# ESSENTIALS LALO-FLAT-DIMMER
# (01) STATIC WHITE

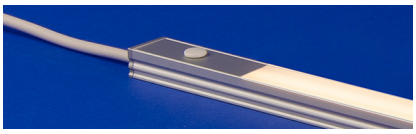
24VDC Linear Fixtures - Surface & Recessed

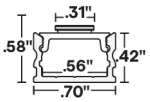
410.2 & 410.16 Closet Rated up to 4.0W/ft

1-BIN 1-STEP SW/SW-HE ONLY

5 YEAR WARRANTY

SW, SW-HE ONLY






- Shallow, low-profile fixture for surface or recessed installations
- Choose from diffused, polar, or frosted lens options for varying diode visibility and beam angles
- Flanged design merges light source with surface
- Built-in dimming module
- Mounting options include stainless steel clips, magnets, and low-profile magnet mounts
- Features painted end caps to match extrusion finish

**INFORMATION REQUIRED FOR LIGHTING SCHEDULE**

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|
| PRODUCT | WATTS/ FT | CCT | RATED | EFFICIENCY | LENS |
| | | | DRY | STD | |

**ADDITIONAL INFORMATION REQUIRED TO ORDER**

| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|
| WIRE INPUT/ OUTPUT | CONNECTOR/ WIRE IN | CONNECTOR/ WIRE OUT | WIRE COLOR | WIRE TYPE | MOUNTING | FINISH | LENGTH (IN) | EXACT/ OPTIMAL |
| | | | | | | | | |

Sample Part Number: **LL1SW-ID-5.0-30-DRY-STD-DF-P1-BW-BW-BK-CL2-SST-BK-48"-E**

## 1 PRODUCT

**LL1SW-ID**
**LL1SW-ID-USA**

Select USA option for BAA and BABA projects.

See following pages for compatible power supplies.

## 2 WATTS/FT

| | |
|---|---|
| **1.5** | 1.5W/ft |
| **3.0** | 3.0W/ft |
| **4.0** | 4.0W/ft |
| **5.0** | 5.0W/ft |
| **1.5HE** | 1.5W/ft HE |
| **3.0HE** | 3.0W/ft HE |
| **6.0HE** | 6.0W/ft HE |
| **3.0HE+** | 3.0W/ft HE+ |
| **6.0HE+** | 6.0W/ft HE+ |

## 3 CCT

| | |
|---|---|
| **20** | 2000K |
| **22** | 2200K |
| **24** | 2400K |
| **27** | 2700K |
| **30** | 3000K |
| **35** | 3500K |
| **40** | 4000K |

| | |
|---|---|
| **27** | 2700K |
| **30** | 3000K |
| **35** | 3500K |
| **40** | 4000K |

## 4 RATED

| | |
|---|---|
| **DRY** | IP20 |

## 5 EFFICIENCY

| | |
|---|---|
| **STD** | Standard |

## 6 LENS

| | |
|---|---|
| **DF** | Diffused |
| **PR** | Polar |
| **FR** | Frosted |

For representation of LED visibility, see Diode Visibility section on following pages. For beam angles, see Photometric Performance section on following pages

## 7 WIRE INPUT/OUTPUT

**SINGLE (Input only)**

| | |
|---|---|
| **S1** | End Feed |
| **S2** | Bottom Feed |

**PASS THROUGH (Input/output)**

| | |
|---|---|
| **P1** | End Feed |
| **P2** | Bottom Feed |

For continuous mounting, consider bottom feed.

## 8 CONNECTOR/WIRE IN

| | |
|---|---|
| **BW** | Bare Wire (Standard 24") |
| **BRL** | Barrel |
| **CON6** | Connector 6" |
| **CON24** | Connector 24" |

| | |
|---|---|
| **BW** | Bare Wire (Standard 24") |
| **BRL** | Barrel |
| **CON6** | Connector 6" |
| **CON24** | Connector 24" |

BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

## 9 CONNECTOR/WIRE OUT

| | |
|---|---|
| **CLS** | Closed End (No feed) |

| | |
|---|---|
| **BW** | Bare Wire (Standard 24") |
| **BRL** | Barrel |
| **CON6** | Connector 6" |
| **CON24** | Connector 24" |

BW: Standard length is 24", Max length is 120". Request custom length by writing in part number next to BW (example: BW48)

## 10 WIRE COLOR

| | |
|---|---|
| **WH** | White |
| **BK** | Black |
| **N/A** | For Barrel |

wet barrel only available in black

## 11 WIRE TYPE

| | |
|---|---|
| **CL2** | Class 2 |
| **CL2P** | Plenum Rated |
| **N/A** | For Barrel |

CL2P only available with bare wire leads (BW)

## 12 MOUNTING

| | |
|---|---|
| **SST** | Stainless Steel |
| **M4** | Low Profile Magnet |
| **MG** | Magnet |

## 13 FINISH

| | |
|---|---|
| **ST** | Satin |
| **BK** | Black |
| **CU** | Custom |

Custom finishes require a longer lead time, consult factory

## 14 LENGTH (IN)

Minimum length is 12", maximum length is 98" not including end caps. Contact us for lengths under 12".

## 15 EXACT/OPTIMAL

| | |
|---|---|
| **O** | Optimal Illumination |
| **E** | Exact Specified Length |

Exact fixtures match the exact length you specify, but they may have dim spots at the ends. Optimal fixtures are slightly shorter than the length specified, but provide full illumination from end to end. See Exact/Optimal Fixture Length charts.

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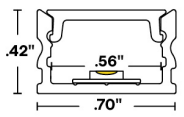
Specification subject to change. Rev-02-02-26

Push Button: On/Off | Press and hold: Dimming | Dimming down to 4% | 5 year warranty | Warranty only valid with QTL non-dimming power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance

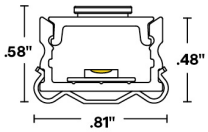
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24VDC Linear Fixtures - Surface & Recessed

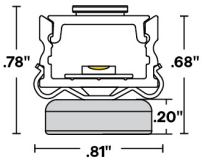
## 1 PRODUCT - DIMENSIONS



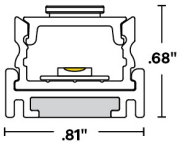

Profile with flat lens




Profile with flat lens, inline dimmer and stainless steel mounting clip




Profile with flat lens, inline dimmer and magnet mounting clip



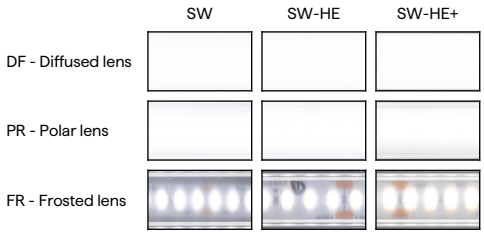

Profile with flat lens, inline dimmer and low profile magnet

## 2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs, L70 = 50000 for HE+]
Tested with LL1SW-**-30-DRY-STD

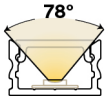
| | 1.5 W/FT | | 1.5HE W/FT | | 3.0 W/FT | | 3.0HE W/FT | | 3.0HE+ W/FT | | 4.0 W/FT | | 5.0 W/FT | | 6.0HE W/FT | | 6.0HE+ W/FT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI | LM/FT | CRI |
| CL | 143 | 98 | 175 | 98 | 249 | 98 | 321 | 98 | 463 | 92 | 309 | 98 | 376 | 98 | 608 | 98 | 856 | 92 |
| FR | 142 | 98 | 174 | 98 | 248 | 98 | 320 | 98 | 461 | 92 | 308 | 98 | 375 | 98 | 606 | 98 | 853 | 92 |
| PR | 134 | 98 | 157 | 98 | 234 | 98 | 288 | 98 | 416 | 92 | 291 | 98 | 354 | 98 | 546 | 98 | 768 | 92 |
| DF | 120 | 98 | 141 | 98 | 210 | 98 | 259 | 98 | 373 | 92 | 261 | 98 | 318 | 98 | 490 | 98 | 690 | 92 |

## 6 DIODE VISIBILITY




## PHOTOMETRIC PERFORMANCE

Nominal beam spread shown, beam spread varies based on light engine. For more detailed information, see photometric data.




