

## INSTALLATION INSTRUCTIONS

### Recessed Trimless Channel

S2CL01, S2CL01.5, S2CL04, S2CL06, S2CL08, S2CL12

WAC  
**STRUT**

**CAUTION: TO PREVENT ELECTRICAL SHOCK, ENSURE ELECTRICITY HAS BEEN TURNED OFF AT THE CIRCUIT BREAKER BEFORE BEGINNING.**

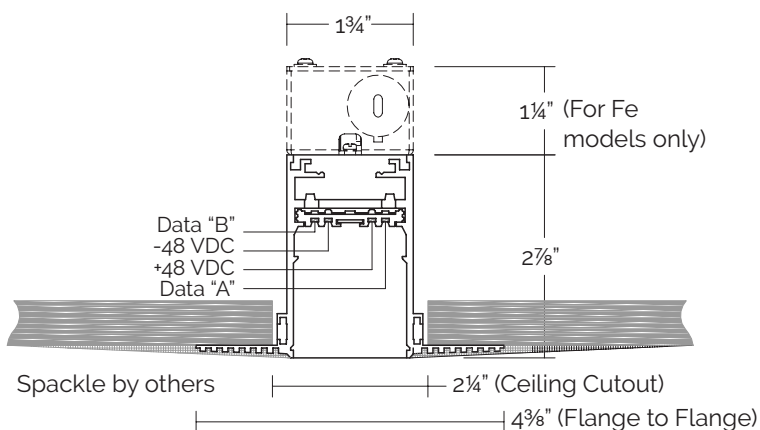
- Read all instructions before installing.
- System is intended for installation by a licensed electrician in accordance with the National Electrical Code (NEC) and local regulations.
- Retain installation instructions for future reference.
- STRUT fixtures and channels feature separate data and power conductor systems. During installation and use, do not short the data or power conductors together by any means or damage may occur.

**WARNING:** All parts must be used as indicated in these instructions. This product is designed for use only with the supplied parts and/or accessories designated for use by WAC Lighting. Substitution of parts or accessories not designated for use with this product by WAC Lighting could result in personal injury or property damage, and will void the warranty. Contact an authorized dealer or the manufacturer if any parts are damaged or missing.

**MISE EN GARDE: POUR ÉVITER TOUT CHOC ÉLECTRIQUE, ASSUREZ-VOUS QUE LE DISJONCTEUR SOIT MIS HORS TENSION AVANT DE COMMENCER.**

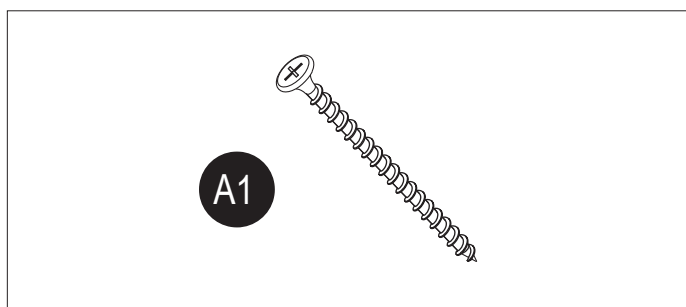
- Lisez toutes les instructions avant l'installation.
- Le système doit être installé par un électricien licencié conformément au code national de l'électricité (NEC), et également aux règlements locaux.
- Lors de la manipulation du luminaire, n'appuyez pas sur les LED. Tenez-le uniquement par la base.

**ATTENTION:** Toutes les pièces doivent être utilisées comme indiqué dans ces instructions. Ce produit est conçu pour être utilisé seulement avec les pièces et/ou accessoires fournis pour être utilisés avec les produits WAC Lighting. Remplacer des pièces ou accessoires non conçus pour ce produit WAC Lighting pourrait causer des dommages corporels ou matériels et pourrait également causer l'annulation de la garantie. Veuillez contacter un revendeur autorisé ou le fabricant si des pièces manquent ou sont endommagées.



STRUT Channels are intended for use with WAC Lighting's STRUT system. Reference specific STRUT components instructions for complete system installation.

SPECIFICATIONS	
<b>Input:</b>	48 VDC (Maximum 12.5A), Data via STRUT CPU
<b>Installation:</b>	IC, Dry Location, Drywall Ceiling and Wall.
*Do not install concealed or extended through building walls.	



Included Hardware
Mounting Screw
3 pcs (1 ft channel)
3 pcs (1.5 ft channel)
4 pcs (4 ft channel)
5 pcs (6 ft channel)
8 pcs (8 ft channel)
12 pcs (12ft channel)

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#### STRUT RECESSED TRIMLESS CHANNEL SAMPLE LAYOUT

##### CHOOSE YOUR CHANNELS AND CONNECTORS

- Power feed from feed end channel or feed end junction box to energize your run.
- Support Strut with screws into rear blocking, 1/4"-20 tie rod (by others), or stem or aircraft cables to plenum ceiling. Minimum two supports per 4ft or less section. Minimum three supports per 6ft, 8ft, and 12ft section.
- For patterns, choose L, T, X, or corners.

**Note:** STRUT is field cut at end of run or between channels using below bus bar connector S2C-IB. For patterns and custom length channels, consult factory.

##### CHOOSE YOUR ELEMENTS

- Refer to element specifications to appropriately select elements.
- Total the wattage of the system.

