

# Installation Instructions - Housing

For use with **BW165RF / BW165R1** T-Grid or Gypsum ceiling types

**⚠ WARNING**  
Risk of electrical shock. Disconnect power before servicing or installing luminaire.

**⚠ WARNING**  
Risk of injury or damage. Luminaire will fail if not installed properly. Follow installation instructions.

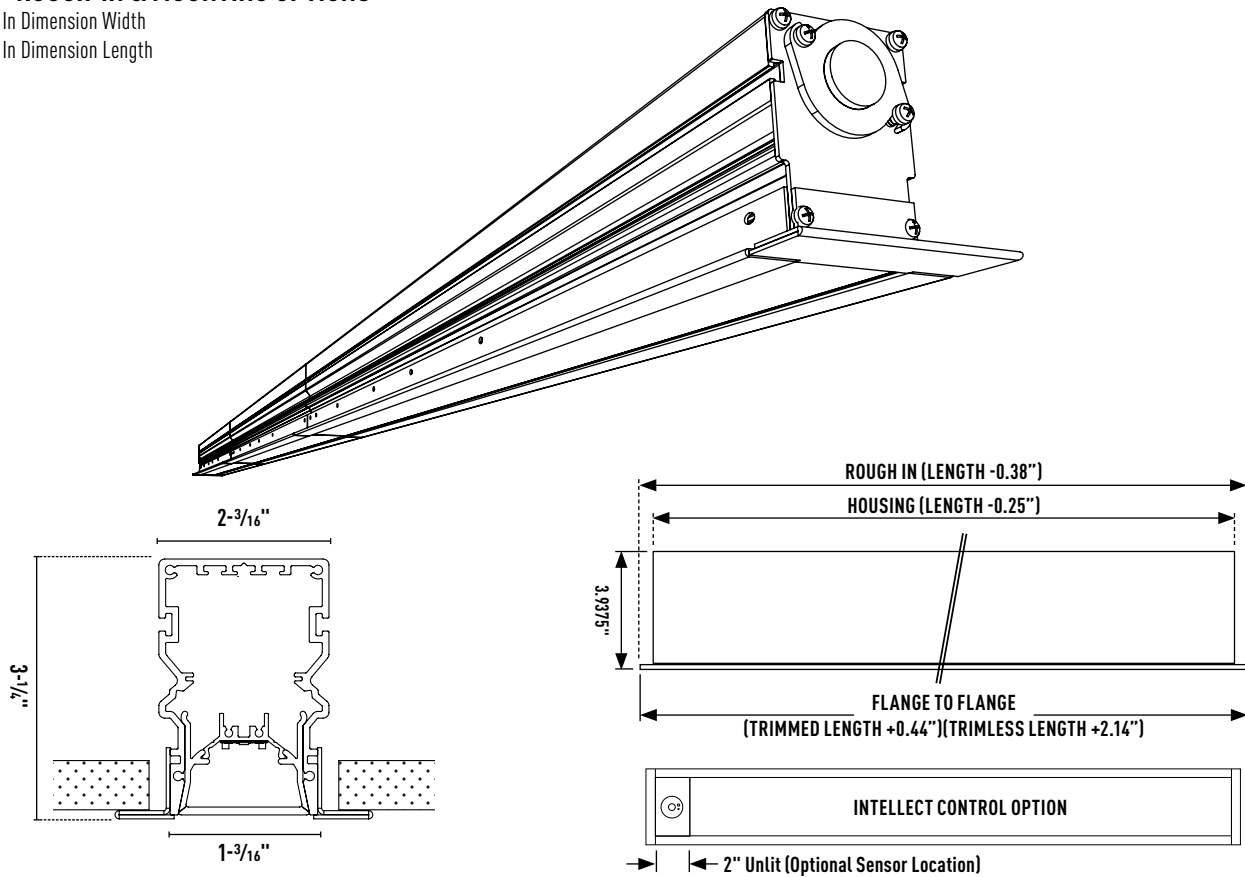
**⚠ WARNING**  
Risk of injury. Wear safety glasses and gloves during installation and servicing. Allow ample time to cool before handling.

