

## RECESSED 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.

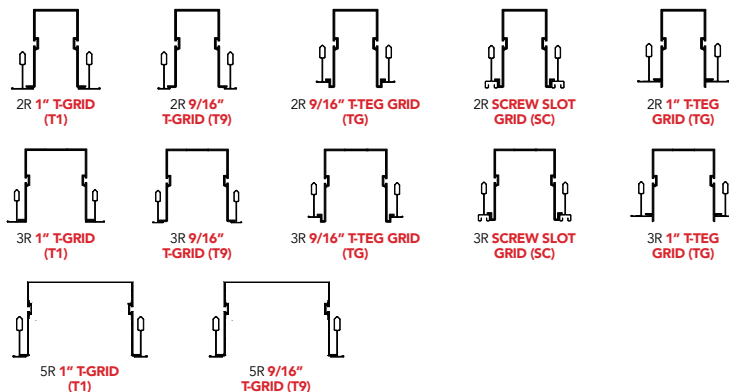
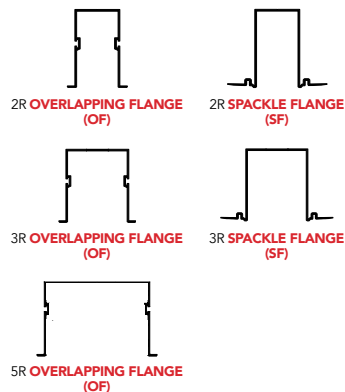
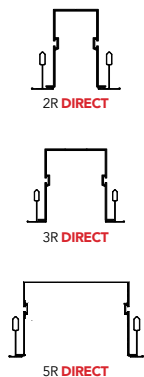
NOTE: The fixture markings can be found on labels positioned behind the direct lens. To access these labels, carefully pry off the direct lens from one end of the fixture using a flat tool or plastic card.

### FIXTURE MOUNTING

Pages 11 - 13

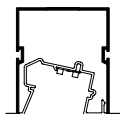
#### OFF-GRID Pages 2 - 7

#### ON-GRID Pages 8 - 10



### WALL WASH REFLECTOR

For 3" product line only Page 5



SAVE THESE INSTALLATION INSTRUCTIONS

## INDIVIDUAL LUMINAIRE INSTALLATION "OFF GRID" HARD CEILINGS

### CAUTION

Ceiling contractors must provide an uninterrupted continuous rough opening maintaining straightness and width. Overlapping Flange ceiling cutout width dimensions: 2R = 2.4", 3R = 3.4", 5R = 5.4". The overall length of the ceiling cutout is provided on the last page of this document. Fixtures should be secured to structure above to support the weight of the fixture. Consult factory for fixture weights if needed.

### Overlapping Flange (OF):

Linear luminaires intended for "Sheet Rock" are to be installed with threaded rod to structure provided above "by others". The product and should be installed in accordance with these instructions.

#### Step One:

Remove the lens and LED tray and safely store aside. Using one of the 7/8" diameter holes on the end fixture, install conduit connector. Install fixture into the ceiling from below into ceiling opening following instructions within this document. Mounting holes are located on the backside "housing top" for supporting to structure above. Mounting hardware by others.

#### Step Two:

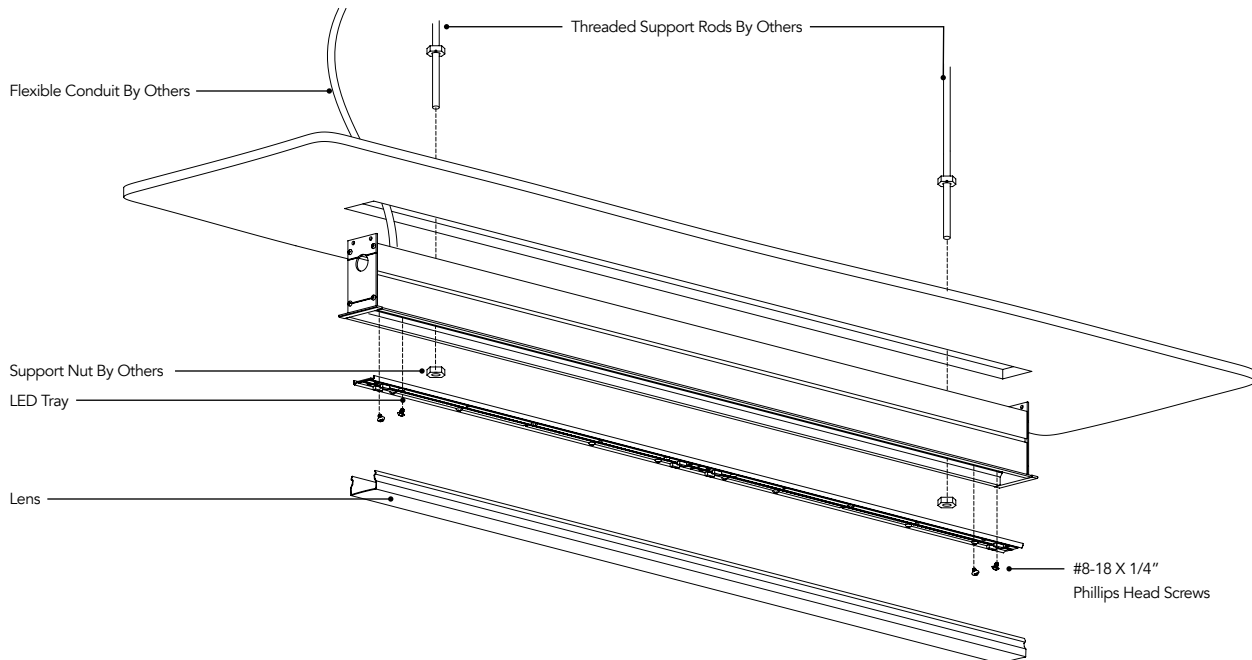
Attach supports to fixture through holes provided and to structure above as shown (FIG. 1). Confirm that fixture is pulled up firm to ceiling line.

#### Step Three:

Wire to leads provided in the wiring compartment. Supply connection & splice inspection to be made by removing the lens and LED tray. Replace LED tray and lens when complete.

NOTE: Fixture Identification and electrical ratings are on a label located behind the lens. To access these labels, use a flat tool or card to pry off the direct lens at the power entry side's end cap.

FIGURE 1

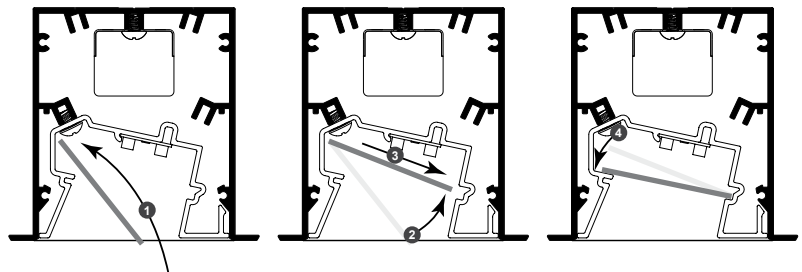


### WALL WASH LENS INSTALLATIONS (3" Direct Only)

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.



## CONTINUOUS ROW LUMINAIRE INSTALLATION "OFF GRID" HARD CEILINGS

### CAUTION:

Attempt to assemble fixture rows on ground and lifting row into 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 mount the fixture run).

### Overlapping Flange (OF):

Linear luminaires intended for "Sheet Rock" are to be installed with threaded rod to structure above "by others". The product and should be installed in accordance with these instructions.

#### Step One:

Ceiling contractors must provide an uninterrupted continuous rough opening maintaining straightness and width. See page 3 for dimensions. Fixtures should be secured to the structure above to support the weight of the fixture run. Consult factory for fixture weights if needed.