##### CHOOSE YOUR CONNECTED POWER UNIT (CPU)

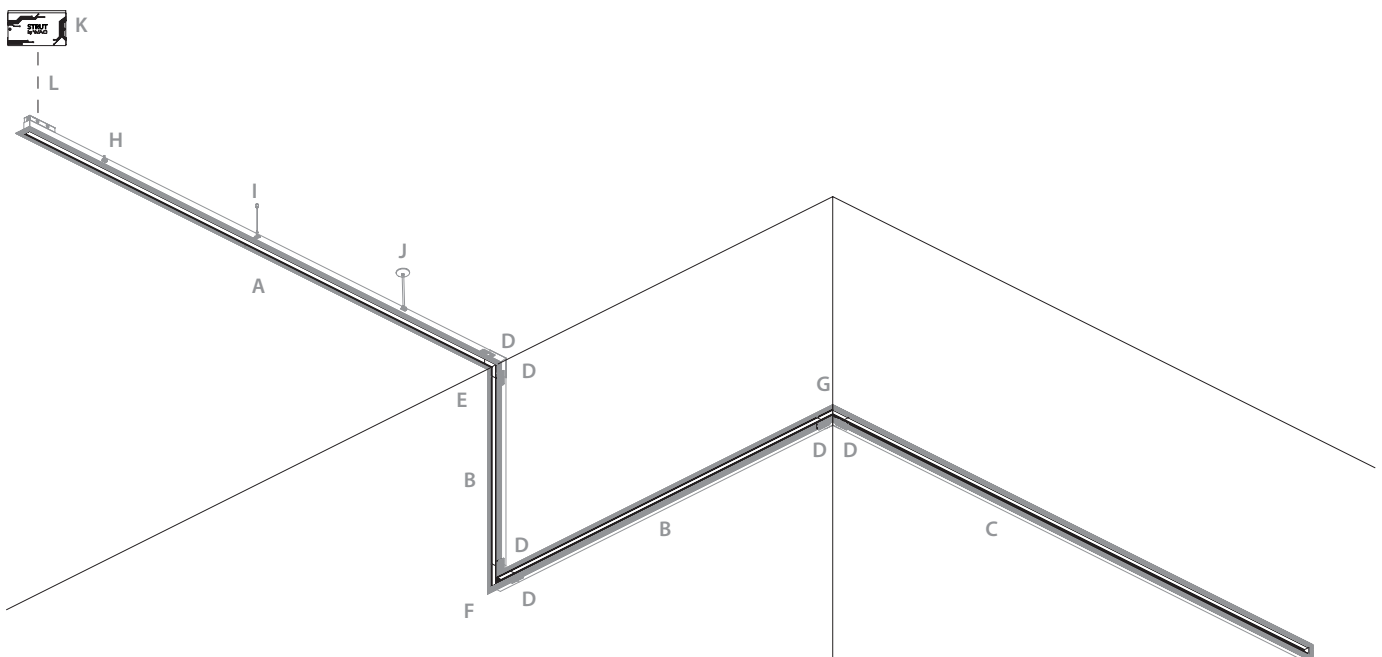
- Select remote mount CPU.
- Select appropriate wattage based on total system wattage.

**Note:** Recommended sizing up as feasible for increased system capability.

##### ACCESSORIZE

- Add channel covers, lenses, or glare control accessories as desired.

A	S2CL08-FE	8FT FEED END RECESSED TRIMLESS CHANNEL	G	S2CL-OC	RECESSED TRIMLESS OUTSIDE CORNER
B	S2CL04	4FT RECESSED TRIMLESS CHANNEL	H	S2CR-CLIP	1/4"-20 TIE ROD MOUNTING CLIP
C	S2CL08	8FT RECESSED TRIMLESS CHANNEL	I	S2C-Cg6	CABLE SUSPENSION
D	S2CSR-I	I CONNECTOR	J	S2C-Sg6	STEM SUSPENSION
E	S2CL-IC	RECESSED TRIMLESS INSIDE CORNER	K	S2CPU-R600-S-BK	REMOTE CPU
F	S2CL-L	RECESSED TRIMLESS L CONNECTOR	L	BY OTHERS	FIELD WIRING TO CPU