## IMPORTANT SAFETY INSTRUCTIONS

- Read all installation instructions before installing. It is important to save these instructions.
- Only install and connect LED module/boards with power disconnected at the circuit breaker. Hot plugging, or connecting the LED module/board with power on, could damage the LEDs and is not covered by warranty.
- Connectors on modules/boards and approved housings are keyed for specific voltage combinations; do not force or attempt to bypass connectors.
- Observe and follow all label information and instructions regarding dry, damp and wet location listings, proper Intense LED module, warnings of installation near combustible materials and/or insulation.
- Turn off power at circuit breaker before attempting to install or perform maintenance on the fixtures.
- Be sure to connect ground wire to prevent electric shock or other potential hazards.
- The product must be installed in a manner consistent with the intended use and in compliance with the national electrical codes and local codes by a person familiar with the construction and operation of the product and the hazards involved.
- Do not block the trim aperture as this may cause unsafe operating conditions.
- WARNING: RISK OF FIRE.** Non-IC fixture requires that insulation must be kept at least 3" away from all sides of the fixture. Minimum 90°C supply conductors. Consult a qualified electrician before installation.

## STEP 1 – ROUGH-IN & MOUNTING OPTIONS

- Rough In Dimension Width
- Rough In Dimension Length



STANDALONE		CONTINUOUS RUN														
FEET	LENGTH	SEGMENTS (NOMINAL FEET)			(NO MIDDLES)		(1) MIDDLE		(2) MIDDLES		(3) MIDDLES		(4) MIDDLES		(5) MIDDLES	
		STARTER	MIDDLE	END	FEET	LENGTH	FEET	LENGTH	FEET	LENGTH	FEET	LENGTH	FEET	LENGTH	FEET	LENGTH
2	02F00	4	8	5	9	09F00	17	17F00	25	25F00	33	33F00	41	41F00	49	49F00
3	03F00			6	10	10F00	18	18F00	26	26F00	34	34F00	42	42F00	50	50F00
4	04F00			7	11	11F00	19	19F00	27	27F00	35	35F00	43	43F00		
5	05F00			8	12	12F00	20	20F00	28	28F00	36	36F00	44	44F00		
6	06F00	8		5	13	13F00	21	21F00	29	29F00	37	37F00	45	45F00		
7	07F00			6	14	14F00	22	22F00	30	30F00	38	38F00	46	46F00		
8	08F00			7	15	15F00	23	23F00	31	31F00	39	39F00	47	47F00		
				8	16	16F00	24	24F00	32	32F00	40	40F00	48	48F00		