78°

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Specification subject to change. Rev-02-02-26

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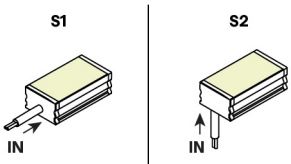
24VDC Linear Fixtures - Surface & Recessed

## TEMPERATURE RATINGS

| | | 1.5 W/FT | | 1.5 HE W/FT | | 3.0 W/FT | | 3.0 HE W/FT | | 3.0 HE+ W/FT | | 4.0 W/FT | | 5.0 W/FT | | 6.0 HE W/FT | | 6.0 HE+ W/FT | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max |
| DRY | Ambient Operating Temp - Surface | -4°F | 130°F | -4 | 135 | -4°F | 120°F | -4 | 125 | -13 | 125 | -4°F | 115°F | -4°F | 110°F | -4 | 110 | -13 | 110 |

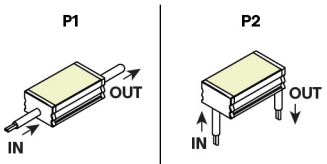
## 7 WIRE INPUT/OUTPUT

SINGLE (Input only)



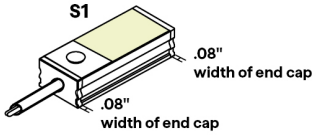

End Feed | Bottom Feed

PASS THROUGH (Input/Output)

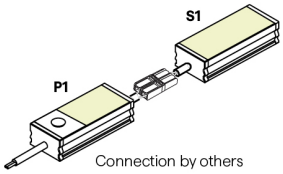



End Feed | Bottom Feed

## CONFIGURATION OPTIONS

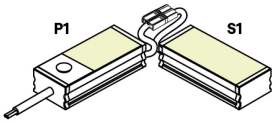



Single End Feed



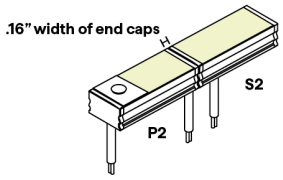

Connection by others

Non-Continuous End Feed

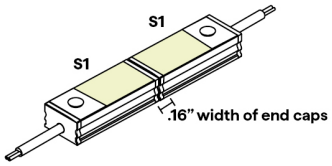



Connection by others

Non-Continuous Corner Feed



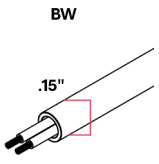

Continuous Bottom Feed



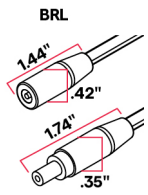

Continuous End to End Feed

## 8/9 CONNECTOR/WIRE – IN/OUT

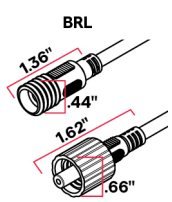
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



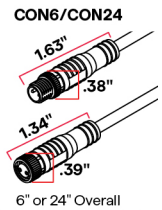

Bare Wire 24"
22 AWG




Barrel 6" - DRY/DMP | 22 AWG

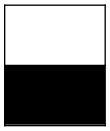



Barrel 6"- WET | 22 AWG




6" or 24" Overall
Wire Connector | 22 AWG
IP67 Rated, UL Listed

## 10 WIRE COLOR



White

Black

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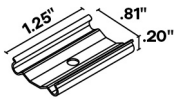
Specification subject to change. Rev-02-02-26

# ESSENTIALS LALO-FLAT-DIMMER (01) STATIC WHITE

24VDC Linear Fixtures - Surface & Recessed

## 12 MOUNTING

**SST**



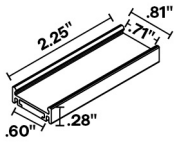

Stainless Steel Clip

2 clips provided for 4' or less; 4 clips provided for greater than 4'

To order separately use SST-01

Each clip comes with a #4 x 5/8" Flat Head SS

**M4**

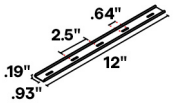



Low Profile Magnet

One M4 provided per foot.

To order separately use MG-04

**MMA-04**



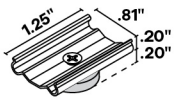

Magnet Mount Accessory for M4

Sold separately, to order use MMA-04

Each bracket comes with 2 #6 x 5/8 Flat Head SS

Required when mounting to a non-magnetic surface

**MG**

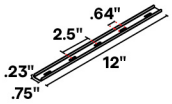



Magnet Clip

One MG provided per foot

To order separately use MG-01

**MMA-01**



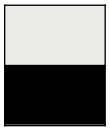

Magnet Mount Accessory of MG-01

Sold separately, to order use MMA-01

Each bracket comes with 2 #6 x 5/8" Flat Head SS

Required when mounting to a non-magnetic surface

## 13 FINISH



Satin

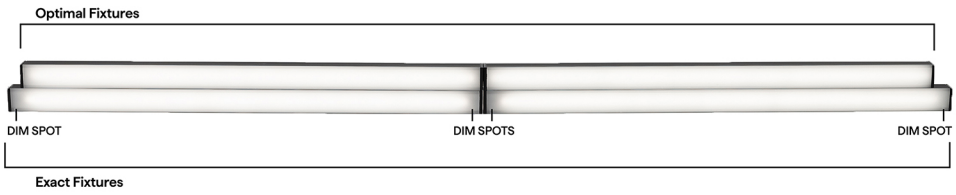
Black

Custom finishes require a longer lead time, consult factory

## 14 EXACT/OPTIMAL FIXTURE LENGTH

E/O Length Calculator →  E/O Explained →

Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture at the end of the run.