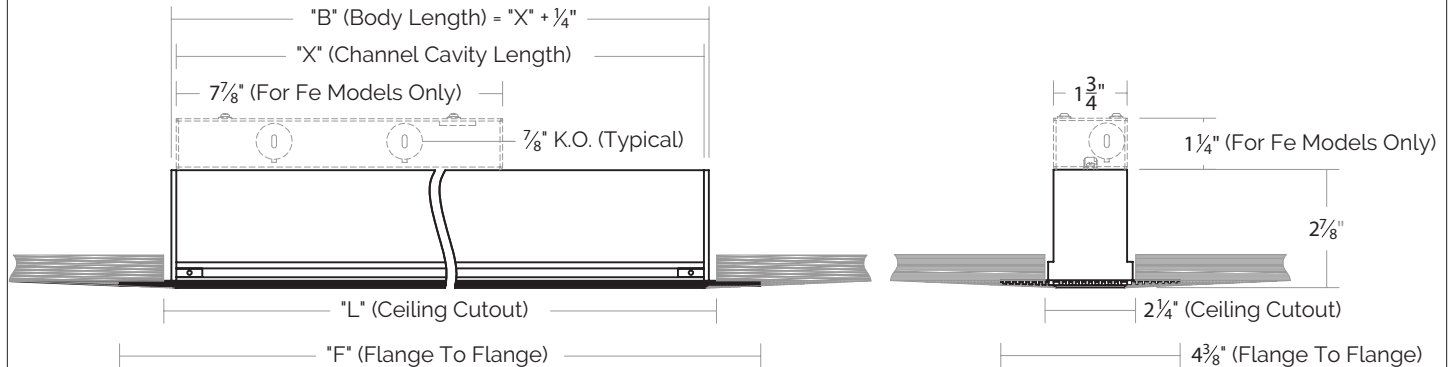
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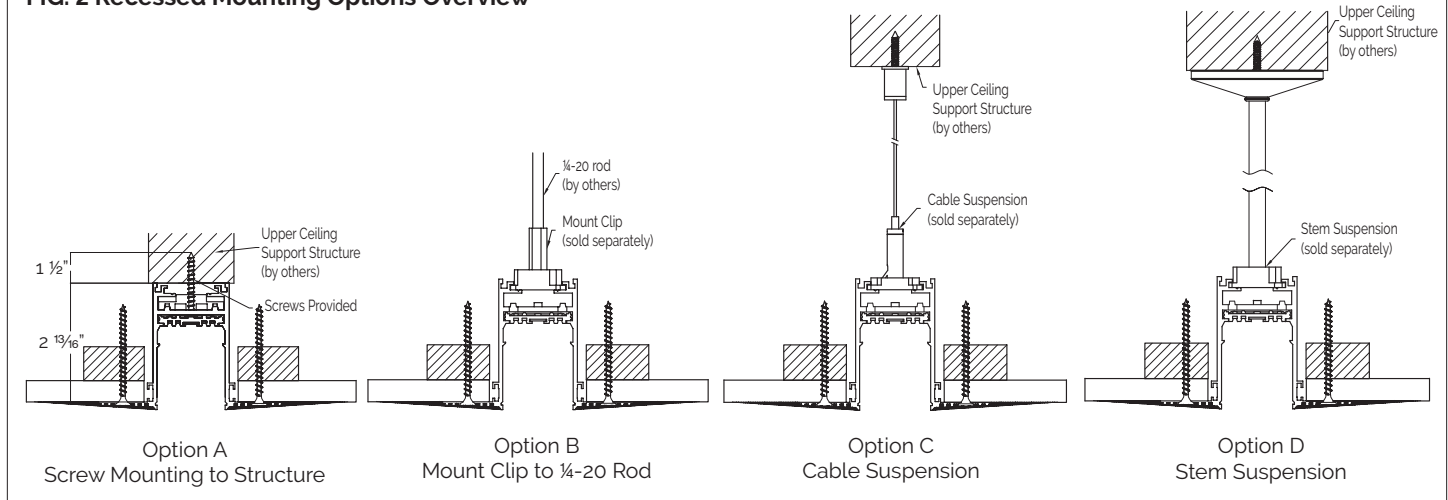
**FIG. 1 Cutout dimensions**



Individual Dimensions				
Model	"X" Channel Cavity Length	"B" Body Length	"L" Ceiling Cutout	"F" Flange to Flange
<b>S2CL01</b>	12"	12 1/4"	12 1/2"	14 3/4"
<b>S2CL01.5</b>	18"	18 1/4"	18 1/2"	20 3/4"
<b>S2CL04</b>	48"	48 1/4"	48 1/2"	50 3/4"
<b>S2CL06</b>	72"	72 1/4"	72 1/2"	74 3/4"
<b>S2CL08</b>	96"	96 1/4"	96 1/2"	98 3/4"
<b>S2CL12</b>	144"	144 1/4"	144 1/2"	146 3/4"

Example 8' + 12' RUN	CONTINUOUS RUN OF CHANNEL DIMENSIONS CEILING CUTOUT "L" = "X" + 1/2"			
	"X" Channel Cavity Length	"B" Body Length	"L" Ceiling Cutout	"F" Flange to Flange
	240"	240 1/4"	240 1/2"	242 3/4"

**FIG. 2 Recessed Mounting Options Overview**



Minimum recommended number of support points per channel					
S2CL01	S2CL01.5	S2CL04	S2CL06	S2CL08	S2CL12
2	2	2	3	3	3

1. STRUT Recessed Trimless Channel is possible to install in various methods. (See **FIG. 2**). Installer to select appropriate hardware and confirm appropriate installation means to meet project requirements.

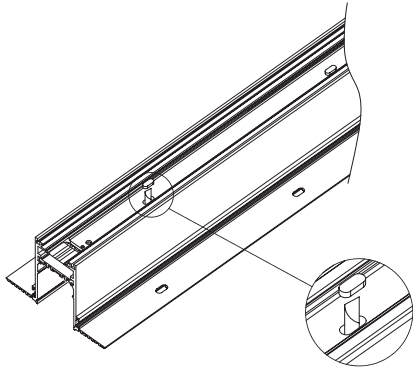
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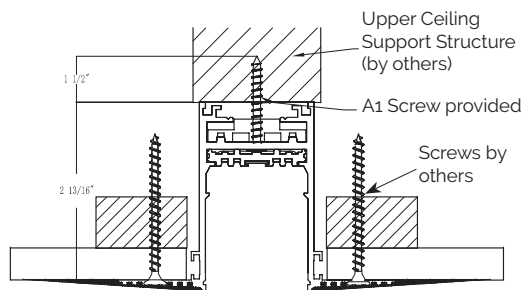
**FIG. 3**



#### *Option A: Screw Mounting to Structure Installation*

A1. Prepare channel by removing necessary mounting point knockouts using a screwdriver and hammer. Take care to protect channel integrity and finish (See **FIG. 3**).

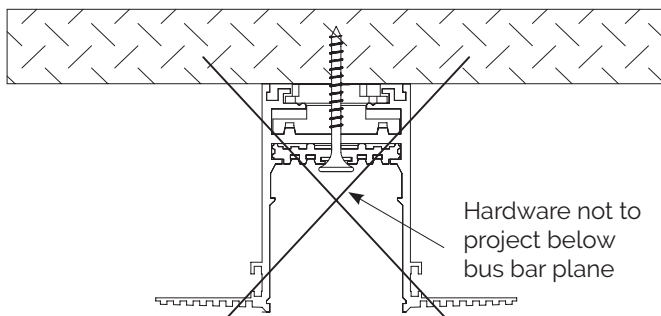
**FIG. 4**



Option A  
Screw Mounting to Structure

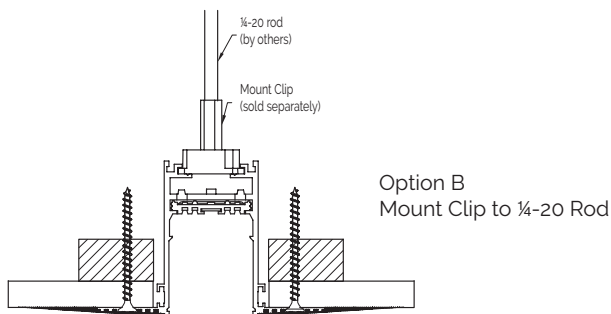
A2. Secure channel to upper ceiling structure using screws provided (See **FIG. 4**).