#### Step Two:

Locate Joiner Kits (FIG 2). See the packing list for quantities per run.  
Remove the lens and LED Reflector tray(s) and store safely aside.

#### Joiner Kits Parts (See FIG 2B, 3A, 3B, & 3C)

**2" Product Family:** 4 Alignment pins and 1 Joiner bracket with screws.

**3" Product Family:** 4 Alignment pins and 1 Joiner bracket with screws.

**5" Product Family:** 4 Alignment pins and 2 Joiner bracket with screws.

Attach the Joiner Bracket(s) 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) (FIG. 2B). Joining the fixture should mate easily leaving no gaps between housings.

Repeat this process for the balance of the fixtures in the run as need.

FIGURE 2A

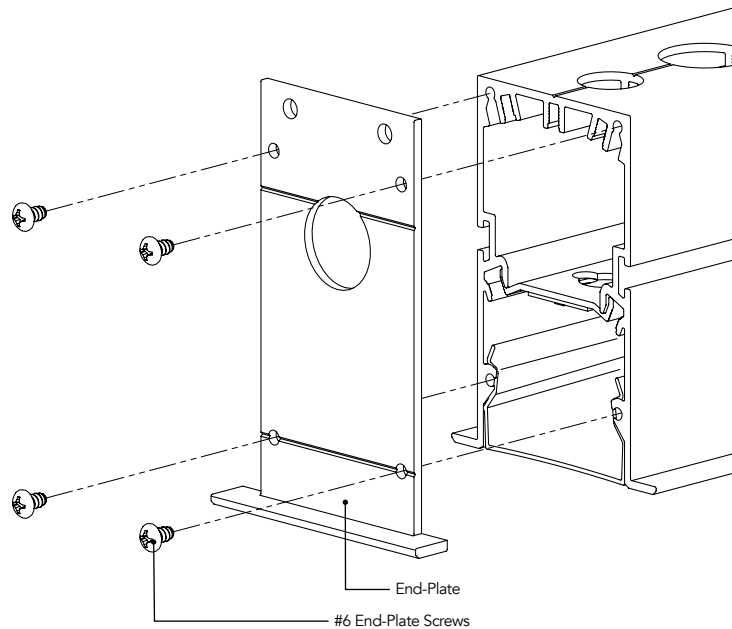
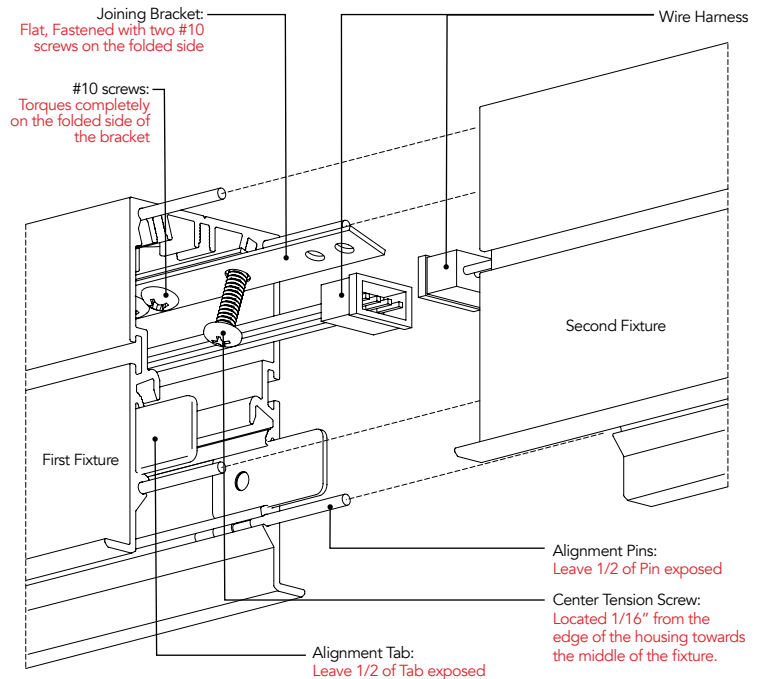


FIGURE 2B



## CONTINUOUS ROW LUMINAIRE INSTALLATION "OFF GRID" HARD CEILINGS

### Step Three:

After determining and locating the suspension points as shown on pages 11 - 12 "Row Information" and following the mounting instructions provided, attach the first fixture "STARTER Fixture" in the row. Mounting hardware by others.

### Step Four:

Position second fixture in a row (JOINER/INTERMEDIATE-ENDER) such that it aligns with the joint end of the first fixture as illustrated. (FIG.3) Make sure that all alignment hardware described on Page 6 in (FIG. 2) are installed.

### Step Five:

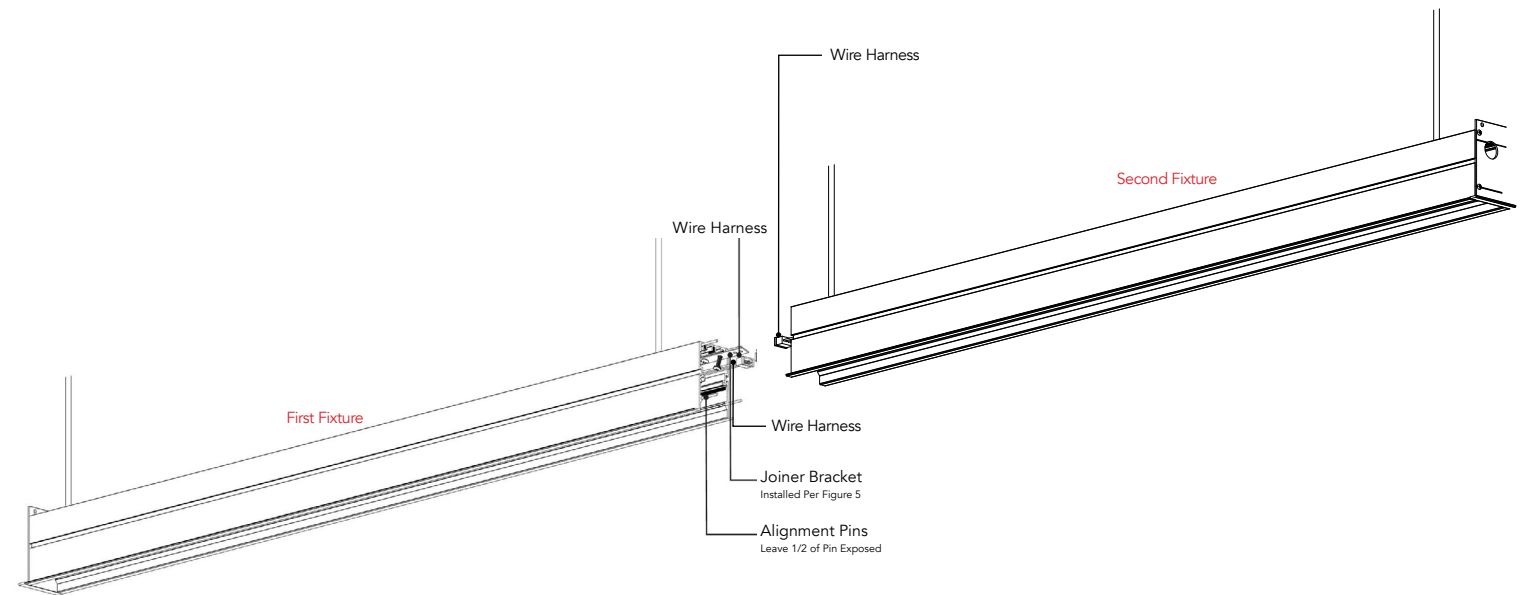
Continue to install and assemble row following steps 2 and 3. Using one of the 7/8" diameter holes on the Ender (RH End of Run) fixture (FIG.3), install conduit connector, and wire to leads provided in the wiring compartment. When both fixtures are secured to the ceiling, screw in two #10 screws through the joining bracket plate (FIG. 3A)