>50' Requires additional power feed(s) 1,2

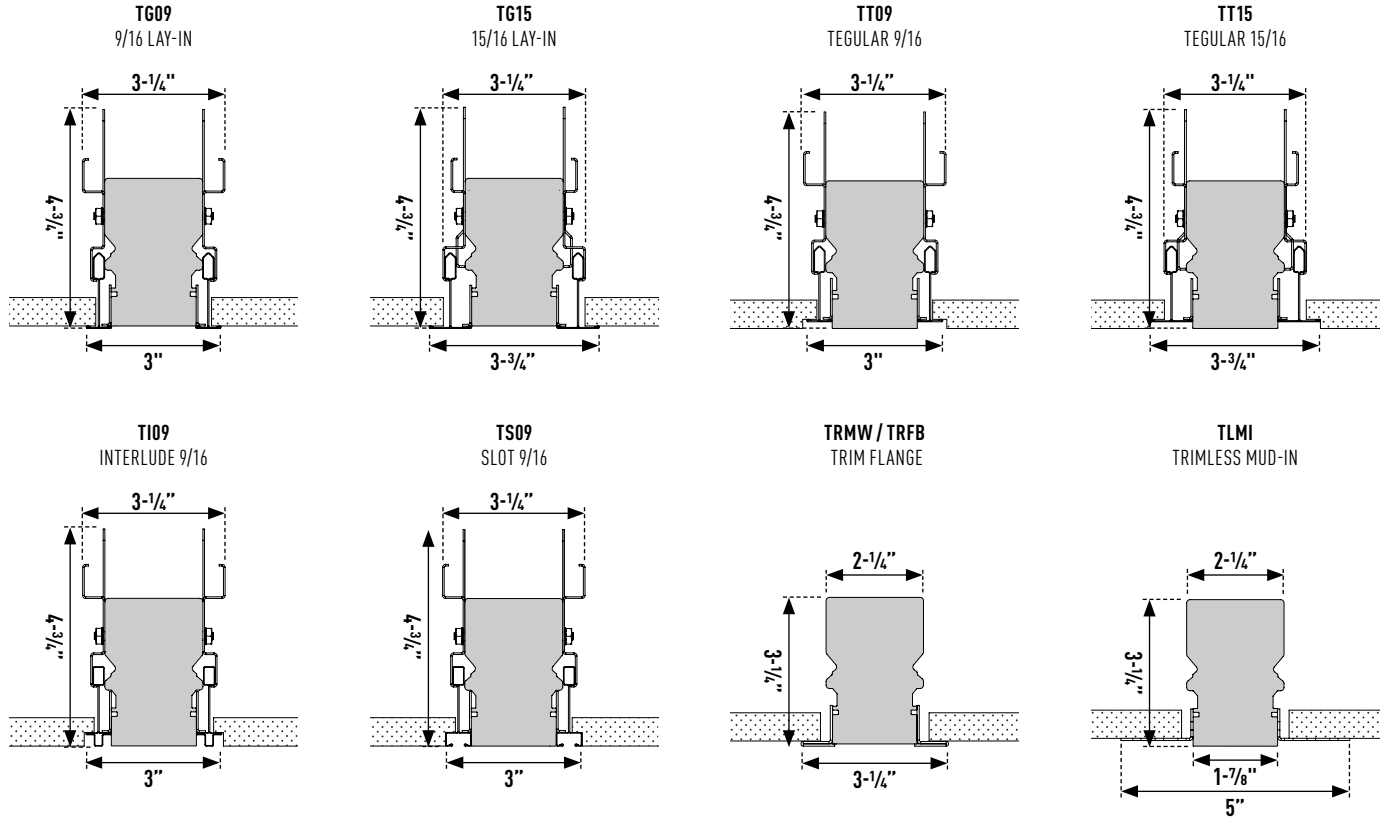
INSTALLATION SHEET L/M-08272024-P-1

# Installation Instructions - Housing