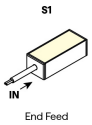

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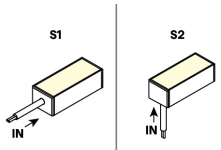
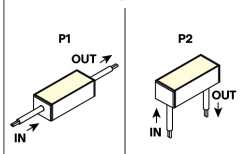
24VDC Linear Fixtures - Surface & Recessed

## SW DRY LENGTHS BY INCH

### EXACT LENGTH

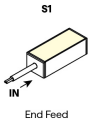
| Requested Length | Potential dim spot on either end of a S1 fixture   |
|---|---|
| 12" | 0.5" |
| 13" | 0.5" |
| 14" | 0.5" |
| 15" | 0.5" |
| 16" | 0.5" |
| 17" | 0.5" |
| 18" | 0.5" |
| 19" | 0.5" |
| 20" | 0.5" |
| 21" | 0.5" |
| 22" | 0.5" |
| 23" | 0.5" |
| 24" | 0.5" |
| 36" | 0.5" |
| 48" | 0.5" |
| 60" | 0.5" |
| 72" | 0.5" |
| 84" | 0.5" |
| 96" | 0.5" |

### OPTIMAL LENGTH

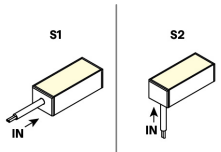
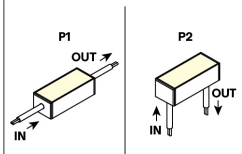
| Requested Nominal Length | S1 & S2   | P1 & P2   |
|---|---|---|
| 12" | 11.41" | 11.66" |
| 13" | 12.41" | 12.66" |
| 14" | 13.41" | 13.66" |
| 15" | 14.41" | 14.66" |
| 16" | 15.41" | 15.66" |
| 17" | 16.41" | 16.66" |
| 18" | 17.41" | 17.66" |
| 19" | 18.41" | 18.66" |
| 20" | 19.41" | 19.66" |
| 21" | 20.41" | 20.66" |
| 22" | 21.41" | 21.66" |
| 23" | 22.41" | 22.66" |
| 24" | 23.41" | 23.66" |
| 36" | 35.41" | 35.66" |
| 48" | 47.41" | 47.66" |
| 60" | 59.41" | 59.66" |
| 72" | 71.41" | 71.66" |
| 84" | 83.41" | 83.66" |
| 96" | 95.41" | 95.66" |

## SW-HE DRY LENGTHS BY INCH

### EXACT LENGTH

| Requested Length | Potential dim spot on either end of a S1 fixture   |
|---|---|
| 12" | 1" |
| 13" | 0.5" |
| 14" | 1" |
| 15" | 0.5" |
| 16" | 1" |
| 17" | 0.5" |
| 18" | 1" |
| 19" | 0.5" |
| 20" | 1" |
| 21" | 0.5" |
| 22" | 1" |
| 23" | 0.5" |
| 24" | 1" |
| 36" | 1" |
| 48" | 1" |
| 60" | 1" |
| 72" | 1" |
| 84" | 1" |
| 96" | 1" |

### OPTIMAL LENGTH

| Requested Nominal Length | S1 & S2   | P1 & P2   |
|---|---|---|
| 12" | 10.41" | 10.66" |
| 13" | 12.41" | 12.66" |
| 14" | 12.41" | 12.66" |
| 15" | 14.41" | 14.66" |
| 16" | 14.41" | 14.66" |
| 17" | 16.41" | 16.66" |
| 18" | 16.41" | 16.66" |
| 19" | 18.41" | 18.66" |
| 20" | 18.41" | 18.66" |
| 21" | 20.41" | 20.66" |
| 22" | 20.41" | 20.66" |
| 23" | 22.41" | 22.66" |
| 24" | 22.41" | 22.66" |
| 36" | 34.41" | 34.66" |
| 48" | 46.41" | 46.66" |
| 60" | 58.41" | 58.66" |
| 72" | 70.41" | 70.66" |
| 84" | 82.41" | 82.66" |
| 96" | 94.41" | 94.66" |

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# ESSENTIALS LALO-FLAT-DIMMER (01) STATIC WHITE

24VDC Linear Fixtures - Surface & Recessed

## COMPATIBLE POWER SUPPLIES

See power supplies cut sheets for more information. Data subject to change, all data has +/- 5% tolerance.

| DIMMING PROTOCOL | INDOOR | |
|---|---|---|
| | SW24/1.5-4.0 | SW24/5.0, SW-HE, SW-HE+ |
| Non-Dim | QTM-eLED-ND<br>QZ-ND | QTM-eLED-ND<br>QZ-ND |

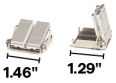
## COMPATIBLE MOUNTING ACCESSORIES

**HINGE - HMB-M**




Adjustable mounting bracket - Medium

**HINGE - HMB-L**




Adjustable mounting bracket - Large

**HINGE - HMB-XL**




Adjustable mounting bracket - XLarge

**Q-PIVOT**



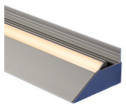

Small mounting accessory

**Q-ANGLE**




Adjustable mounting accessory

**QUOVA-STANDARD**



QUOVA Knife Edge

**NJ-MEDIUM**



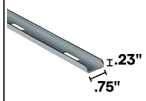
J Mounting Bracket

**SD-L-MEDIUM**



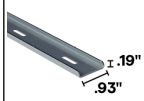
L Mounting Bracket

**MMA-01**



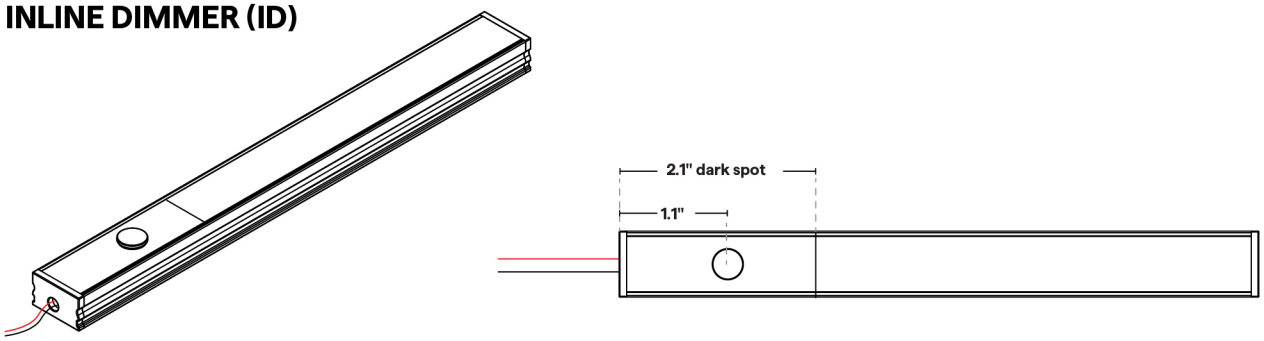

Magnet Mount Accessory of MG-01

**MMA-04**




Magnet Mount Accessory of MG-04

## INLINE DIMMER (ID)




- **On/off and dimming functionality**
- **24VDC**
- **4A DC max / 96W**
- **Dimming down to 4%**
- **Use with non-dimming driver**