### Step Six:

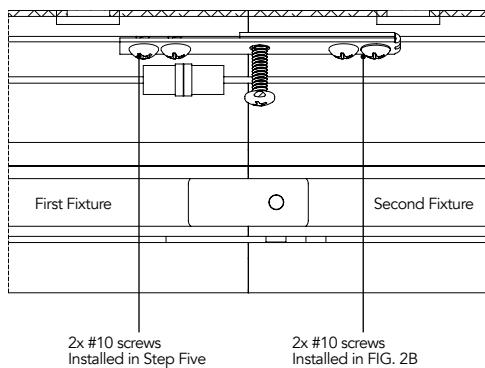
Once all luminaries in a row are installed, tighten the Center Tension Screw on the joining bracket on all fixtures enough to hold luminaries snug to the mounting surface (FIG. 3B). Joining brackets are designed for a single-use. Contact the factory for the additional joining kits. Make a wire connection as required to meet the intended function. 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 #8-18X1/4" 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 5 for the Wall Wash lens installation. Reinstall lens(es).

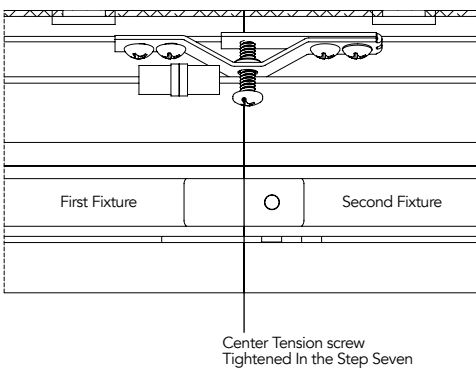
**FIGURE 3**



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

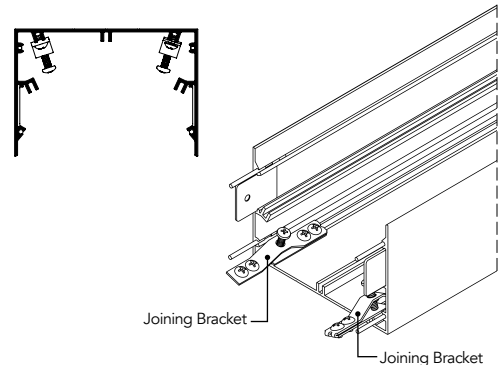


**FIGURE 3B Shown in a cross-section for clarity**



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

Two joining brackets are required for 5" product family



## INDIVIDUAL LUMINAIRE INSTALLATION "SPACKLE FLANGE" HARD CEILINGS

### CAUTION:

Ceiling contractors must provide an uninterrupted continuous rough opening maintaining straightness and width. Overlapping Flange ceiling cutout width dimensions: 2R = 3.25", 3R = 4.25". The overall length of the ceiling cutout is provided on the last page of this document. Fixtures should be secured to structure above to support weight of fixture. Consult factory for fixture weights if needed.

### Spackle Flange (SF):

Trimless Linear luminaries intended for hard ceiling are to be installed with fasteners through the flange to the structure above in accordance with these instructions "by others".

#### Step One:

Ceiling contractors must provide an uninterrupted continuous rough opening maintaining straightness and width referenced at the top of this page. Fixtures should be secured to structure above to support the weight of the fixture. Consult factory for the fixture weights if needed.

#### Step Two:

Remove the lens and LED tray and safely store them aside. Install LED Tray Spacer bracket(s) into the housing as shown (FIG.4) with two #8 screws, then install a Housing Spacer Bracket(s) with two #10 screws. Spacer bracket(s) must be installed on 4'-12' fixtures every two feet. Using one of the 7/8" diameter holes on the end plates, install conduit connector. Depending on the type of the fasteners used by the installer, an appropriate number of holes needs to be drilled into the housing flange. We recommend installing a fastener every 12"-16" along the flange and one fastener on the end caps.

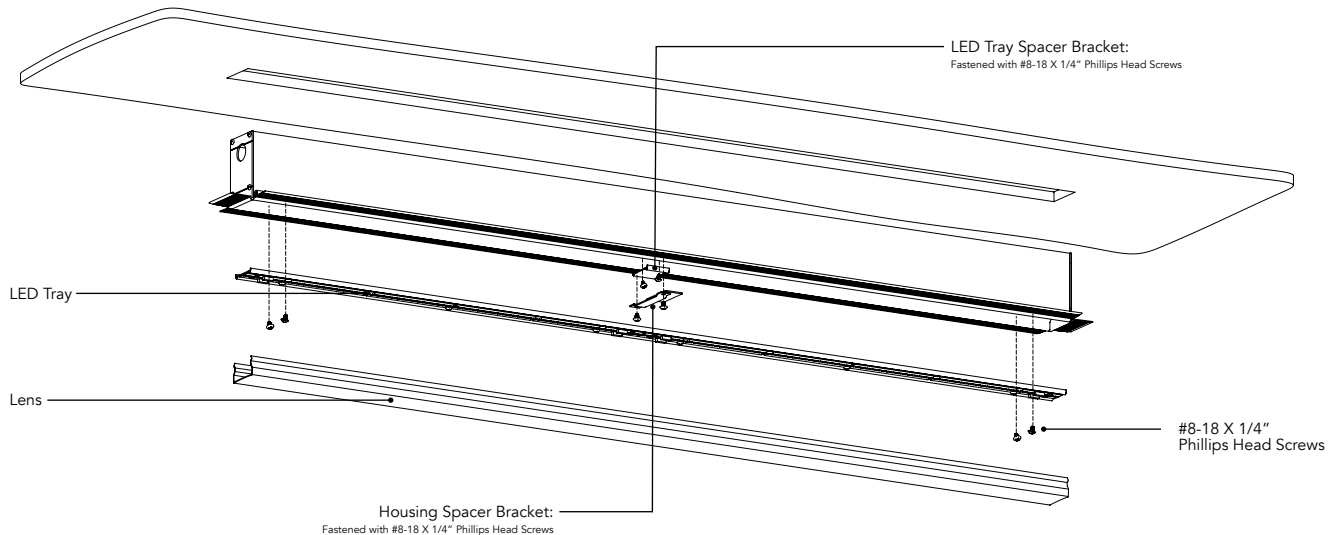
#### Step Three:

Install fixture into ceiling opening from below following instructions within this document. (FIG. 4). Make sure that Both types of the spacer brackets are installed prior to fixing flange to the ceiling. Confirm that fixture is pulled up firm to ceiling line. Remove brackets and begin to plaster over the flange and the ceiling. Make sure not to get any plaster into the lens or the LED tray grooves.

#### Step Four:

Wire to leads provided in the wiring compartment. Supply connection & splice inspection to be made by removing the lens and LED tray. Replace LED tray and lens when complete.

FIGURE 4



## CONTINUOUS LUMINAIRE INSTALLATION "SPACKLE FLANGE" HARD CEILINGS

### CAUTION:

Attempt to assemble fixture rows on ground and lifting row into 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 to protect the fixtures. (Please also note this is to be done before attempting to mount the fixture run).

### Spackle Flange (SF):

Trimless Linear luminaires intended for hard ceiling are to be installed with fasteners through the flange to the structure above in accordance with these instructions "by others".