**FIG. 5**



**CAUTION:** Channels hardware mounting slots accommodate hardware of specific size. Use only provided hardware or hardware of equivalent head size. Do not use hardware which protrudes below the channel bus bar or system operation could be affected (See **FIG. 5**).

**FIG. 6**



#### *Option B: Mount Clip to 1/4-20 Rod Installation*

B1. Install 1/4-20 threaded rod in appropriate locations (See **FIG. 6**).

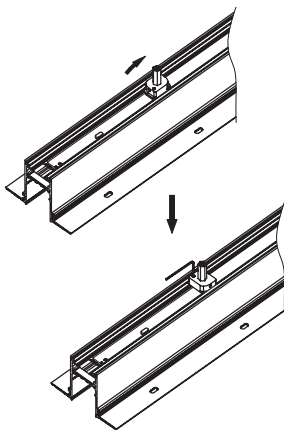
## INSTALLATION INSTRUCTIONS

### Recessed Trimless Channel

S2CL01, S2CL01.5, S2CL04, S2CL06, S2CL08, S2CL12

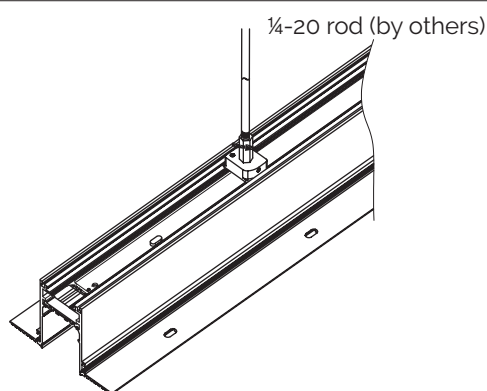
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**FIG. 7**



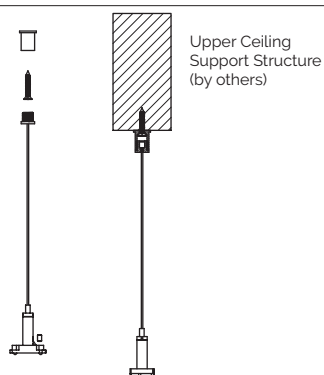
B2. Install the mounting clip on the channel then lock it with allen key (See **FIG. 7**).

**FIG. 8**



B3. Hang the channel, rotate the hexagonal stud on the mount clip to install and secure the 1/4-20 rod (See **FIG. 8**).

**FIG. 9**

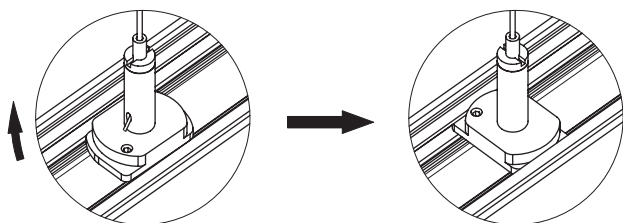


#### *Option C: Cable Suspension Installation*

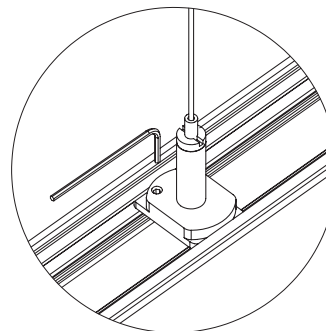
C1. Remove top from cable suspension mount and install to upper ceiling support structure. Reinstall cable assembly onto top (See **FIG. 9**).

C2. Install the bottom of suspension cable assembly on the channel then secure it in place with allen key. Adjust cable to appropriate height using cable gripper adjustment (See **FIG. 10** & **FIG. 11**).

**FIG. 10**



**FIG. 11**

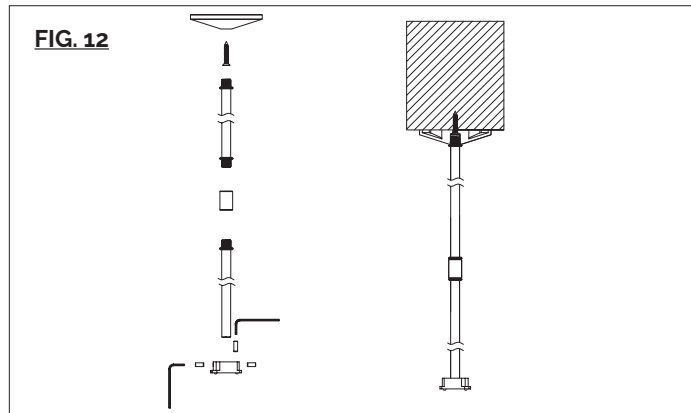


## INSTALLATION INSTRUCTIONS

### Recessed Trimless Channel

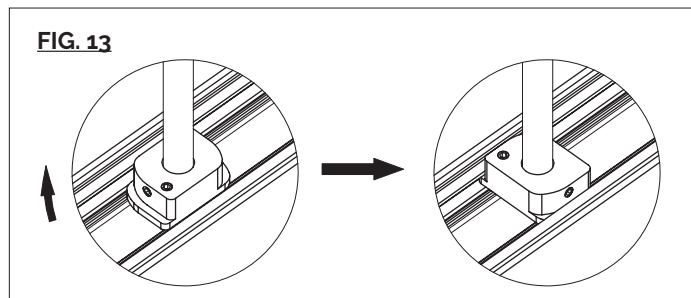
S2CL01, S2CL01.5, S2CL04, S2CL06, S2CL08, S2CL12