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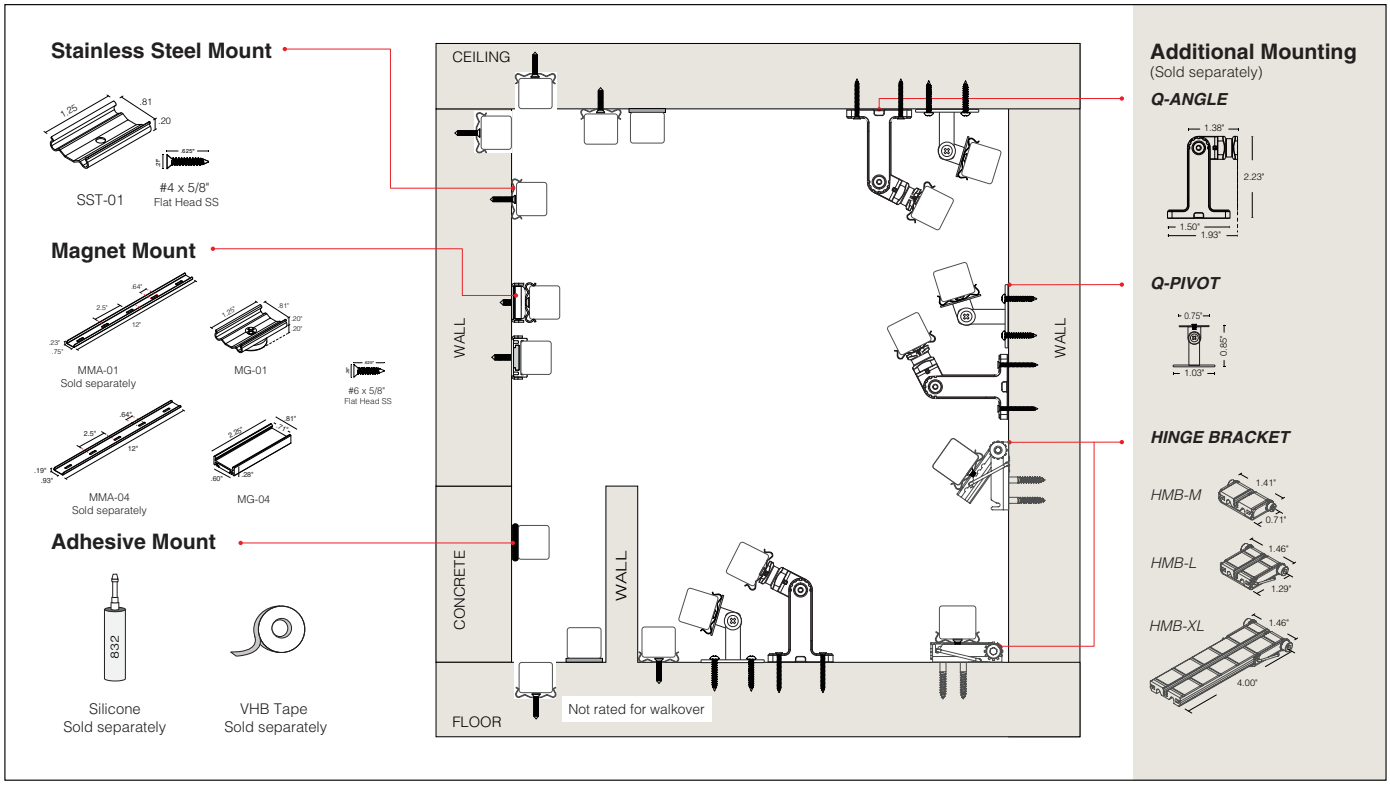
# ESSENTIALS LALO-FLAT-DIMMER

Linear Fixture Installation Instructions

## ATTENTION: Please read all instructions BEFORE installation

- Product to be installed by a licensed electrician - Field modifications void warranty
- Use only with Class 2 power supply unit — Compatible for use with QTL power supplies
- Surface mount or recessed in millwork
- Suitable for installation in storage area of a clothes closet when assembled as a finished fixture up to 4W/ft at QTL facility
- Not rated for walkover
- Input Voltage: 24VDC
- Diagrams for representation only and not to scale.

## METHODS OF INSTALLATION:




### Surface Mounting Method

- VHB Mount (page 5-6)
- Silicone Mount (page 7)
- Screw Mount (page 8)
- Magnet Mount (page 9)
- Low Profile Magnet Mount (page 10)

### Recessed Mounting Method

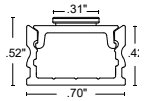
- Magnet Mount : Millwork (page 11)



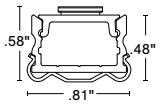
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# ESSENTIALS LALO-FLAT-DIMMER

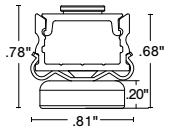
Linear Fixture Installation Instructions




Profile with flat lens



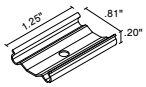
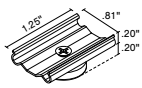
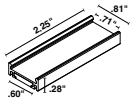

Profile with flat lens stainless steel mounting clip




Profile with flat lens magnet mounting clip

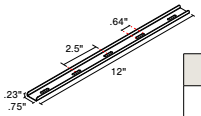
## COMPONENTS & HARDWARE

Alternate screw lengths can be used in installation as long as the screw diameter size is consistent with the included screw diameter size

| STAINLESS STEEL CLIP | MAGNET CLIP | LOW PROFILE MAGNET CLIP |
|---|---|---|
|  SST-01 |  MG-01 |  MG-04 |
| Included: Flat Head Screw #4x5/8" | Included: Flat Head Screw #6x5/8" | Included: Flat Head Screw #6x5/8" |
| • 2 clips provided for 4' or less; 4 clips provided for greater than 4' | • One magnet clip per foot | • One magnet clip per foot |

### ACCESSORIES SOLD SEPARATELY

**MAGNET MOUNT ACCESSORY;** sold individually

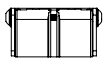


Included: Flat Head Screw #6x5/8"

MMA-01

- MMA-01 comes in 12" pieces; use at least one clip per MMA-01 accessory
- MMA-01 can be cut into smaller pieces, if desired

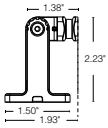
**HINGE BRACKET;** sold individually




HMB-M
HMB-L
HMB-XL

Included:
- 3/4" long mount screw
- 1/4" #4 clip mount screw

**Q-ANGLE;** sold in pairs



Q-ANGLE

Included:
- 3/4" long mount screw
- 1/4" #4 clip mount screw

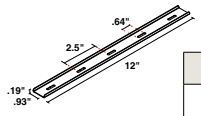
**Q-PIVOT;** sold in pairs



Q-PIVOT

Included:
- SS #4-40x3/16 Flat head screw
- 2 #4x3/4 Pan head screws

**LOW PROFILE MAGNET MOUNT ACCESSORY;** sold Individually



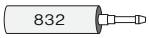
Included: 2 #6x5/8" Flat Head screws

MMA-04

- MMA-04 comes in 12" pieces; use at least one clip per MMA-04 accessory
- MMA-04 can be cut into smaller pieces, if desired



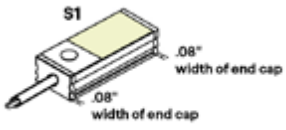
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| ADHESIVE SOLD SEPARATELY | |
|---|---|
| SILICONE | VHB TAPE; sold in 15' increments |
|   DOWSIL 832 |  TAPE-VHB-IP20 |

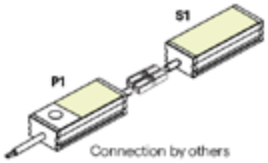


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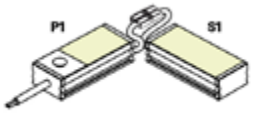
## CONFIGURATION OPTIONS



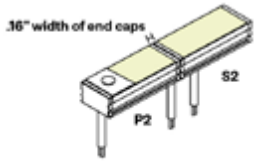

Single End Feed



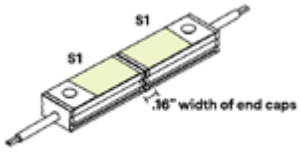

Non-Continuous End Feed




Non-Continuous Corner Feed




Continuous Bottom Feed




Continuous End to End Feed

Review wire method to ensure clean installation prior to mounting finished Fixture.