#### Step One:

Ceiling contractors must provide an uninterrupted continuous rough opening maintaining straightness and width (see top of previous page for opening dimensions). Fixtures should be secured to the structure above to support the weight of the fixture run. Consult factory for fixture weights if needed.

#### Step Two:

Remove the lens and LED tray(s) and safely store them aside. Install LED Tray Spacer bracket(s) into the housing as shown (FIG.4) with two #8 screws, then install a Housing Spacer Bracket(s) with two #10 screws. Spacer bracket(s) must be installed on 4'-12' fixtures every two feet. Using one of the 7/8" diameter holes on the end plates, install conduit connector. Depending on the type of the fasteners used by the installer, an appropriate number of holes needs to be drilled into the housing flange. We recommend installing a fastener every 12"-16" along the flange and one fastener on the end caps.

Locate and install Joiner Bracket(s) (FIG. 5) See the packing list for quantities per run.

#### Joiner Parts (See FIG 5B, 6A, & 6B)

**2" Product Family:** 4 Alignment pins and 1 Joiner bracket with screws.

**3" Product Family:** 4 Alignment pins and 1 Joiner bracket with screws.

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.

Repeat the process for the balance of the fixtures in the run as needed.

FIGURE 5A

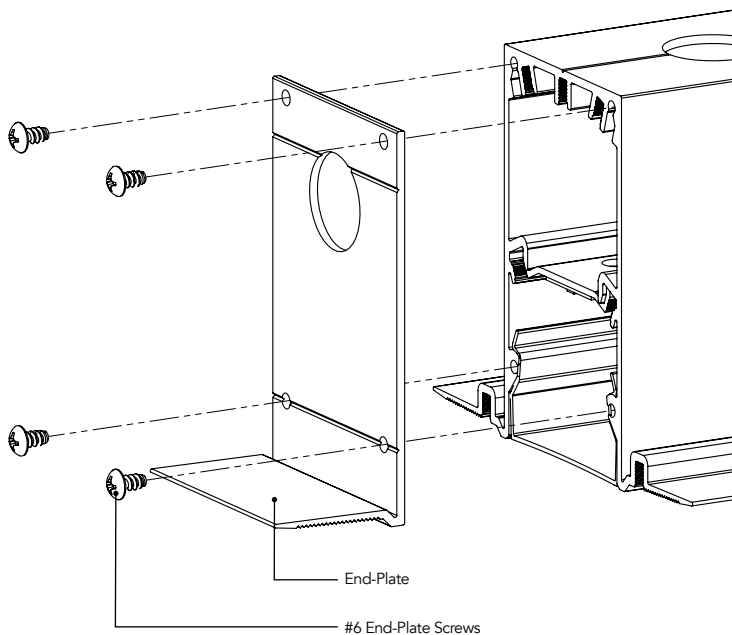
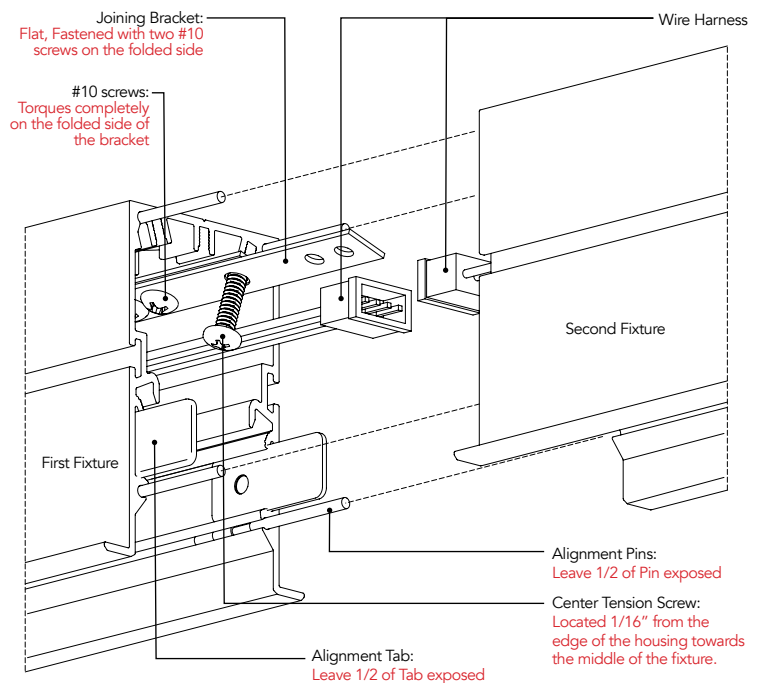


FIGURE 5B



## CONTINUOUS LUMINAIRE INSTALLATION "SPACKLE FLANGE" HARD CEILINGS

### Step Three:

Depending on the type of the fasteners used by the installer, an appropriate number of holes and hole diameters needs to be drilled into the housing flange. We recommend installing fasteners every 12"-16" along the flange and one fastener on the end caps. Attach the first fixture "STARTER Fixture" in the row to the ceiling. Mounting hardware by others.

Position second fixture in a row (JOINER/INTERMEDIATE-ENDER) such that it aligns with the joint end of the first fixture as illustrated. (FIG.6) Make sure that all alignment hardware describes on Page 9 in (FIG. 5) are installed.

### Step Four:

Push luminaires tightly together while making sure the alignment pins slide into the interior tracks of each luminaire. Confirm fixtures are secured to structure above as noted. When both fixtures are secured to the ceiling, screw in two #10 screws through the joining bracket plate (FIG. 6A). when the second fixture in a row is installed, tighten the Center Tension Screw on the joining bracket (FIG. 6B). Joining brackets are designed for a single-use. Contact the factory for the additional joining kits.

### Step Five:

Continue to install and assemble row following steps 2-4. Using one of the 7/8" diameter holes on the Ender (RH End of Run) fixture, install conduit connector and wire to leads provided in the wiring compartment. Install fixture into position. Confirm that each fixture in the row is pulled up firm to ceiling line. Remove the spacer brackets and begin to plaster over the flange and the ceiling. Make sure not to get any plaster into the lens grooves.

### Step Six:

Make a wire connection as required to meet the intended function. 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 #8-18x1/4" 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 plates or the next fixture in a row. Please refer to Page 5 for the Wall Wash lens installation. Reinstall lens(es).

