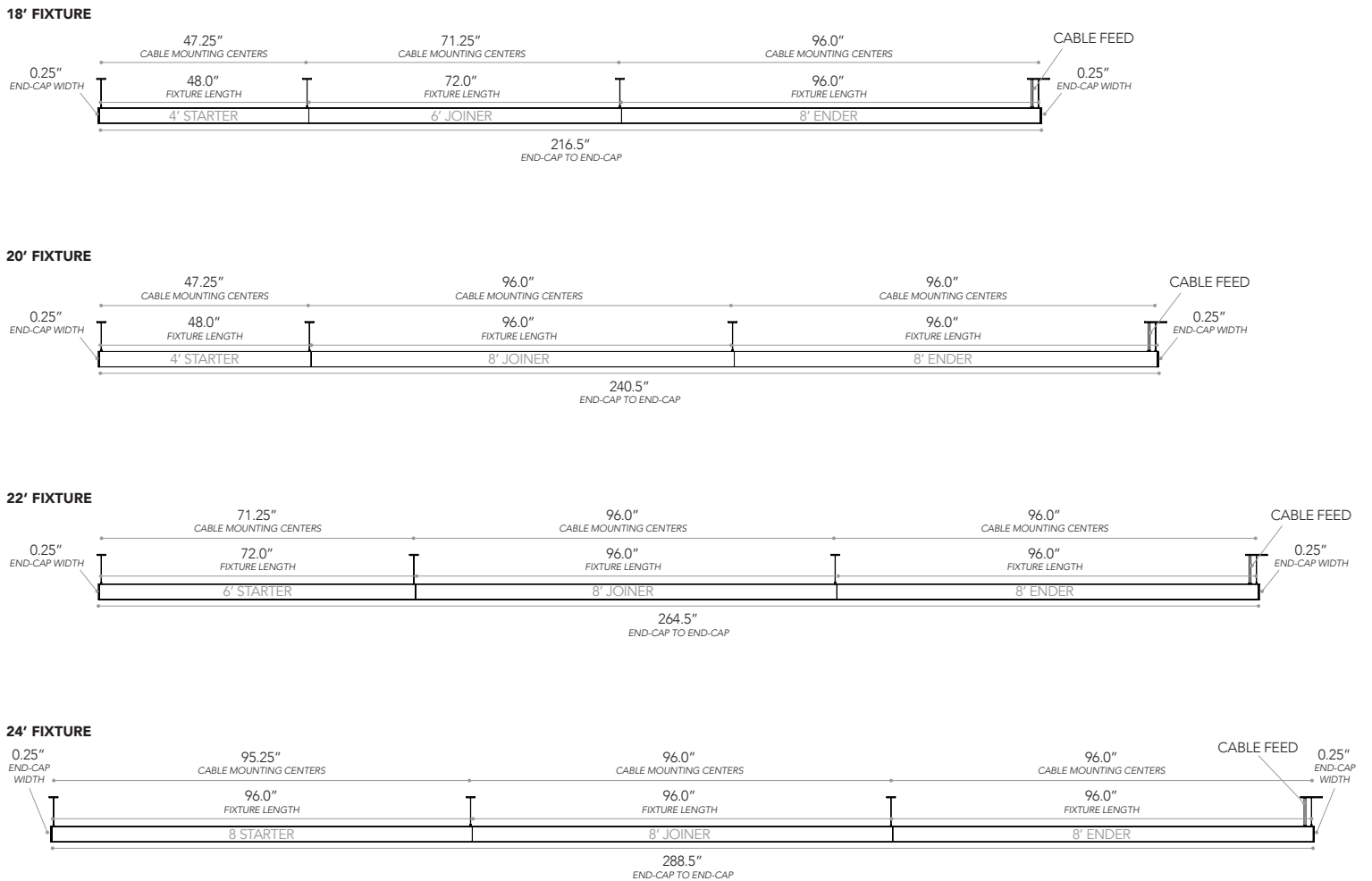
12' FIXTURE



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



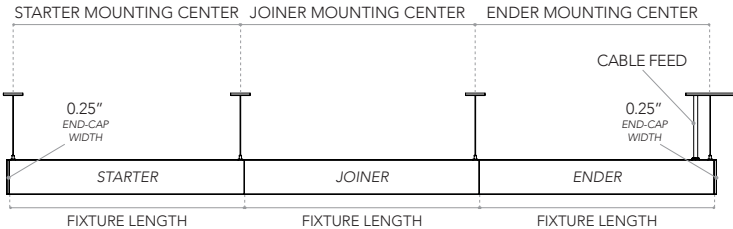
## FIXTURE ROW LAYOUT: THREE UNITS 18' - 20' - 22' - 24'



### FIXTURE ROW COMPONENTS

RUN LENGTH (FT)	FIXTURE LENGTHS									JOINER KITS	FEED KITS	HANGER KITS	END-CAP TO END-CAP
	STARTER	JOINER							ENDER				
	1	2	3	4	5	6	7	8	9				
14	6'	-	-	-	-	-	-	-	8'	1	1	2	168.5"
16	8'	-	-	-	-	-	-	-	8'	1	1	2	192.5"
18	4'	6'	-	-	-	-	-	-	8'	2	1	3	216.5"
20	4'	8'	-	-	-	-	-	-	8'	2	1	3	240.5"
22	6'	8'	-	-	-	-	-	-	8'	2	1	3	264.5"
24	8'	8'	-	-	-	-	-	-	8'	2	1	3	288.5"
26	4'	6'	8'	-	-	-	-	-	8'	3	1	4	312.5"
28	4'	8'	8'	-	-	-	-	-	8'	3	1	4	336.5"
30	6'	8'	8'	-	-	-	-	-	8'	3	1	4	360.5"
32	8'	8'	8'	-	-	-	-	-	8'	3	1	4	384.5"
34	4'	6'	8'	8'	-	-	-	-	8'	4	1	5	408.5"
36	4'	8'	8'	8'	-	-	-	-	8'	4	1	5	432.5"
38	6'	8'	8'	8'	-	-	-	-	8'	4	1	5	456.5"
40	8'	8'	8'	8'	-	-	-	-	8'	4	1	5	480.5"