**NOTE:** Additional wire methods include:
S1 & S2: Connector/Wire Input only
P1 & P2: Connector/Wire Input and Output

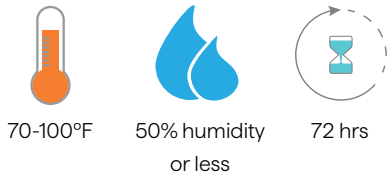


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## SURFACE MOUNTING METHOD

SURFACE PREPARATION

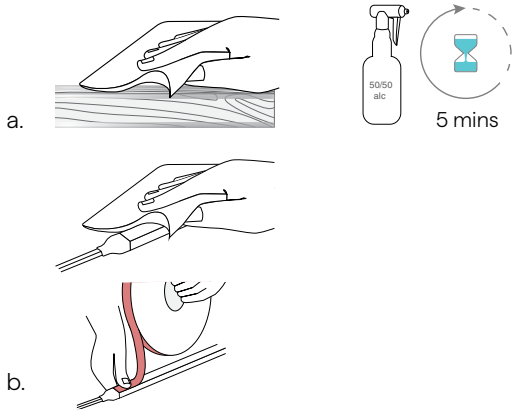
**1**




Temperature and environmental concerns:

- Ideal application environment is 70-100°F in 50% humidity or less.
- Minimum application temperature: 50°F
- This temperature and humidity should be maintained for 72 hours after application for maximum bond strength.

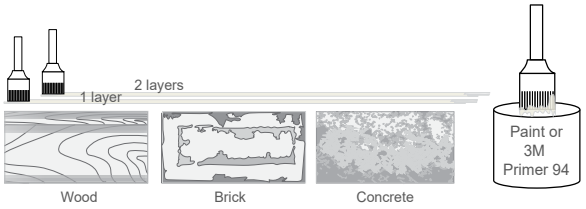
**2**




**a.** Using a 50/50 alcohol mix, thoroughly clean the backside of the Fixture and the surface area where Fixture will be installed. Allow 5 minutes to dry.

**b.** Peel back 0.5" of the VHB tape's protective film on one end and use firm pressure to adhere it to the desired surface, avoiding air bubbles. Continue peeling the film and adhering the tape in small sections until the entire length is installed.

**3**




For porous materials (Wood, Brick, Concrete etc.) apply two layers of paint or primer to the surface. This will help create a better bonding surface for these materials. These can be purchased from a local hardware store.

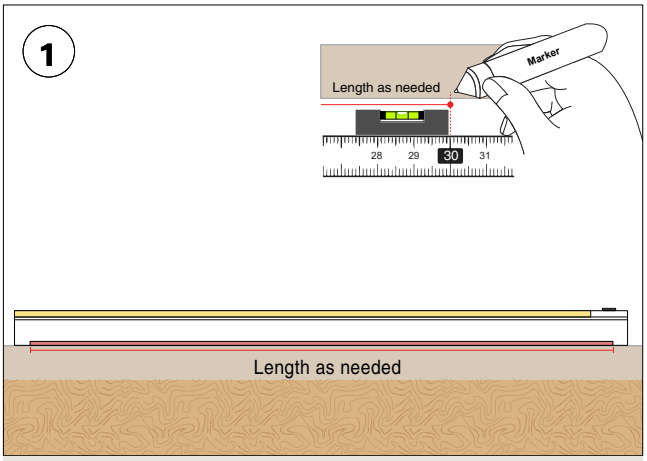
| MATERIALS | SUGGESTED EPOXIES |
|---|---|
| Concrete, Stone, Cinderblock, Metal, and Brick | Loctite Metal and Concrete Two-Part Epoxy |
| ABS, Fiberglass, Plastic, and PVC | Loctite Plastic Two-Part Epoxy |
| Tile, Wood, Ceramic, Glass, or Metal | Loctite Clear Two-Part Epoxy |
| All Purpose | Strong Stik |



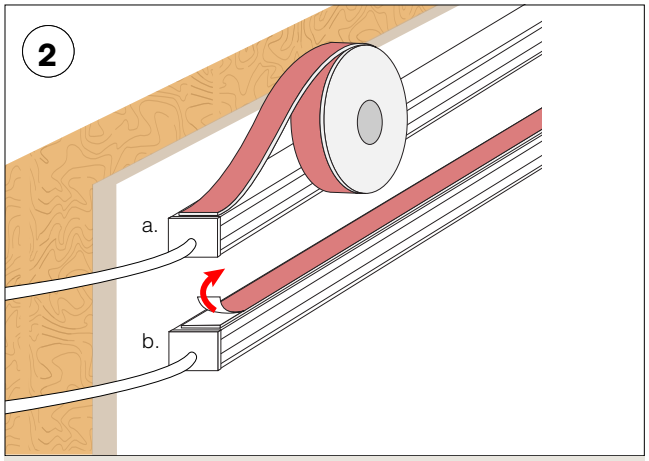

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## SURFACE MOUNTING METHOD: **VHB ADHESIVE MOUNT**

**BEFORE installation, the surface must be thoroughly cleaned and dried for maximum bond strength.**

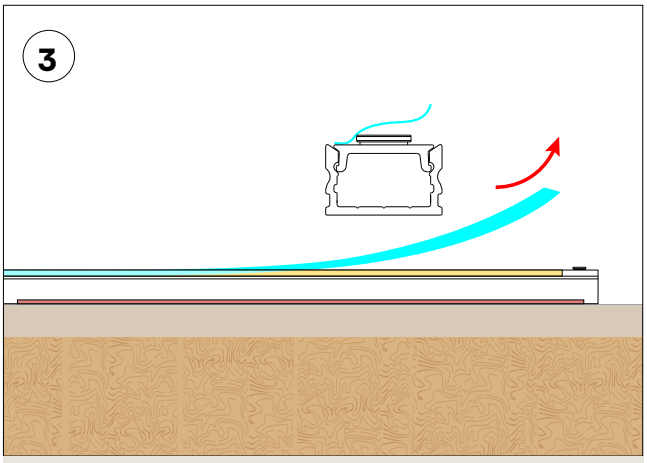



Determine the LALO-FLAT-ID fixture(s) location and positioning on desired surface before adhering Fixture to surface. Make any necessary reference markings to indicate fixture placement.




a. To adhere the VHB adhesive, peel the white film back while evenly applying the tape to the mounting side of the fixture. The red side should be visible.

b. Remove the red film and position fixture in place according to your previous reference marking(s).




Remove protective film from the surface of the fixture's lens.