FIGURE 6

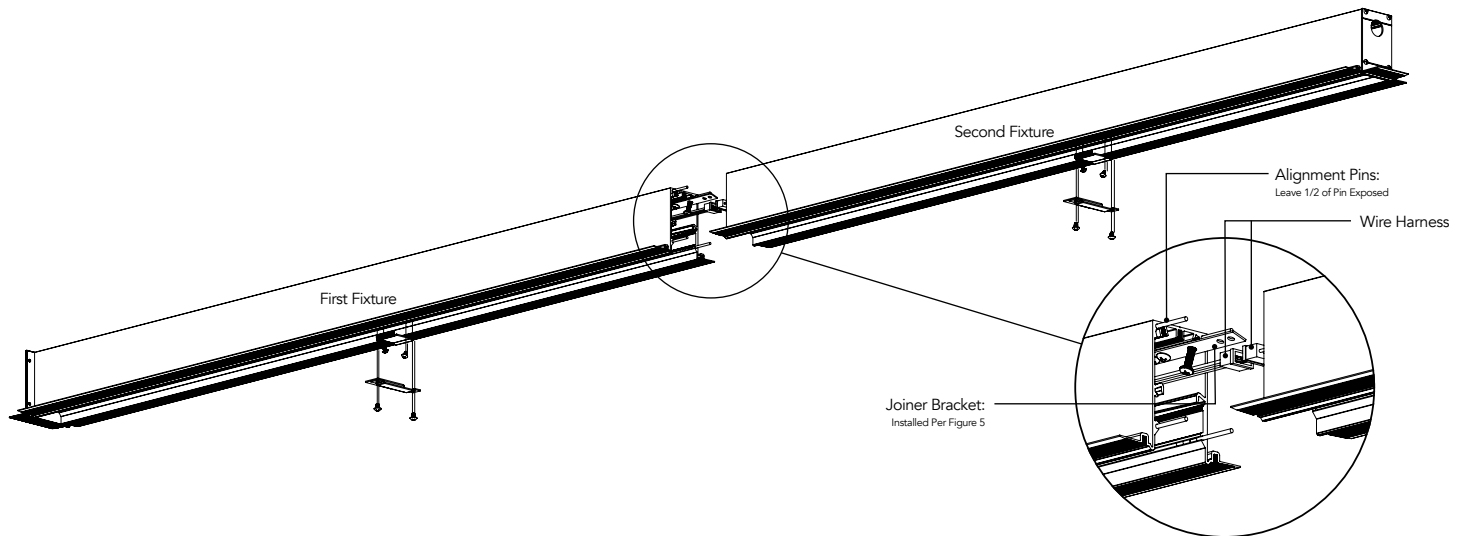


FIGURE 6A Shown in a cross-section for clarity

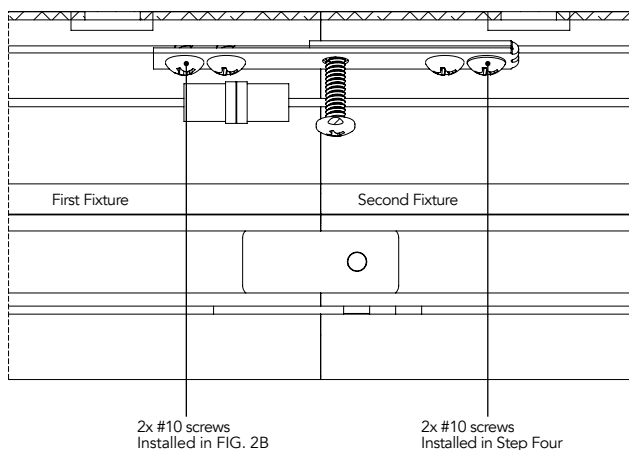
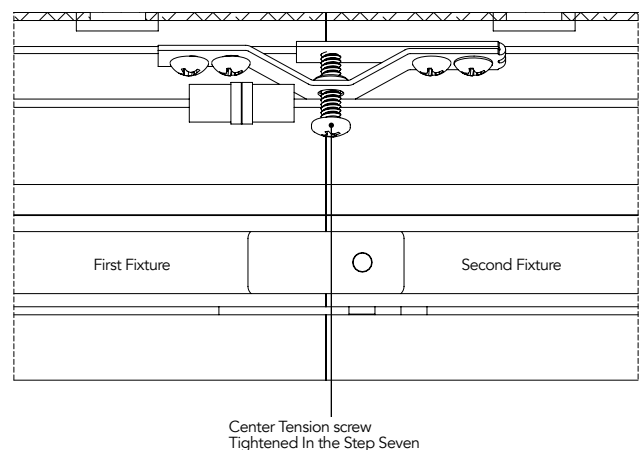


FIGURE 6B Shown in a cross-section for clarity



## INDIVIDUAL LUMINAIRE INSTALLATION "ON GRID" CEILINGS

### CAUTION:

Ceiling contractors must provide an uninterrupted continuous opening utilizing main tee's spaced 3" center to center for 2R, 4" center to center for 3R, and 6" center to center for 5R. Length as required. Main tee's should be secured to structure above to support the weight of the fixture. Consult factory for fixture weights if needed.

#### Step One:

Remove the lens and LED tray and safely store aside (supply connection & splice inspection inside the fixture cavity). Install fixture into ceiling grid from above following instructions illustrated below, shop drawings, or order processing specification sheet. (FIG.7)

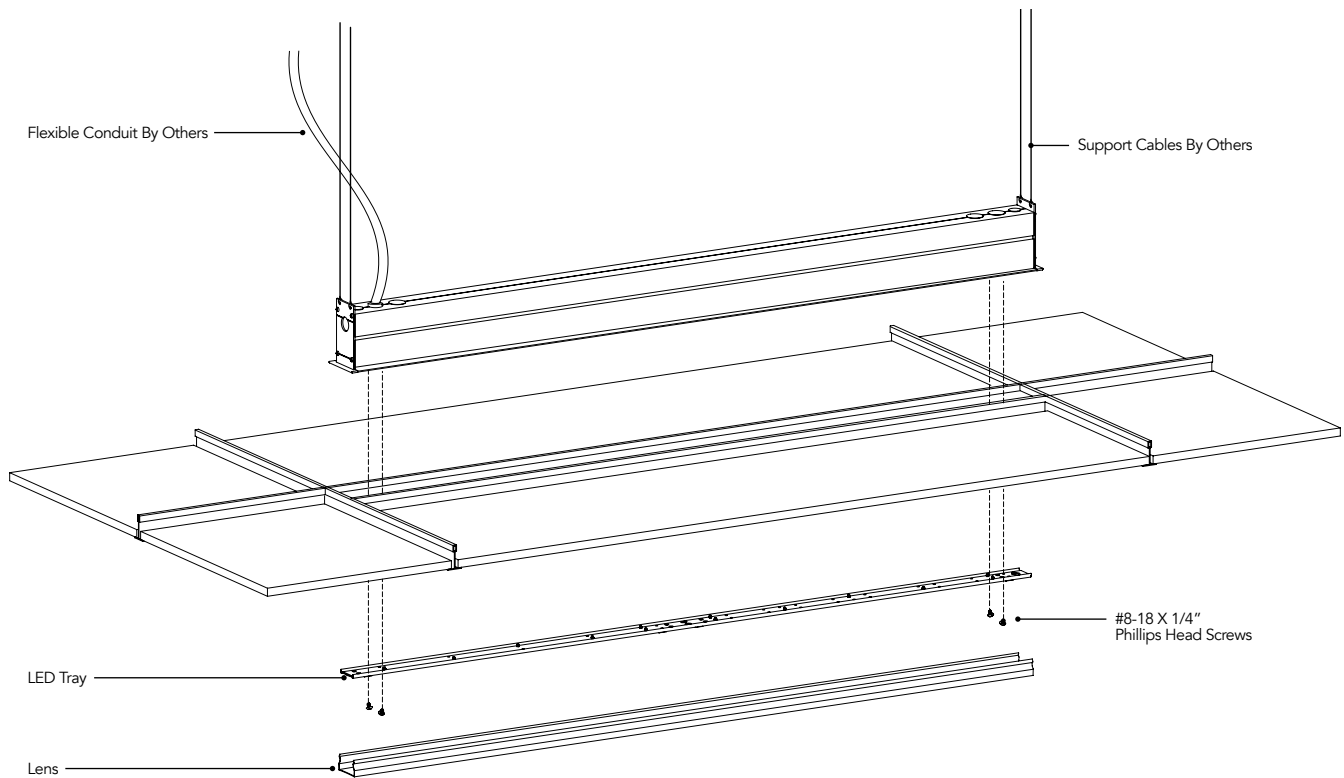
#### Step Two:

Attach safety support cables to fixture end caps and structure above as shown in (FIG.7).

#### Step Three:

Using one of the 7/8" diameter holes on the end of the fixture, install conduit connector and wire to leads provided in the wiring compartment. Supply connection and splice inspection to be made by removing lens and LED tray. 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 #8-18x1/4" 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 plate or the next fixture in a row. Please refer to Page 5 for the Wall Wash lens installation. Reinstall lens(es).