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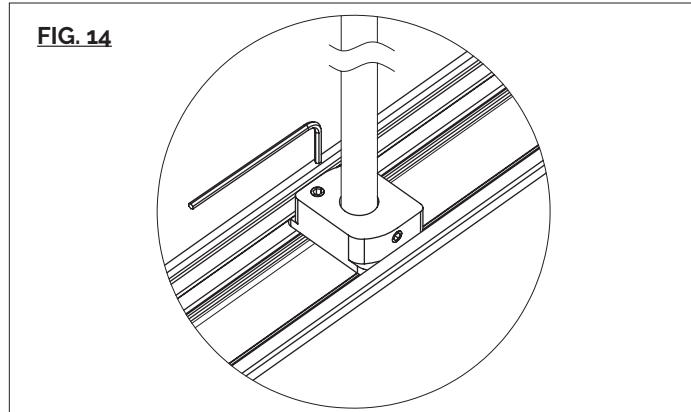


#### *Option D: Stem Suspension Installation*

D1. Remove top from stem mount and install to upper ceiling support structure. Cut (if necessary) bottom of stem to appropriate height. Reassemble stem assembly. Confirm all connection points are secure (See **FIG. 12**).



D2. Install the bottom of stem assembly on the channel then secure it in place with allen key. Confirm all connection points are secure (See **FIG. 13** & **FIG. 14**).



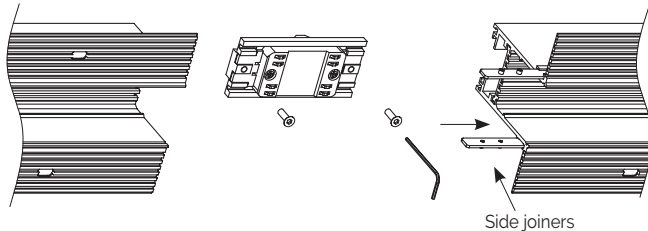
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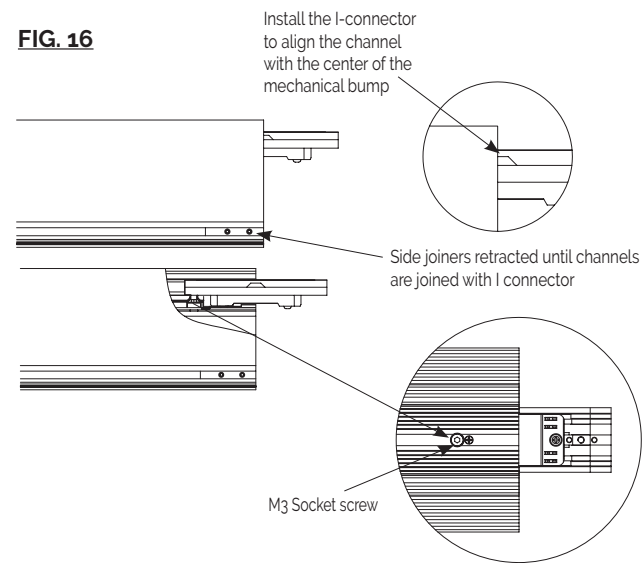
**FIG. 15**



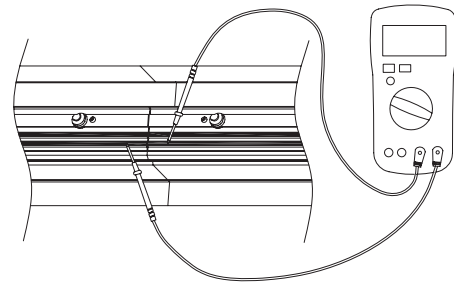
#### Channel to channel connection (Factory channel ends for uninterrupted bus bar)

1. Join channel sections mechanically and electrically with I connector and channel side joiners (See **FIG. 15**).

**FIG. 16**

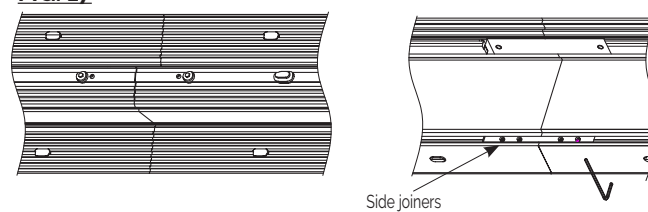


2. Insert I connector into one channel. Be sure I connector is fully inserted with mechanical bump aligned. A gentle tap with a rubber mallet may be necessary. Insert socket screw straight and gently tighten. Take caution not to strip threads. Note: Use of power tools not recommended (See **FIG. 16**).



**Note:** Confirm continuity across each of the 4 bus bars after I connector is secured and prior to completing installation.

**FIG. 17**



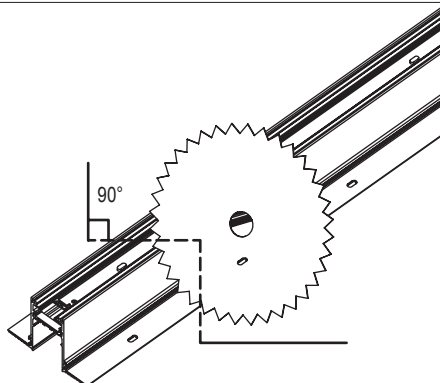
3. Repeat for other side. Lock I connector with screws from bottom of channel. After I connector is installed on both ends, slide side joiners to span both sides of channels and secure by tightening set screws. Note: Use of power tools not recommended (See **FIG. 17**).