For use with **BW165RF / BW165R1** T-Grid or Gypsum ceiling types

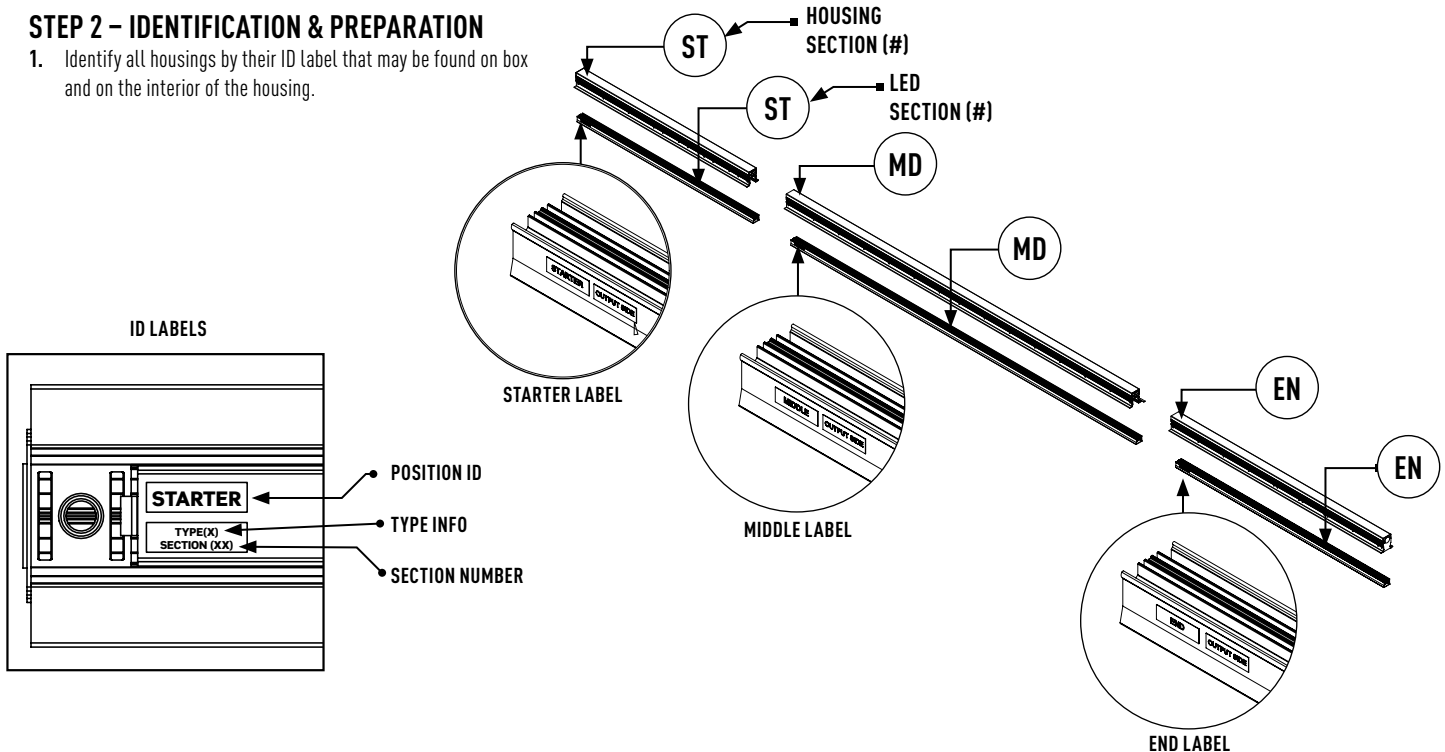
## STEP 1 – ROUGH-IN & MOUNTING OPTIONS - CONTINUED