FIGURE 7



## CONTINUOUS ROW LUMINAIRE INSTALLATION "ON GRID" CEILINGS

### CAUTION:

Attempt to assemble fixture rows on ground and lifting row into 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 mount the fixture run).

#### Step One:

Ceiling contractors must provide an uninterrupted continuous opening utilizing main tee's spaced 3" center to center for 2R, 4" center to center for 3R, and 6" center to center for 5R. Length as required. Main tee's should be secured to structure above to support the weight of the fixture. Consult factory for fixture weights if needed.

#### Step Two:

Locate and install Joiner Kits (FIG. 2). See the packing list for quantities per run. Remove the lens and LED Reflector tray(s) and store safely aside.

#### Joiner Parts (See FIG 2B, 3A, 3B, & 3C)

**2" Product Family:** 4 Alignment pins and 1 Joiner bracket with screws.

**3" Product Family:** 4 Alignment pins and 1 Joiner bracket with screws.

**5" Product Family:** 4 Alignment pins and 2 Joiner brackets with screws.

Attach the Joiner Bracket(s) 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 the fixture should mate easily leaving no gaps between housings.

Repeat this process for the balance of the fixtures in the run as need.

FIGURE 8A

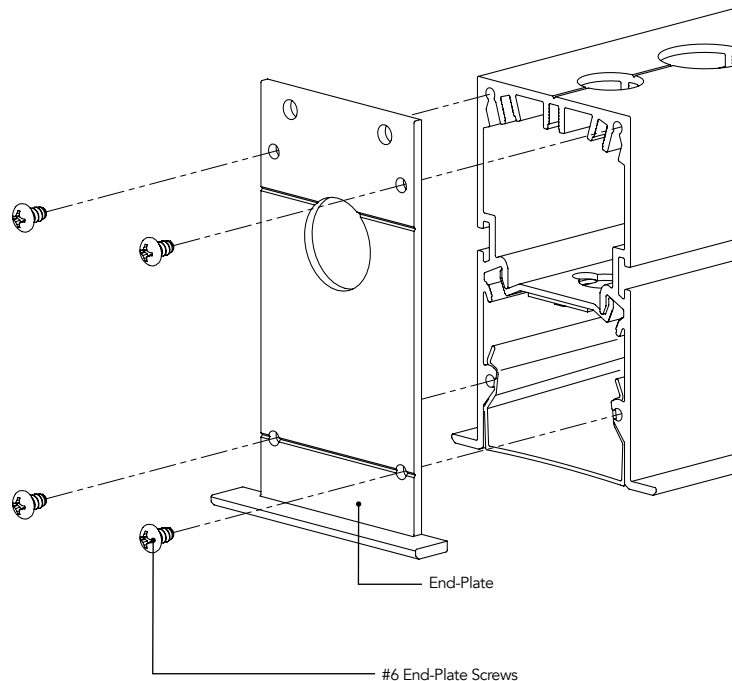
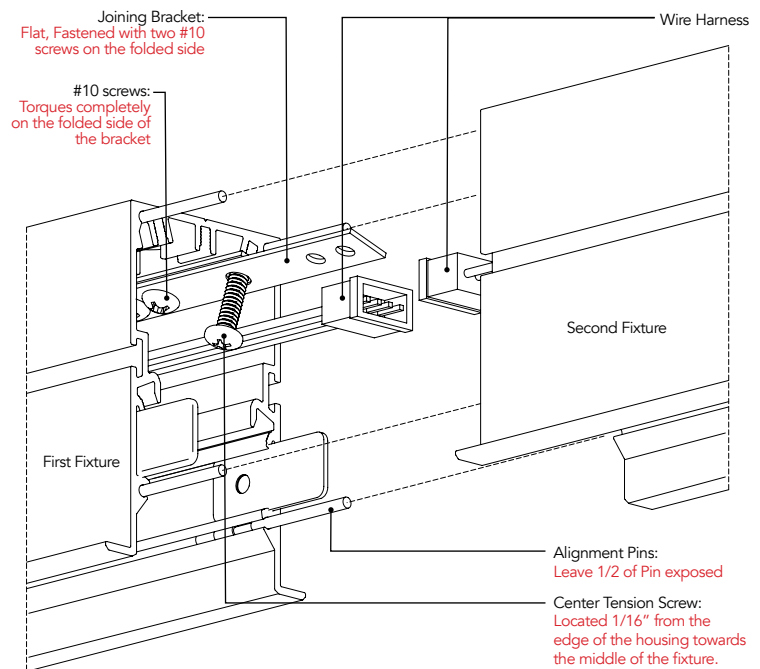


FIGURE 8B



## CONTINUOUS ROW LUMINAIRE INSTALLATION "ON GRID" CEILINGS

### Step Three:

After locating the suspension grid requirements as shown at the end of this document "Row Information" and following the mounting instructions provided, lay the first fixture "STARTER Fixture" in the row.

### Step Four:

Position second fixture in a row (JOINER/INTERMEDIATE-ENDER) such that it aligns with the joint end of the first fixture as illustrated. (FIG.9) Make sure that all alignment hardware describes on Page 12 in (FIG. 8) are installed.

### Step Five:

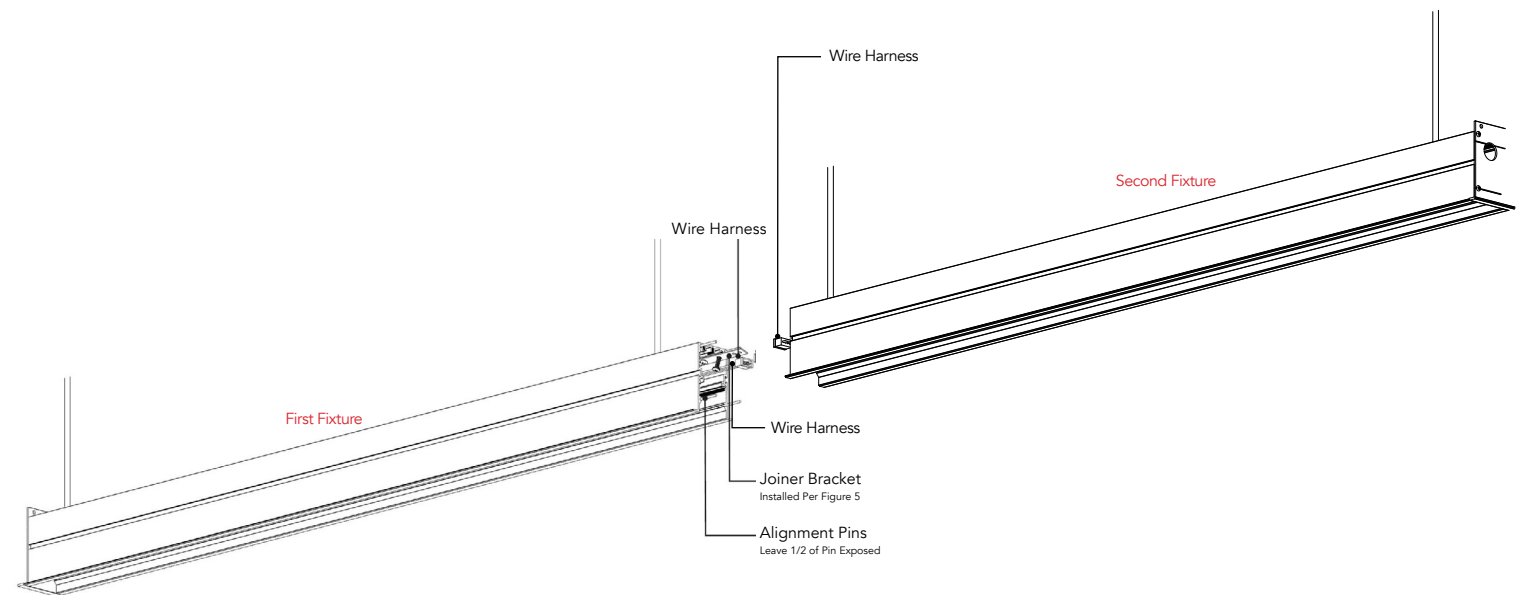
Continue to install and assemble row following steps 2-4. When both fixtures are secured to the ceiling, screw in two #10 screws through the joining bracket plate (FIG. 9A)