#### Channel Cutting

1. Last channel in a run can be field cut to terminate the run. Use a chop saw with good condition blade rated for metal cutting. Confirm cut is perpendicular and remove any burrs or filings. Reattach end cap (See **FIG. 18**).

**Note:** Field cuts result in end of run condition and accepts end caps. Cut ends are not compatible with general channel connectors.

**FIG. 18**



Use a metal cutting power saw to cut the channel

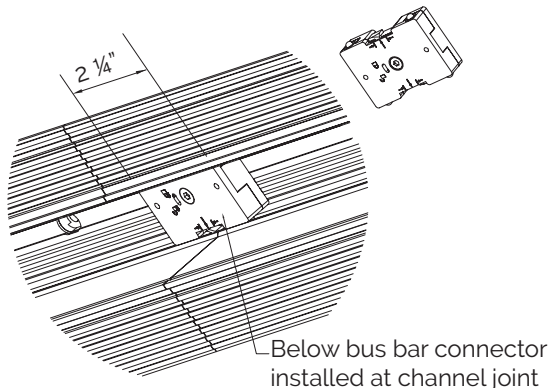
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**FIG. 19**

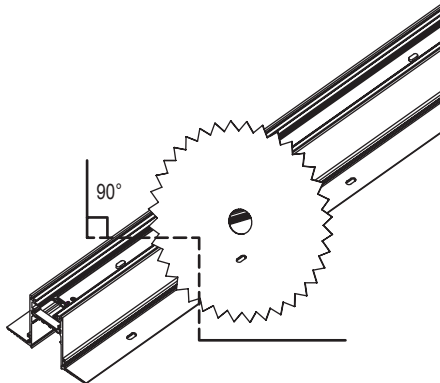


#### Channel to channel connection (Field cut channel end(s) for interrupted bus bar)

1. If necessary to field cut channel at channel to channel connection, it is possible to create joint mechanically and electrically using below bus bar I connector kit S2C-IB-BK. Note: with this setup, a connector will be installed below bus bar plane which may interfere with installation of fixture elements. Confirm this will be acceptable in project prior to proceeding (See **FIG. 19**).

**Note:** Some 2' and 4' STRUT fixture elements can span below bus bar connector. Reference line drawings on spec sheets.

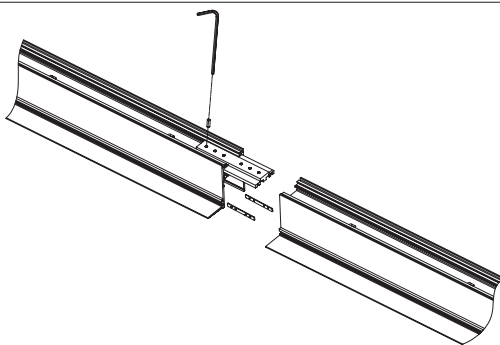
**FIG. 20**



Use a metal cutting power saw to cut the channel

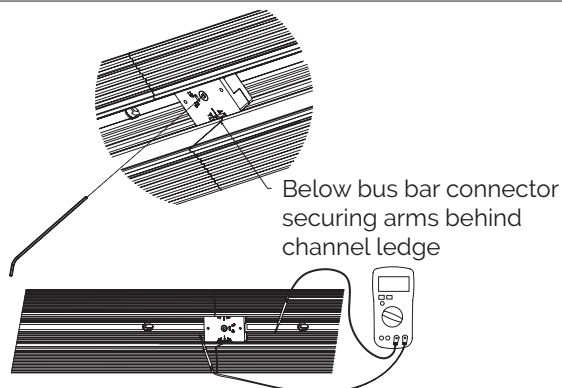
2. Field cut appropriate channel. Use a chop saw with good condition blade rated for metal cutting. Confirm cut is perpendicular and remove any burrs or filings. (See **FIG. 20**).

**FIG. 21**



3. Insert top connector (S2C-ID) into top side of channel and channel side joiners into side profile. Position connector and joiners centered between channels and tighten all set screws. (See **FIG. 21**).

**FIG. 22**



4. To make electrical connection, insert below bus bar connector into bus bar at channel joint. Center the connector in the appropriate position (channel joint is between connector arrows) and push in firmly. Securing arms should be behind channel ledge. Then, tighten central screw to lock the connector in position. Confirm connector is mechanically secure and has electrical continuity across. (See **FIG. 22**)



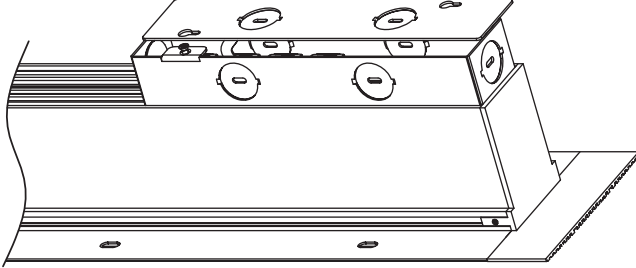
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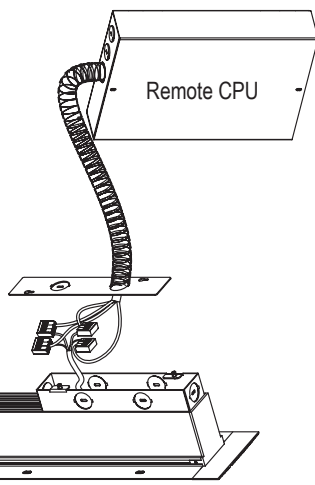
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**FIG. 23**