### FLANGE TYPES & DIMENSIONS:



## STEP 2 – IDENTIFICATION & PREPARATION

1. Identify all housings by their ID Label that may be found on box and on the interior of the housing.

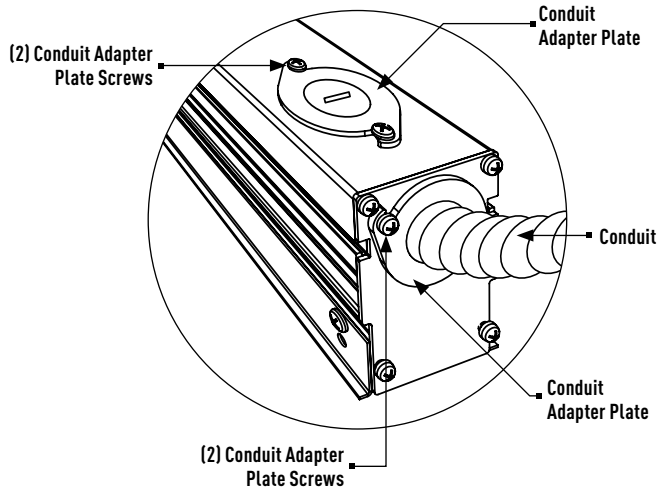


# Installation Instructions - Housing

For use with **BW165RF / BW165R1** T-Grid or Gypsum ceiling types

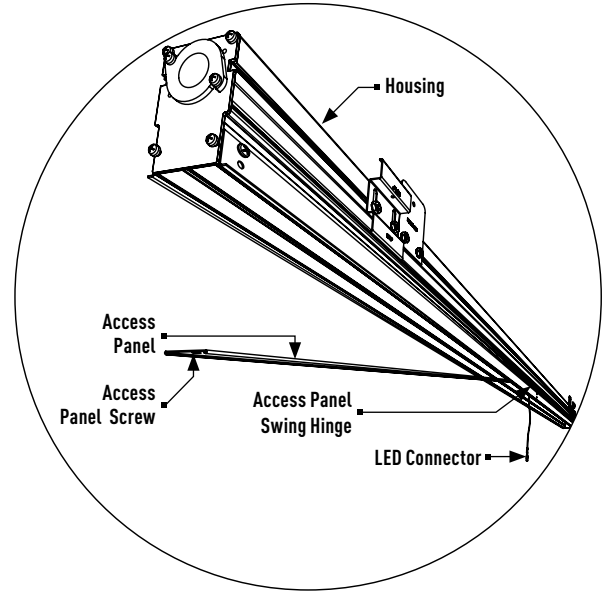
## STEP 3 – CONDUIT ADAPTER

1. Remove conduit adapter plate and install fitting (by others) to top or side position, re-install conduit adapter plate.



## STEP 4 – ACCESS PANEL

1. Loosen screw on access panel, lower access panel to a hanging service position.
2. Bring incoming wire into housing, make wire connections, reference wiring diagrams section of this instruction.
3. Re-install access panel and secure to housing with screw.



## WIRING DIAGRAM(S)

WIRING	10V1 (0-10V)	EDV1 (0-10V eLdoLED)	LDE1 (Lutron® Hi-Lume EcoSystem)	DALI (DALI, DT6)	PHEL (Phase/ELV)	IEPH (Leviton Intellect)	SOLO (Leviton Intellect Solo)
0-10V DIMMING +	VIOLET	VIOLET	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
0-10V DIMMING -	PINK	PINK	(N/A)				
LUTRON ECOSYSTEM E2	(N/A)	(N/A)	VIOLET				
LUTRON ECOSYSTEM E1			PINK				
DALI +	(N/A)	(N/A)	(N/A)	VIOLET	(N/A)	(N/A)	(N/A)
DALI -			PINK				
GROUND	GREEN						
NEUTRAL	WHITE						
LINE SWITCHED HOT	BLACK						
LINE UNSWITCHED HOT (EM)	RED						