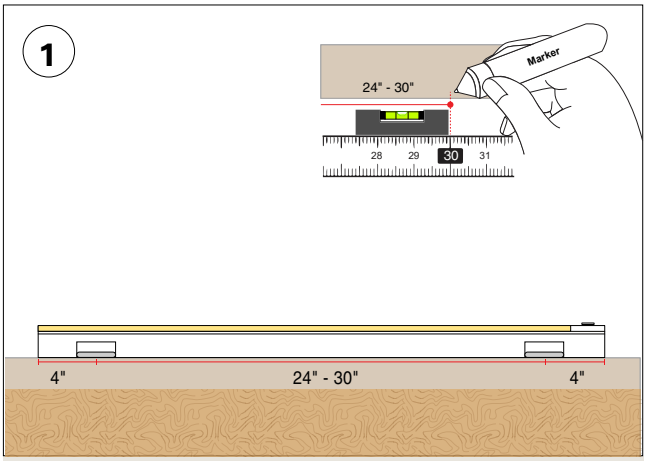
***NOTES:*** *EPOXY ALTERNATIVE: For improved bonding strength, apply a small amount of epoxy at each end. Refer to table on* page 5 *for suggested epoxies. These can be purchased at a local hardware store. Please follow all manufacturer instructions for suggested epoxy.*



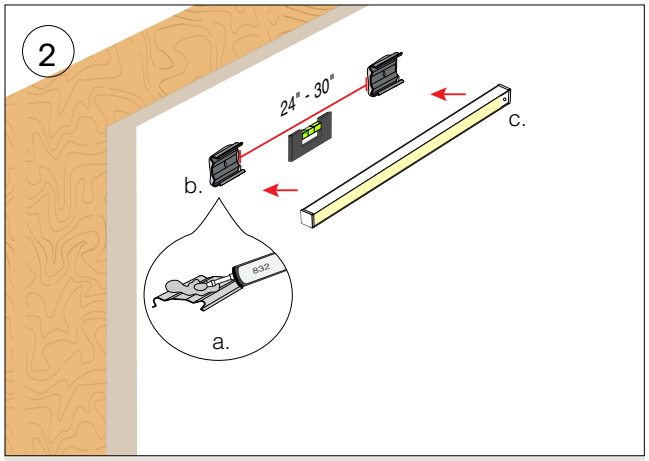
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## SURFACE MOUNTING METHOD: **SILICONE**

- 2 clips provided for 4’ or less; 4 clips provided for greater than 4’




Determine the LALO-FLAT-ID fixture(s) location and positioning on desired surface; evenly distribute clips. Make any necessary reference markings to indicate where each clip is to be secured in place. Recommended every 24” - 30”.

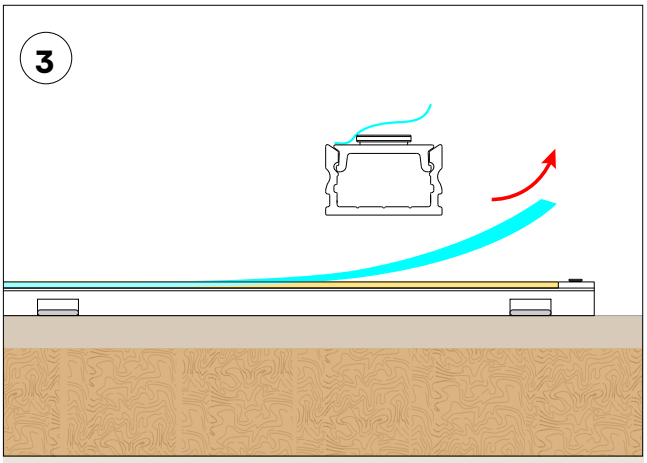



**a.** Firmly press the silicone-coated clips on the marked reference points.

**b.** Wait for silicone adhesive to cure completely before snapping fixture into place.

**c.** Snap fixture onto clips.

**NOTE:** Cure time is dependent on the type of silicone adhesive used. Refer to silicone product manufacturer for accurate drying time.



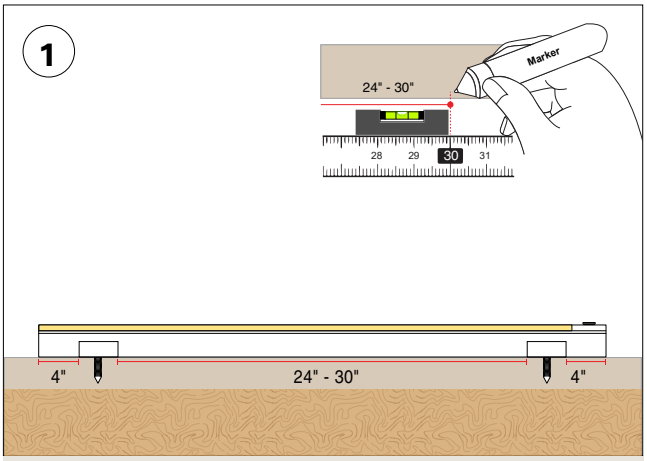

Remove protective film from the surface of the fixture’s lens.



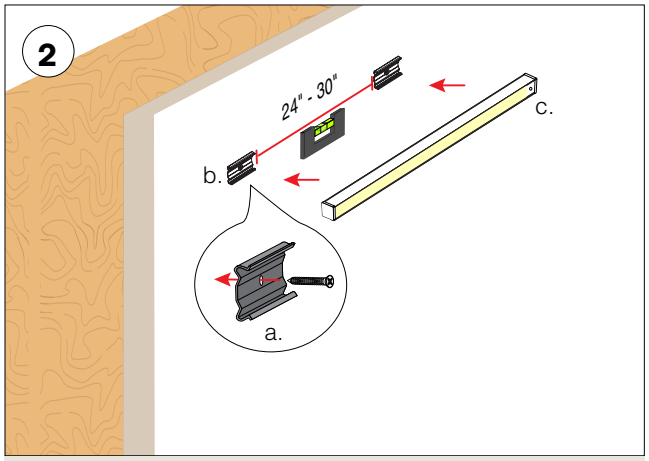

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## SURFACE MOUNTING METHOD: **SCREW MOUNT**

- 2 clips provided for 4’ or less; 4 clips provided for greater than 4’




Determine the LALO-FLAT-ID fixture(s) location and positioning on desired surface; evenly distribute clips. Make any necessary reference markings to indicate where each clip is to be secured in place. Recommended every 24” - 30”.

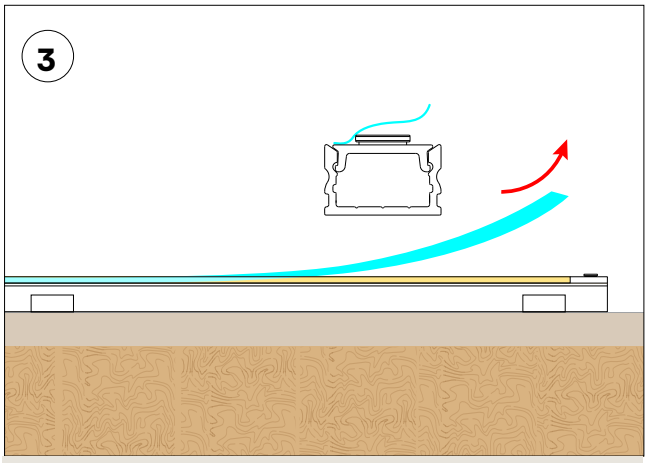



**a.** Secure clips using the #4 flat head hardware provided.

**b.** Ensure the screw head is flush with the clip’s base.

**c.** Snap fixture onto clips.

**NOTE:** Flat head screw type is dependent on surface/application material. Alternative flat head screws may be required. Refer to the surface material manufacturer for suggested screw type.