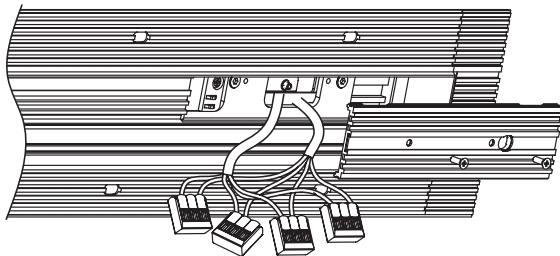


**FIG. 24**

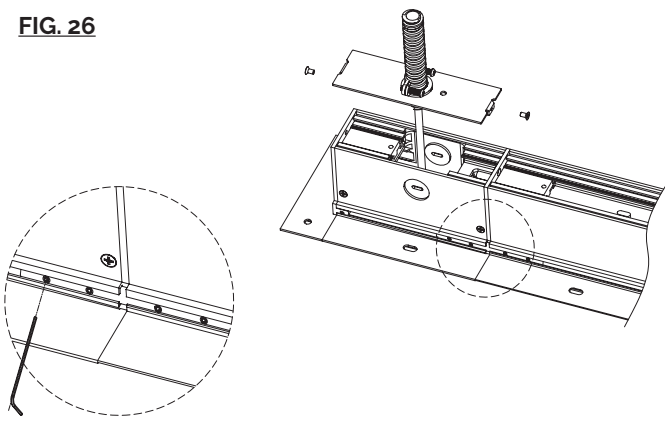
Red: + 48 VDC  
Black: - 48 VDC  
Brown: Data "A"  
Blue: Data "B"



**FIG. 25**



**FIG. 26**



#### Channel Wiring (S2CT'-FE)

1. Loosen the screws on the junction box and remove the cover (See **FIG. 23**).

2. Remove desired knockout for wiring. Make wire connection between CPU and Channel with appropriate conductors and conduit (by others) (See **FIG. 24**).

Reference STRUT CPU instructions for CPU specific instructions.

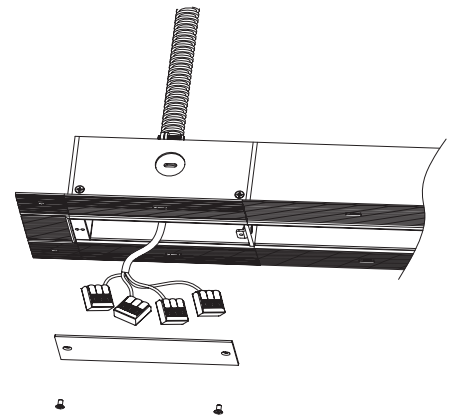
#### Wiring inspection

1. It is possible to inspect wiring from inside of channel. Loosen two small screws located at the feed end of the channel to remove small section of channel bus bar and gain access to wiring (See **FIG. 25**).

#### Channel Wiring with Feed End Junction Box (S2CL-FEB)

1. Join feed end junction box and adjacent channel section mechanically with screw and channel side joiners (See **FIG. 26**).
2. Loosen the screws on the junction box and remove the cover. Remove desired knockout for wiring. Make wire connection between CPU and Channel with appropriate conductors and conduit (by others). Replace bottom cover after wire connection is completed (See **FIG. 27**).