42	4'	6'	8'	8'	8'	-	-	-	8'	5	1	6	504.5"
44	4'	8'	8'	8'	8'	-	-	-	8'	5	1	6	528.5"
46	6'	8'	8'	8'	8'	-	-	-	8'	5	1	6	552.5"
48	8'	8'	8'	8'	8'	-	-	-	8'	5	1	6	576.5"
50	4'	6'	8'	8'	8'	8'	-	-	8'	6	1	7	600.5"
52	4'	8'	8'	8'	8'	8'	-	-	8'	6	1	7	624.5"
54	6'	8'	8'	8'	8'	8'	-	-	8'	6	1	7	648.5"
56	8'	8'	8'	8'	8'	8'	-	-	8'	6	1	7	672.5"
58	4'	6'	8'	8'	8'	8'	8'	-	8'	7	1	8	696.5"
60	4'	8'	8'	8'	8'	8'	8'	-	8'	7	1	8	720.5"
62	6'	8'	8'	8'	8'	8'	8'	-	8'	7	1	8	744.5"
64	8'	8'	8'	8'	8'	8'	8'	-	8'	7	1	8	768.5"
66	4'	6'	8'	8'	8'	8'	8'	8'	8'	8	1	9	792.5"
68	4'	8'	8'	8'	8'	8'	8'	8'	8'	8	1	9	816.5"
70	6'	8'	8'	8'	8'	8'	8'	8'	8'	8	1	9	840.5"
72	8'	8'	8'	8'	8'	8'	8'	8'	8'	8	1	9	864.5"

	FIXTURE LENGTH	MOUNTING CENTERS	
	STARTER	STARTER	JOINER / ENDER
4'	48.0"	47.25"	-
6'	72.0"	71.25"	72.0"
8'	96.0"	95.25"	96.0"



## 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 1/16" steel cable and up to finished ceiling line. Tighten support ring to locate canopy in place.