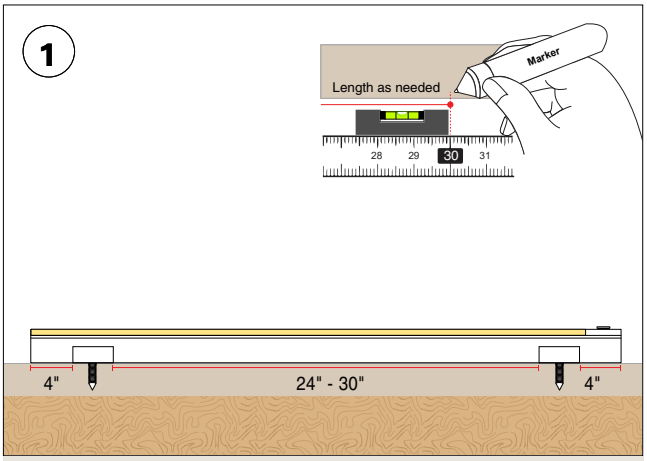

Remove protective film from the surface of the fixture’s lens.



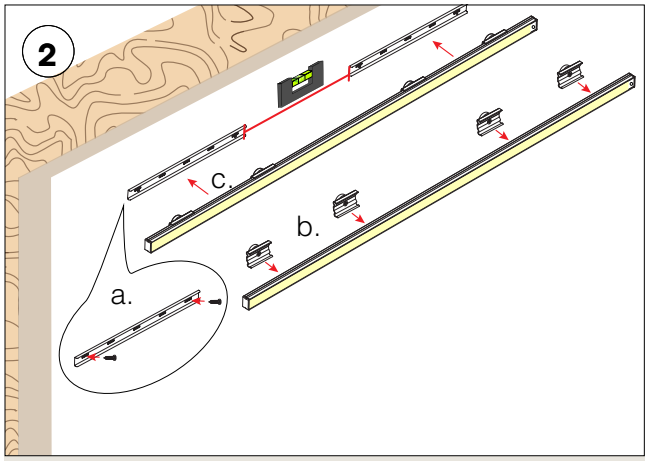

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## SURFACE MOUNTING METHOD: **MAGNET MOUNT**

- One magnet clip per foot
- MMA-01 comes in 12" pieces; use at least one clip per MMA-01 accessory
- MMA-01 can be cut into smaller pieces, if desired




Determine the LALO-FLAT-ID fixture(s) location and positioning on desired surface. Make any necessary reference markings to indicate where the magnet mount accessory bracket is to be secured in place.

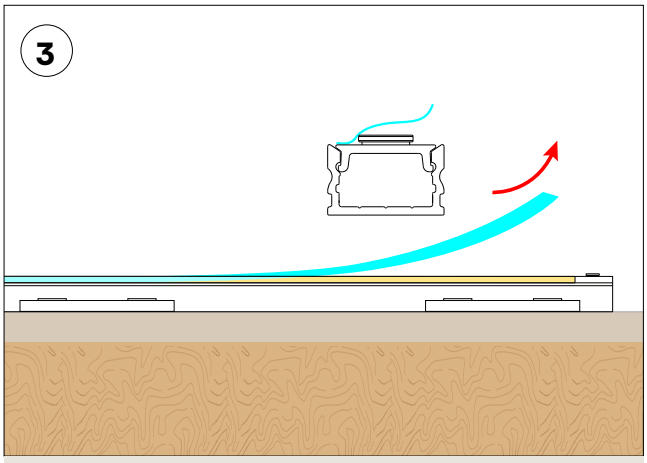



**a.** Mount the two #6 flat head screws into the 12" magnet mount accessory bracket through the slotted holes at each end. Ensure the screw head is flush with the magnet mount bracket.

**b.** Snap the magnet clips onto the backside of the fixture. They should be offset to the accessory bracket screws to maximize magnetic connection.

**c.** Place the assembled fixture into the magnet mount bracket.

**NOTE:** If surface application requires a longer screw, the screw size must be a #6 Flat Head.



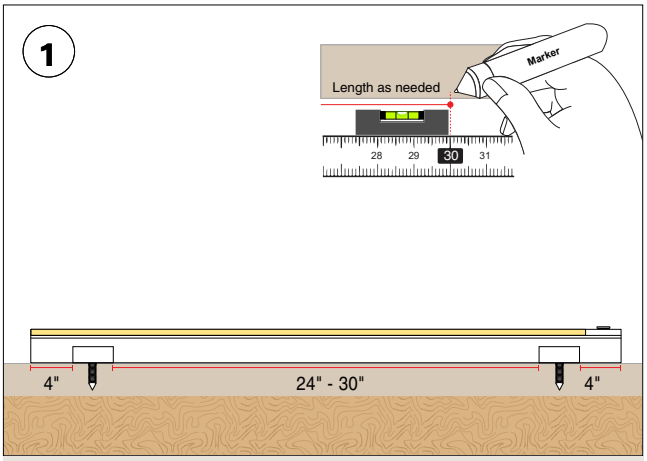

Remove protective film from the surface of the fixture's lens.



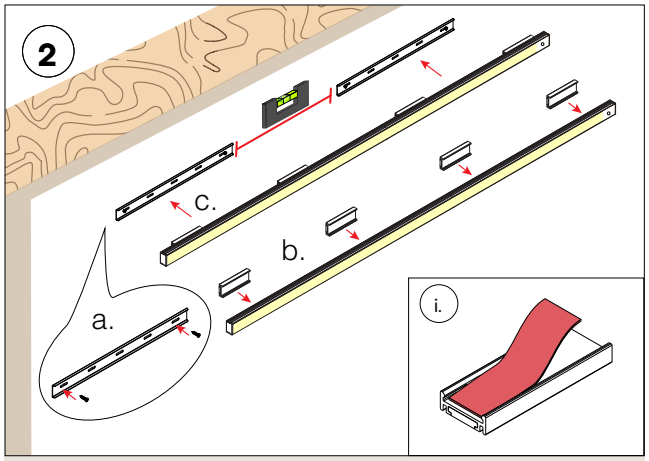

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## SURFACE MOUNTING METHOD: **LOW PROFILE MAGNET MOUNT**

- One magnet clip per foot
- MMA-04 comes in 12" pieces; use at least one clip per MMA-04 accessory
- MMA-04 can be cut into smaller pieces, if desired




Determine the LALO-FLAT-ID fixture(s) location and positioning on desired surface. Make any necessary reference markings to indicate where the magnet mount accessory bracket is to be secured in place.

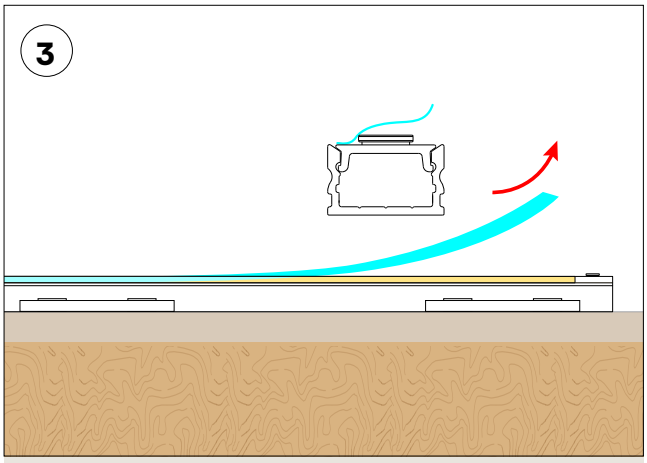



**a.** Mount the two #6 flat head screws into the magnet mount accessory bracket through the slotted holes at each end. Ensure the screw head is flush with the magnet mount bracket.