### Step Six:

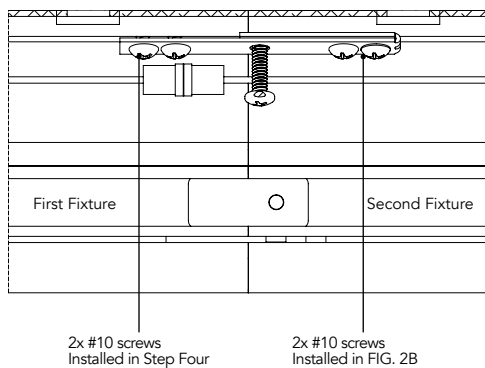
Once all luminaries in a row are installed, tighten the Center Tension Screw on the joining bracket on all fixtures enough to hold luminaries snug to the mounting surface (FIG. 9B). Joining brackets are designed for a single-use. Contact the factory for the additional joining kits. Using one of the 7/8" diameter holes on the Ender (RH End of Run) fixture (FIG.8), install conduit connector, and wire to leads provided in the wiring compartment. Make a wire connection as required to meet the intended function. 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 #8-18x1/4" 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 5 for the Wall Wash lens installation. Reinstall lens(es).

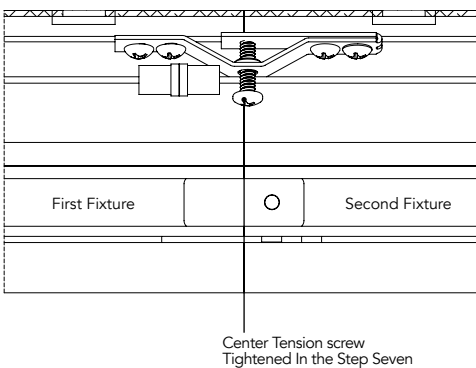
**FIGURE 9**



**FIGURE 9A Shown in a cross-section for clarity**

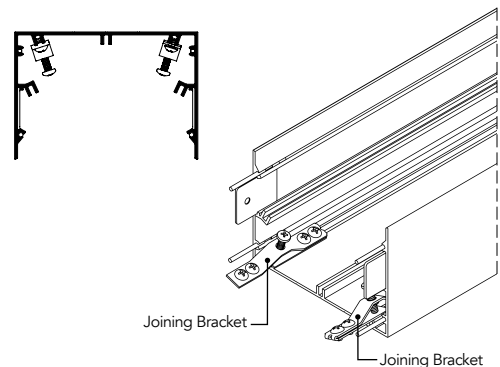


**FIGURE 9B Shown in a cross-section for clarity**

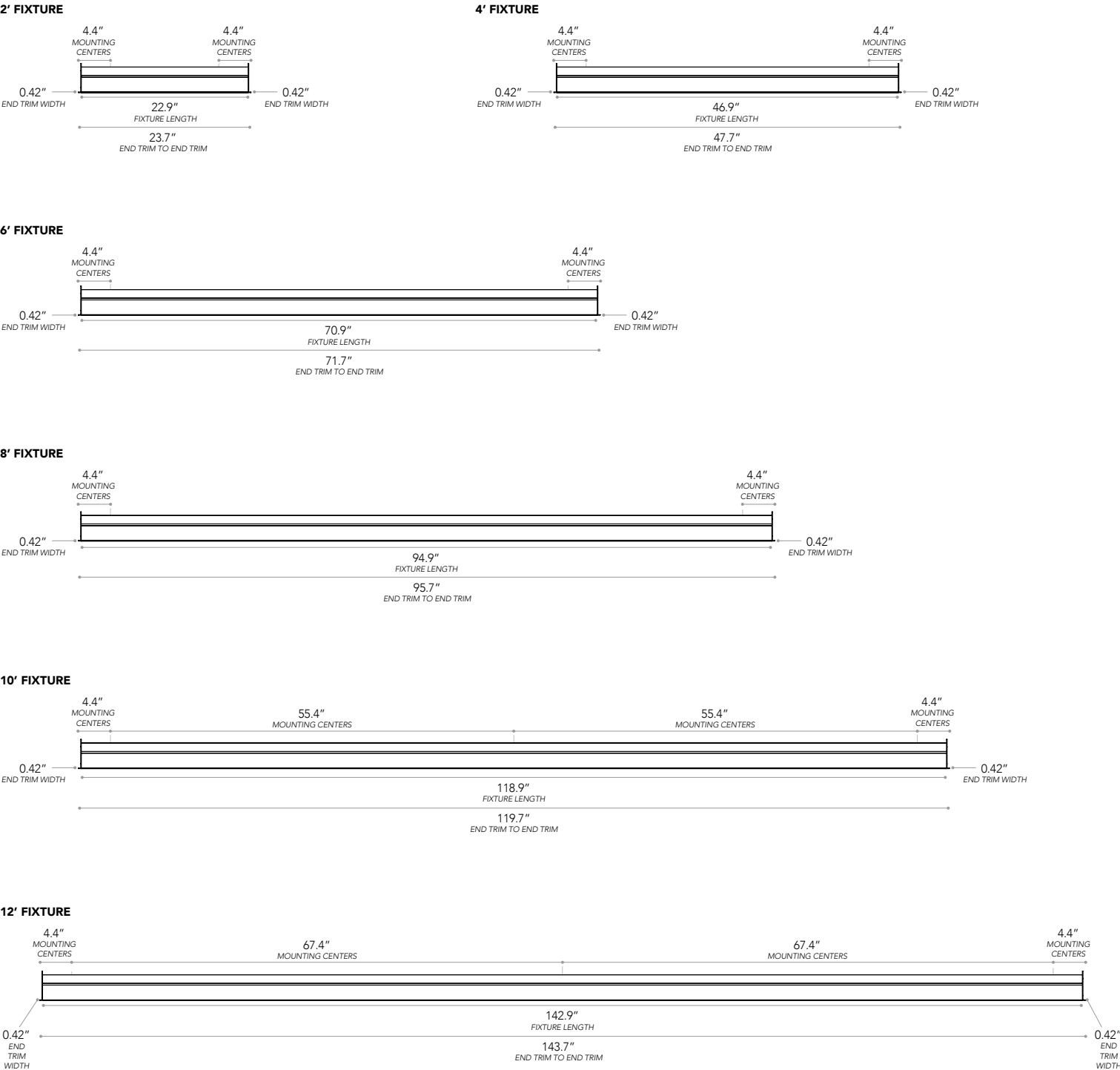


**FIGURE 9C Shown in a cross-section for clarity**

Two joining brackets are required for 5" product family



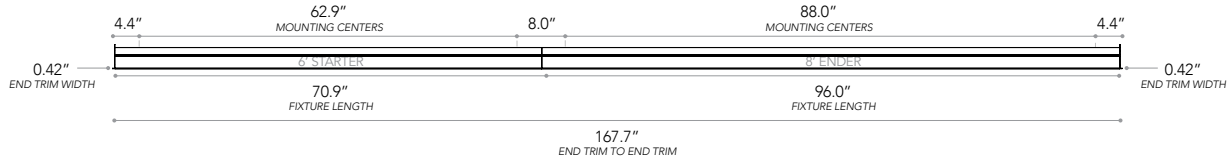
# FIXTURE ROW LAYOUT: SINGLE UNIT    2' - 4' - 6' - 8' - 10' - 12'