**FIG. 27**



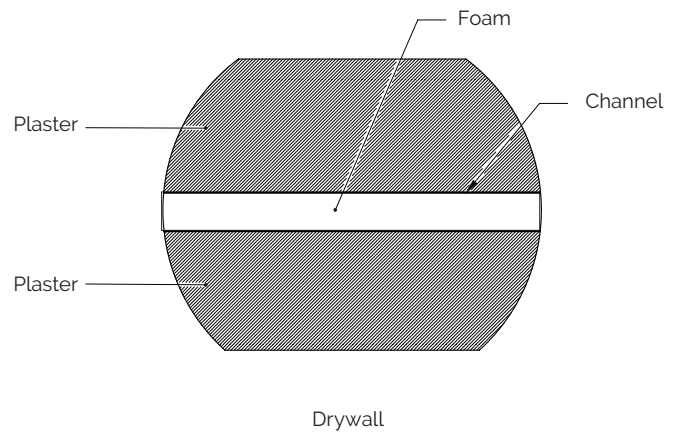
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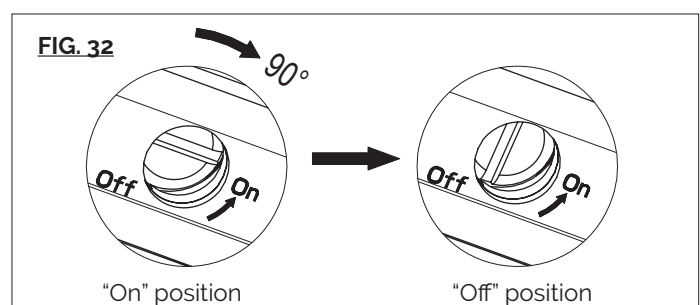
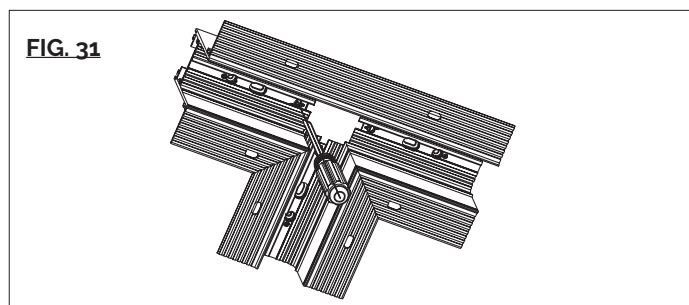
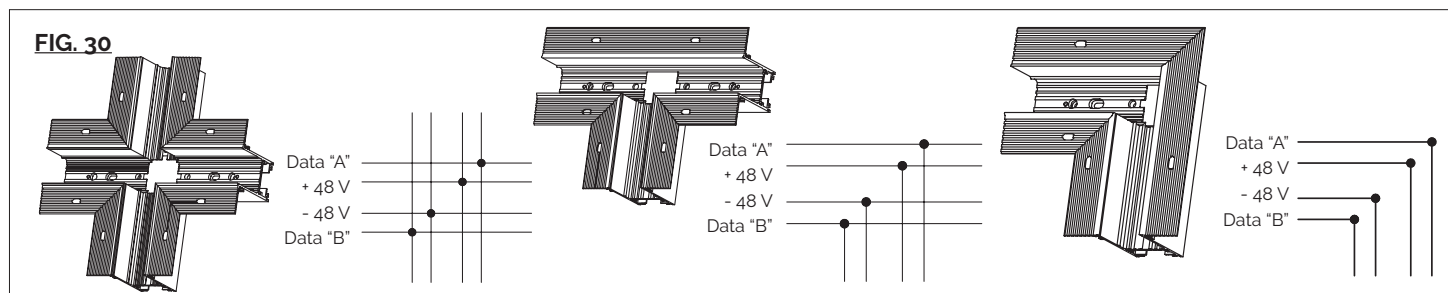
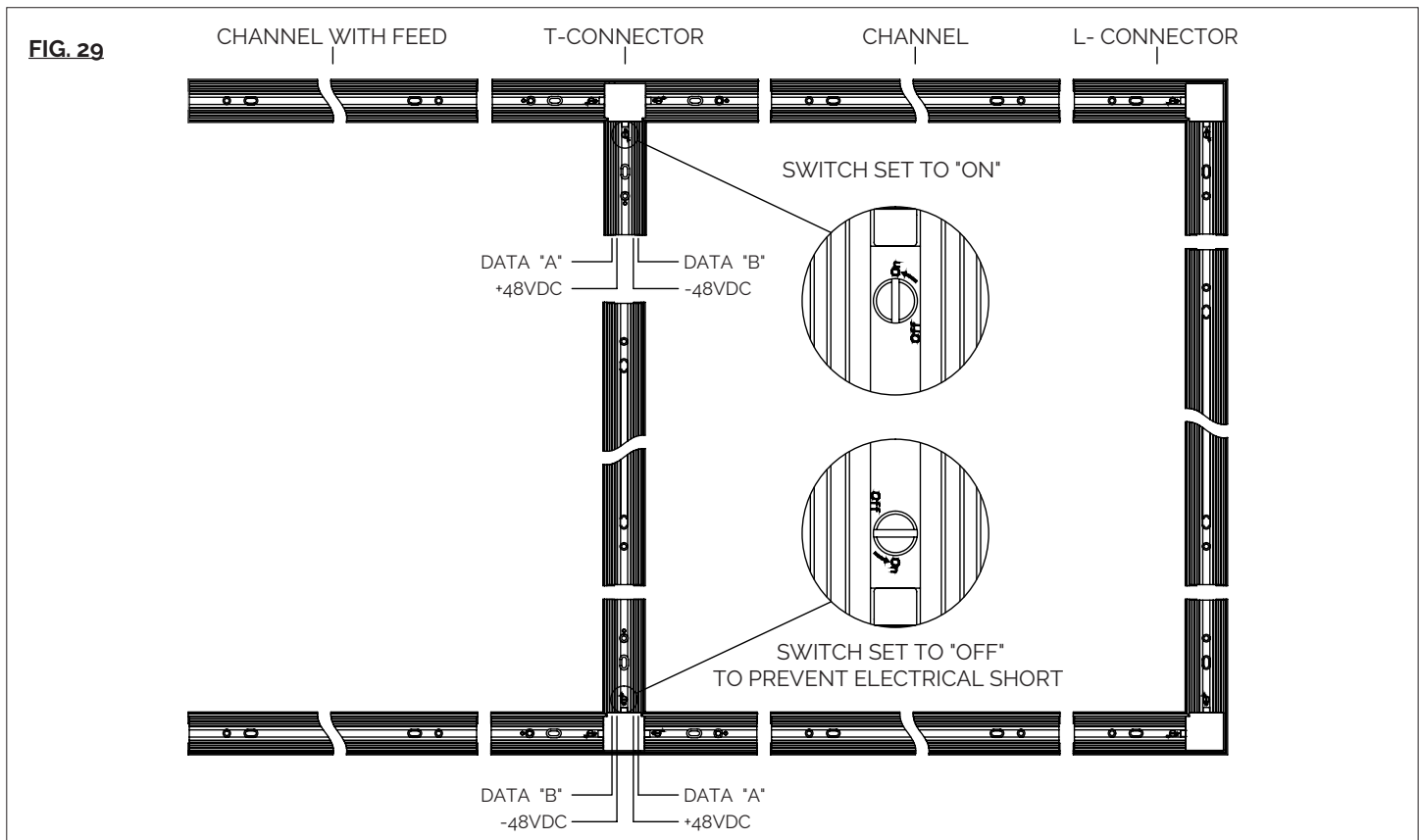
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**FIG. 28**



#### Spackle Channel

1. Cover up the opening section of the channel with the provided foam to prevent plaster and dust entering the channel.  
Plaster the channel edges to the drywall. Sand and paint the ceiling/wall properly.  
After the plaster cures, remove the foam and clean the inside of the channel before installing fixtures (See **FIG 28**).



### Channels with Patterns

- For channels consisting of patterns, it is important to confirm no electric short prior to energizing system. Review pattern and confirm if it is possible for short (See **FIG 29** & **FIG 30**). To avoid circuit short, there is a continuity switch on channel connectors. Where appropriate, use the a flat-blade screwdriver to align the slot with on and turn it 90° clockwise, to turn off and disconnect continuity from that leg (See **FIG 31** & **FIG 32**).