##### Step Four:

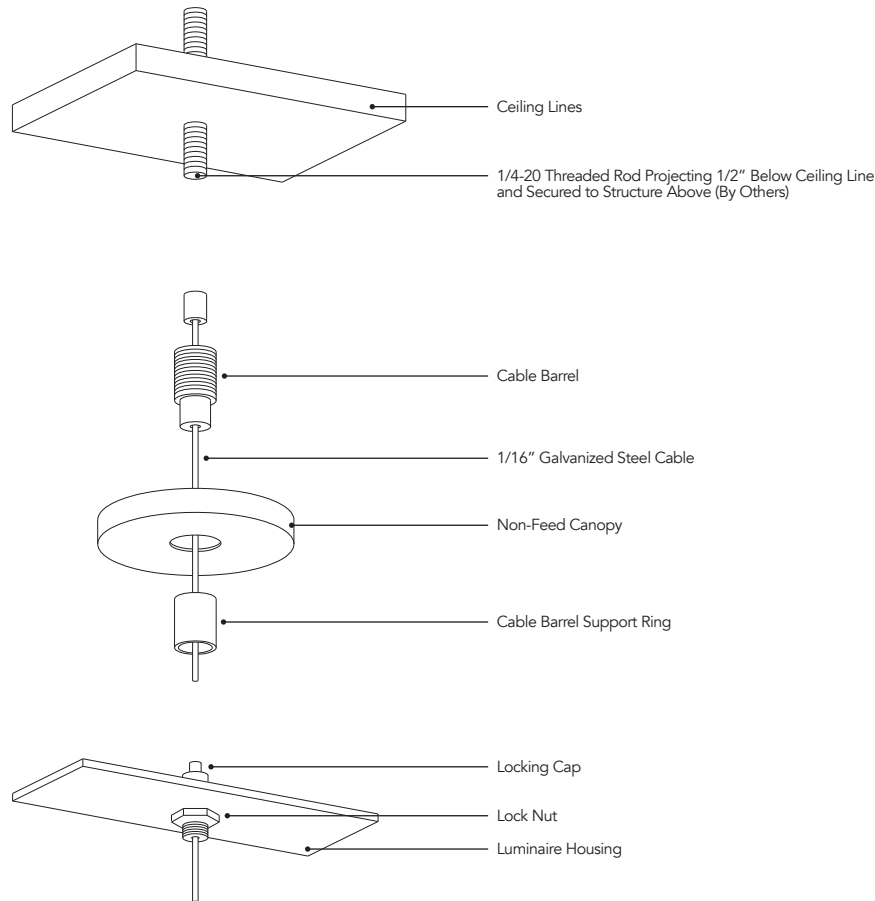
Raise luminaire to mounting/hanger assembly and route 1/16" steel cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the 1/16" steel cable to enter fitting. Feed the cable through the adjustable fitting until the desired mounting height is attained. The 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 1/16" Steel 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 junction box cross-strap support bracket to the with screws by others. Be sure the junction box cross-strap can support luminaire/luminaire row in accordance with local codes as illustrated.

OPTION 2 Drill a 5/16" diameter 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 the 1/16" steel 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 the 1/16" steel cable and up to finished ceiling line. Loosely tighten the support ring to locate canopy in place.

**Step Four:**

Raise luminaire to mounting/feed assembly and route the 1/16" steel cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the 1/16" steel 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 1/16" Steel Cables When Depressing Retainer Stem.**