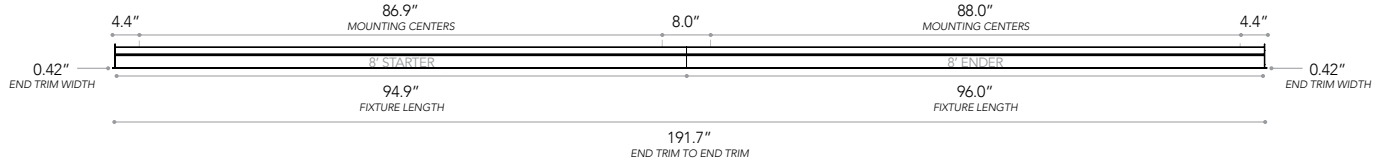
\* Does not apply to the Spackle Flange fixtures.

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

### 14' FIXTURE



### 16' FIXTURE

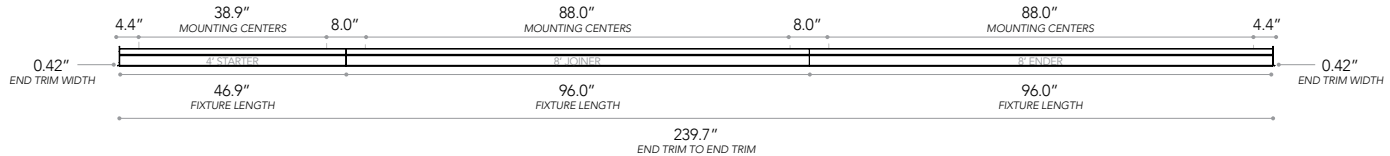


## FIXTURE ROW LAYOUT: THREE UNITS 18' - 20' - 22' - 24'

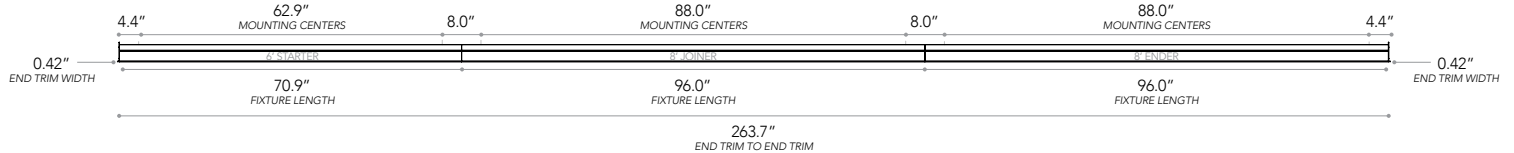
### 18' FIXTURE



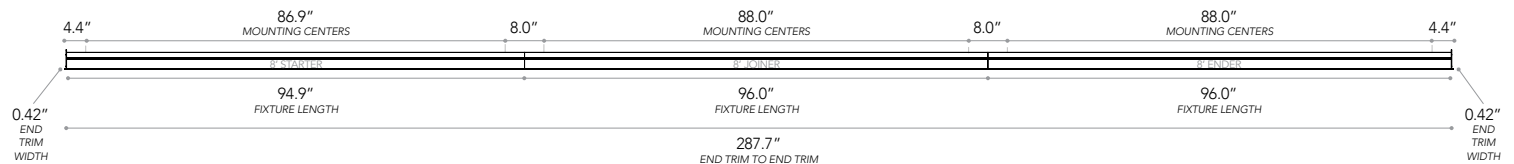
### 20' FIXTURE



### 22' FIXTURE



### 24' FIXTURE

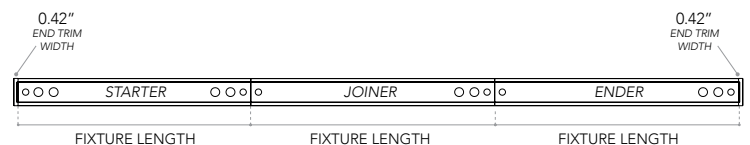


\* Does not apply to the Spackle Flange fixtures.

## FIXTURE ROW COMPONENTS

RUN LENGTH (FT)	FIXTURE LENGTHS									JOINER KITS	CEILING CUT OUT LENGTH FOR OVERLAPPING FLANGE (OF) & SPACKLE FLANGE (SF)
	STARTER	JOINER							ENDER		
	1	2	3	4	5	6	7	8	9		
14	6'	-	-	-	-	-	-	-	8'	1	167.25"
16	8'	-	-	-	-	-	-	-	8'	1	191.25"
18	4'	6'	-	-	-	-	-	-	8'	2	215.25"
20	4'	8'	-	-	-	-	-	-	8'	2	239.25"
22	6'	8'	-	-	-	-	-	-	8'	2	263.25"
24	8'	8'	-	-	-	-	-	-	8'	2	287.25"
26	4'	6'	8'	-	-	-	-	-	8'	3	311.25"
28	4'	8'	8'	-	-	-	-	-	8'	3	335.25"
30	6'	8'	8'	-	-	-	-	-	8'	3	359.25"
32	8'	8'	8'	-	-	-	-	-	8'	3	383.25"
34	4'	6'	8'	8'	-	-	-	-	8'	4	407.25"
36	4'	8'	8'	8'	-	-	-	-	8'	4	431.25"
38	6'	8'	8'	8'	-	-	-	-	8'	4	455.25"
40	8'	8'	8'	8'	-	-	-	-	8'	4	479.25"
42	4'	6'	8'	8'	8'	-	-	-	8'	5	503.25"
44	4'	8'	8'	8'	8'	-	-	-	8'	5	527.25"
46	6'	8'	8'	8'	8'	-	-	-	8'	5	551.25"
48	8'	8'	8'	8'	8'	-	-	-	8'	5	575.25"
50	4'	6'	8'	8'	8'	8'	-	-	8'	6	599.25"
52	4'	8'	8'	8'	8'	8'	-	-	8'	6	623.25"
54	6'	8'	8'	8'	8'	8'	-	-	8'	6	647.25"
56	8'	8'	8'	8'	8'	8'	-	-	8'	6	671.25"
58	4'	6'	8'	8'	8'	8'	8'	-	8'	7	695.25"
60	4'	8'	8'	8'	8'	8'	8'	-	8'	7	719.25"
62	6'	8'	8'	8'	8'	8'	8'	-	8'	7	743.25"
64	8'	8'	8'	8'	8'	8'	8'	-	8'	7	767.25"
66	4'	6'	8'	8'	8'	8'	8'	8'	8'	8	791.25"
68	4'	8'	8'	8'	8'	8'	8'	8'	8'	8	815.25"
70	6'	8'	8'	8'	8'	8'	8'	8'	8'	8	839.25"
72	8'	8'	8'	8'	8'	8'	8'	8'	8'	8	863.25"

FIXTURE LENGTH		
	STARTER	JOINER / ENDER
4'	46.9"	48.0"
6'	70.9"	72.0"
8'	94.9"	96.0"



GRID OPENING WIDTH			
	T-GRID (T1, T9, TG, SC)	OVERLAPPING FLANGE (OF)	SPACKLE FLANGE (SF)
2R	3"	2.4"	3.25"
3R	4"	3.4"	4.25"
5R	6"	5.4"	N/A