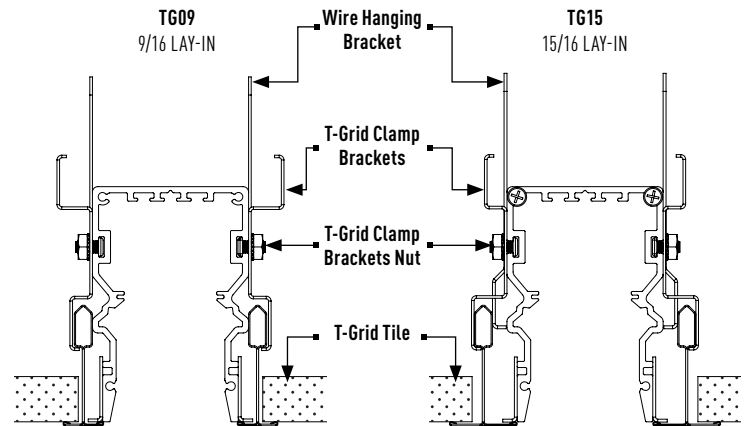
# Installation Instructions - Housing

For use with **BW165RF / BW165R1** T-Grid or Gypsum ceiling types

820-00164 (Rev.1)  
4 of 6

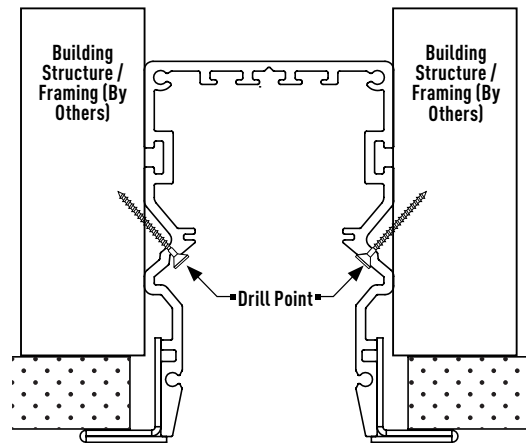
## STEP 5A – MOUNT STARTER / STANDALONE T-GRID CEILING

1. Loosen nuts on T-Grid clamp brackets.
2. Place luminaire into T-Grid ceiling.
3. Hang fixture using wires (by others) through wire hanging bracket and attach to structure.
4. Mount and attach adjacent section(s) and make connections.



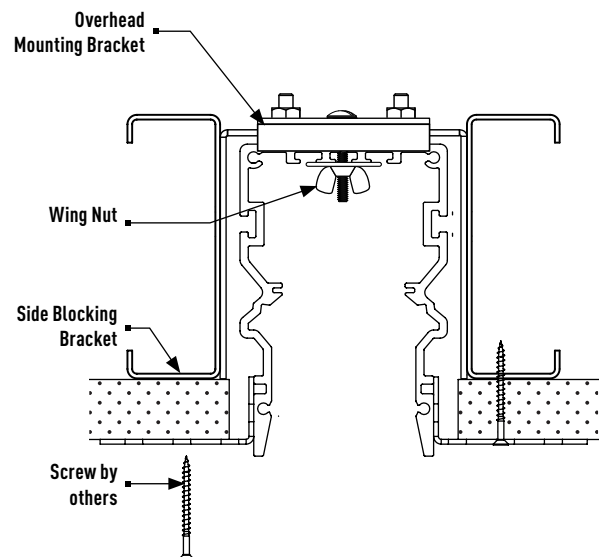
## STEP 5B – GYPSUM CEILING - TRIM FLANGE STANDARD MOUNTING - SIDE BLOCKING

1. Place luminaire into gypsum ceiling, drill 3/16" through hole(s) at interior drill point along housing and install appropriate screw (by others) to mount housing to structure.



## STEP 5C – GYPSUM CEILING - TRIM FLANGE OVERHEAD MOUNTING BRACKET

1. Secure the side blocking bracket to the stud using appropriate screws (provided by others).
2. Once the side blocking is secured to the stud, install the overhead mounting bracket using appropriate screws (provided by others).
3. Place the luminaire into the ceiling between the side blocking and the overhead mounting bracket. Secure the fixture with a wing nut.



INSTALLATION SHEET L/M-08272024-P-4

BIRCHWOOD LIGHTING | 725 Landwehr Road, Northbrook, IL 60062 | tel 714 550-7118 | fax 847 559-5505 | www.birchwoodlighting.com

For Birchwood Lighting's limited product warranty, go to [www.birchwoodlighting.com](http://www.birchwoodlighting.com). For a printed copy of the warranty, you may call 800 961-5321.

© 2024 Birchwood Lighting, Inc. All rights reserved. **Note:** This document is subject to change without notice.