**Step Five:**

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

**Step Six:**

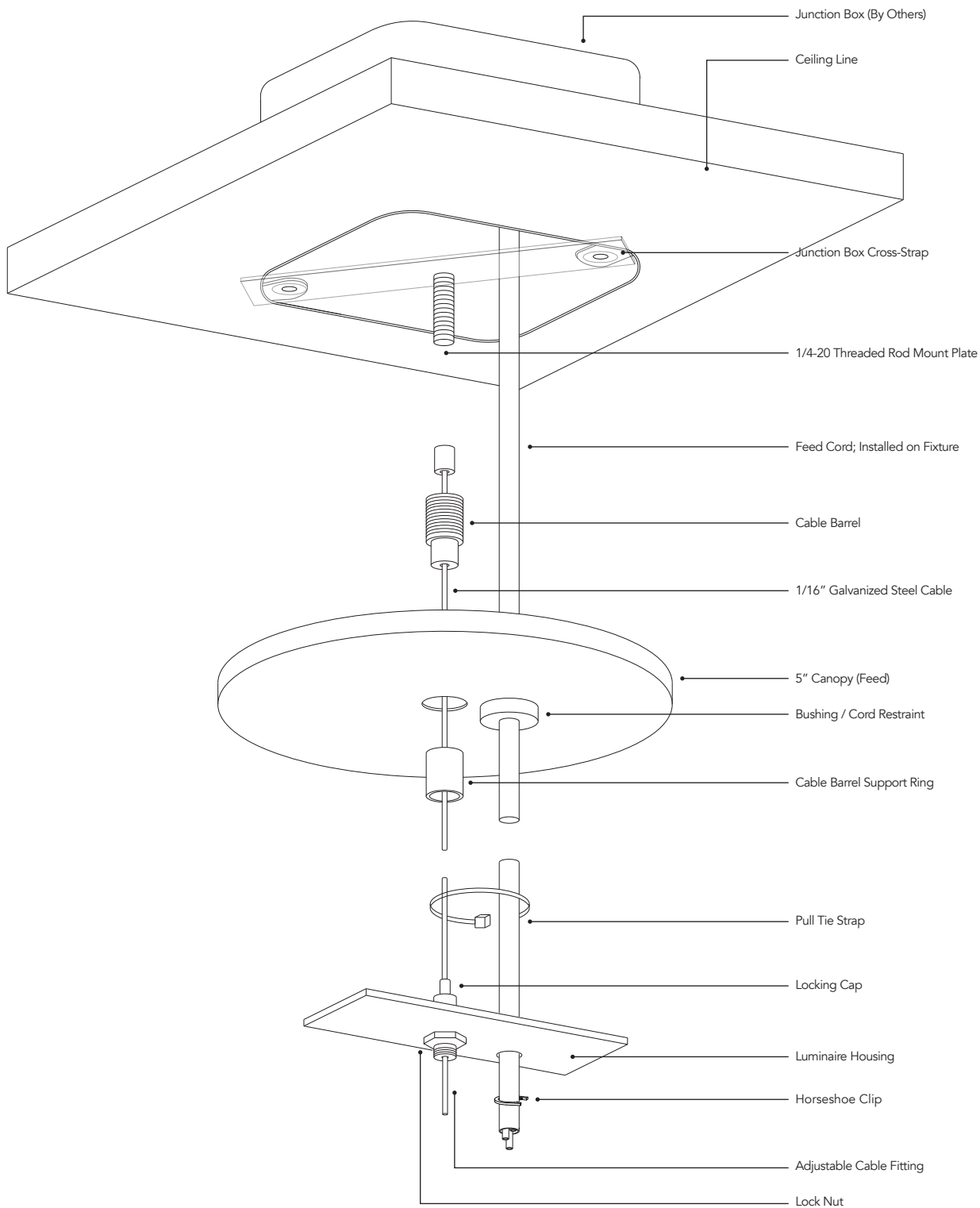
Raise the canopy finished ceiling line and locate with canopy support ring. Attach supplied tie straps around feed cord and cable at minimum of 12" on center. ENERGIZE AND CHECK FOR PROPER OPERATION.

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 the grid clip onto T-BAR at appropriate locations (REF. STEP 1 AND FIG. 7)

- Assemble 1/4-20 stud and grid clip. Start stud into the recessed square hole, grasp the grid clip in hand and depress tab a with a thumb. Pull stud into place and release TAB A.
- Separate the grid clip into its two parts by bending at TAB B.
- 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 the grid clip to structural support above with minimum #12 gauge support wire in accordance with local, state, and federal codes. (REF FIG. 8)

##### Step Four:

Insert the 1/16" steel cable supplied in the kit through ceiling coupler in the kit and attach to 1/4-20 stud on the grip clip securely. Remove threaded canopy support ring from coupler and slide canopy then support ring over the 1/16" steel cable and up to finished ceiling line. Tighten support ring to locate canopy in place.