# Installation Instructions - Housing

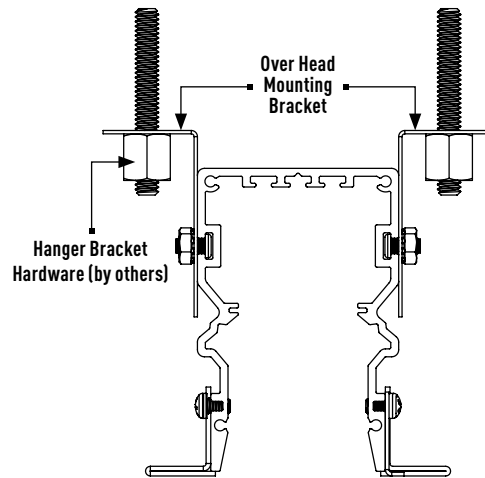
For use with **BW165RF / BW165R1** T-Grid or Gypsum ceiling types

820-00164 (Rev.1)  
5 of 6

## STEP 5D – GYPSUM CEILING - TRIM FLANGE

### HANGER BRACKET

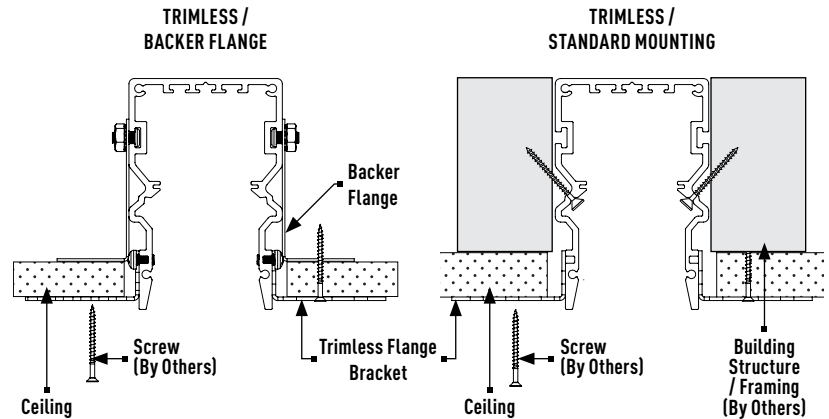
1. Loosen nuts on hanger brackets.
2. Place luminaire into gypsum ceiling, adjust hanger brackets to align with mounting studs (by others).
3. Secure luminaire to mounting studs (hardware by others) and tighten nuts to secure hanger bracket to housing.



## STEP 5E – GYPSUM CEILING - TRIMLESS FLANGE

### STANDARD MOUNTING / BACKER FLANGE

1. Place luminaire into gypsum ceiling and install appropriate fastener (by others) to mount housing to:
  - Standard Mounting: Structure Behind Gypsum Ceiling
  - Backer Flange: Gypsum Ceiling



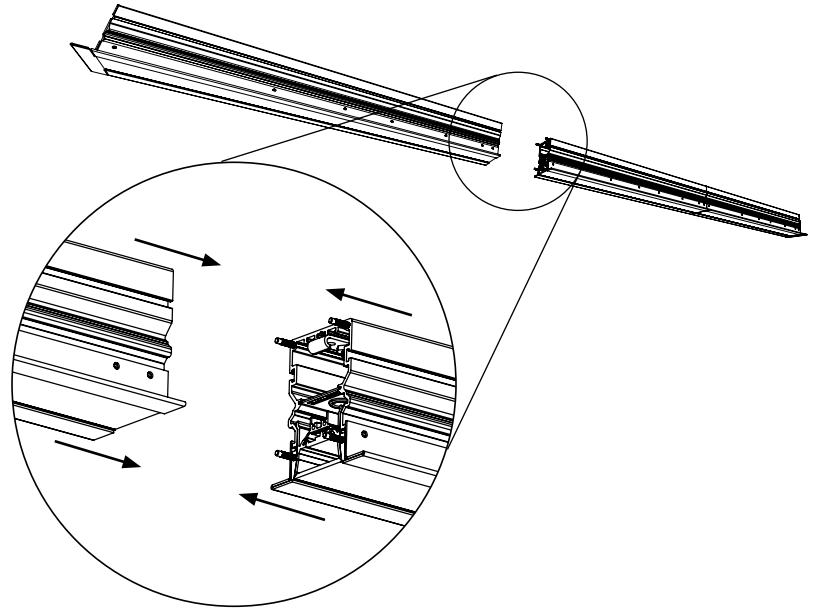
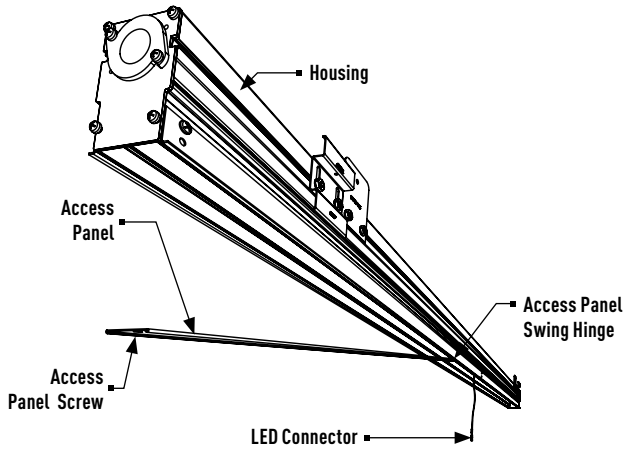
# Installation Instructions - Housing