##### Step Five:

Raise luminaire to mounting/hanger assembly and route the 1/16" steel cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the 1/16" steel cable to enter fitting. Feed the 1/16" steel 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 1/16" Steel Cables When Depressing Retainer Stem.**

FIGURE 7

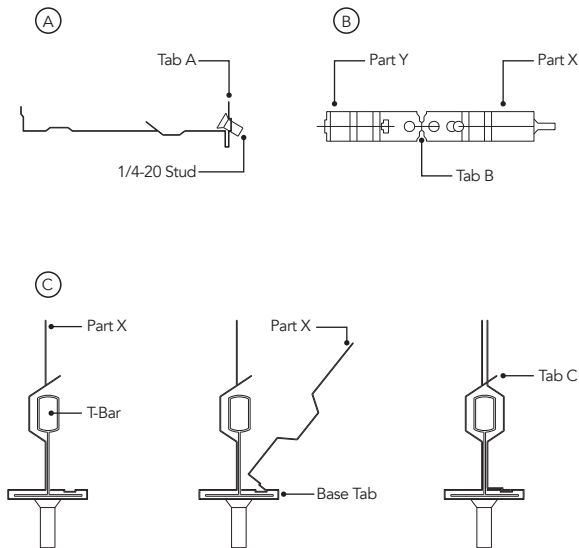
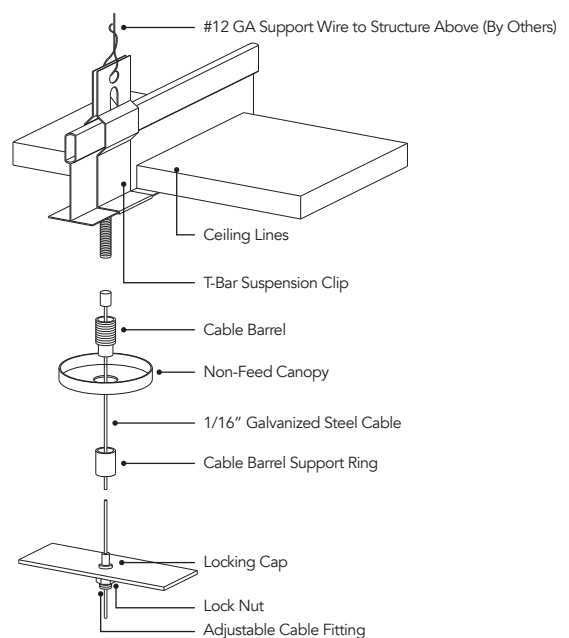


FIGURE 8



## 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 grid 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 the grid 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, state, and federal codes as illustrated.

**Step Five:**

Cut a 3/4" diameter hole in ceiling tile aligned with Greenfield connector protruding from Junction Box. Insert the 1/16" steel cable supplied in the kit through ceiling coupler in the kit and attach to 1/4-20 stud on grid clip securely. Remove threaded canopy support ring from coupler and slide canopy then support ring over the 1/16" steel cable and up to finished ceiling line. Tighten support ring to locate canopy in place.

**Step Six:**

Raise luminaire to mounting/feed assembly and route the 1/16" steel cable through the center of the adjustable cable fitting loosening the locking cap enough to allow the 1/16" steel cable to enter fitting. Feed the 1/16" steel 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 1/16" Steel Cables When Depressing Retainer Stem.**

**Step Seven:**

Route feed power cord(s) from luminaire through the grommets in the canopy and into Junction Box. Connect feed power cord(s) 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 12" on center.

ENERGIZE AND CHECK FOR PROPER OPERATION.

FIGURE 9 ON NEXT PAGE

## SUSPENDED LUMINAIRE INSTALLATION INSTRUCTIONS

### ON-GRID MOUNTING

FIGURE 9