For use with BW165RF / BW165R1 T-Grid or Gypsum ceiling types

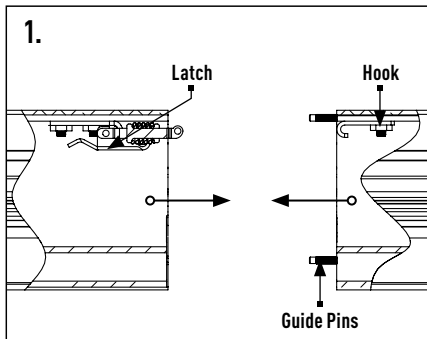
820-00164 (Rev.1)  
6 of 6

## STEP 6 – JOIN LUMINAIRES (CONTINUOUS RUN CONFIGURATIONS ONLY)

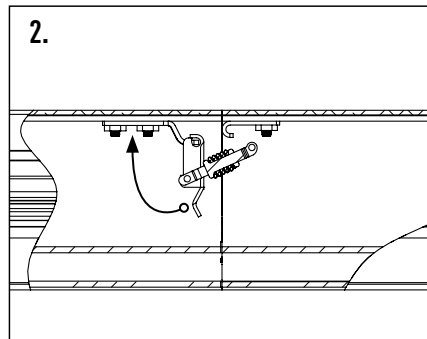
1. Place Middle or End section luminaire into ceiling, align guide pins and repeat installation method as Starter section.
2. Loosen screw on access panel, lower access panel to a hanging service position.
3. Engage and secure latch.
4. Connect electrical plug(s).
5. Re-install access panel and secure to housing with screw.



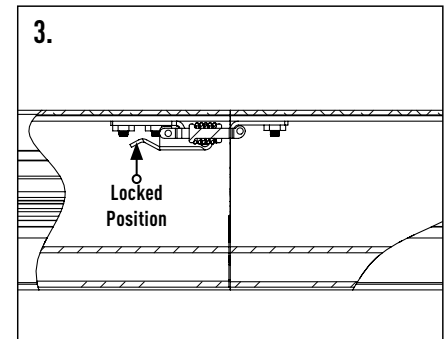
## ENGAGE AND SECURE LATCH:



Align guide pins of the two end of the fixture and lift and latch the lock over the hook



Once the latch is over the hook. Press down on the latch to lock the system in place



Double check latch is fully seated and secure

## STEP 7 – INSTALLATION SPACER (GYPSUM CEILING ONLY)

1. Use installation spacer(s) to verify installation, spacer should be able to be inserted and removed easily without falling out, if spacer is loose or does not fit then repeat previous step to ensure screws are not over-tightened and housing has not deformed
2. Leave installation spacer in place until light engine is ready to be installed.