**b.** Snap the magnet clips onto the backside of the fixture. They should be offset to the accessory bracket screws to maximize magnetic connection. If the clip does not fit securely onto the extrusion, apply the provided foam onto the inner face of the magnet clip.

**c.** Place the assembled fixture into the magnet mount bracket.

**NOTE:** If surface application requires a longer screw, the screw size must be a #6 Flat Head.



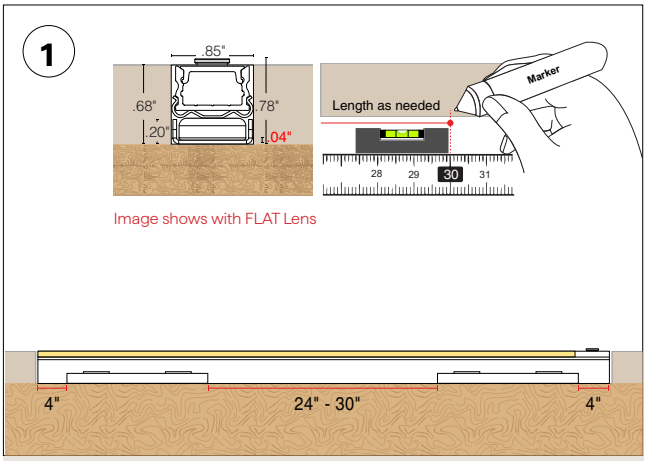

Remove protective film from the surface of the fixture's lens.




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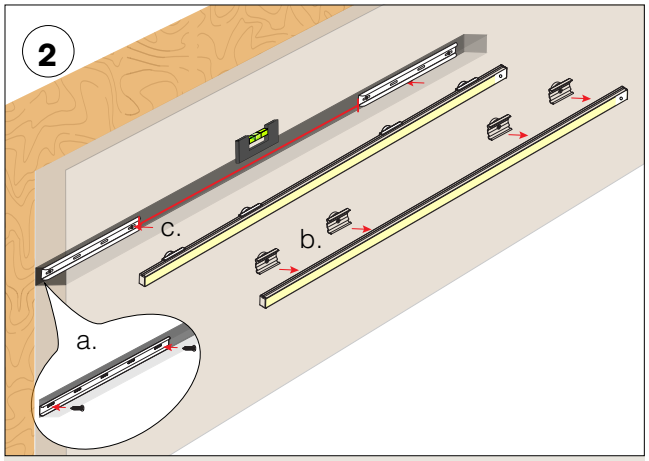
## RECESSED MOUNTING METHOD: **MILLWORK**

- One magnet clip per foot
- MMA-01 comes in 12" pieces; use at least one clip per MMA-01 accessory
- MMA-01 can be cut into smaller pieces, if desired




Determine the LALO fixture(s) location and positioning on desired surface. Make any necessary reference markings to indicate where the magnet mount accessory bracket is to be secured in place.

**NOTE:** Depth of the channel in the millwork is dependent on overall height with the magnet clip and Magnet Mount Accessory.

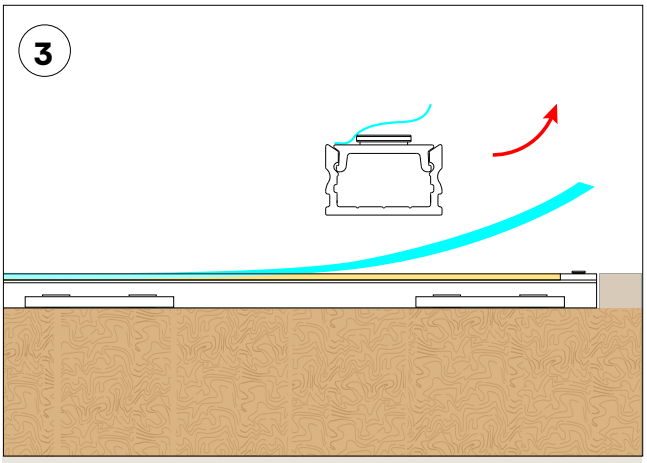



**a.** Mount the two #6 flat head screws into the 12" magnet mount accessory bracket through the slotted holes at each end. Ensure the screw head is flush with the magnet mount bracket.

**b.** Snap the magnet clips onto the backside of the fixture. They should be offset to the accessory bracket screws to maximize magnetic connection.

**c.** Place the assembled fixture into the magnet mount bracket.

**NOTE:** If surface application requires a longer screw, the screw size must be a #6 Flat Head.




Remove protective film from the surface of the fixture's lens.




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# ESSENTIALS LALO-FLAT-DIMMER-SW(01)

Linear Fixtures Color Data

## LL1SW-ID-5.0-30-DRY-STD-FR

3120 K

**CRI:** 98.2

**CRI R9:** 96.5

**TM30 Rf:** 94.3

**TM30 Rg:** 100.8

**CQS:** 95.4

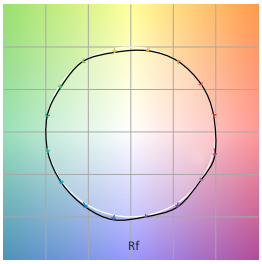
**X:** 0.428

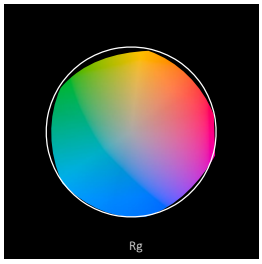
**Y:** 0.398

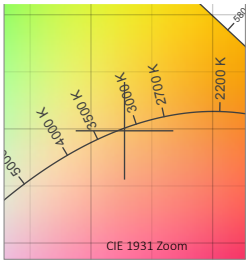
**U:** 0.247

**V:** 0.345

**Δuv:** -0.0010




| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 98.2 | 99.4 | 96.8 | 98.9 | 98.6 | 97.1 | 98.5 | 98.4 | 96.5 | 99.0 | 96.5 | 83.0 | 98.3 | 97.2 | 98.3 |

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 93.7 | 97.0 | 91.8 | 92.4 | 95.4 | 98.3 | 95.6 | 97.3 | 97.3 | 97.3 | 97.9 | 98.4 | 98.4 | 96.5 | 95.7 |

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 96.1 | 97.8 | 96.8 | 95.1 | 93.6 | 97.3 | 93.4 | 97.9 | 93.8 | 90.8 | 90.9 | 92.1 | 95.3 | 93.0 | 92.4 | 90.1 |

| TM30 | | | |
|---|---|---|---|
| Hue Bin | $R_f$ | Chroma | Hue |
| 1 | 96 | -1% | 1% |
| 2 | 98 | 0% | 0% |
| 3 | 97 | 0% | 0% |
| 4 | 95 | -2% | -1% |
| 5 | 94 | -4% | 1% |
| 6 | 97 | 0% | 1% |
| 7 | 93 | -2% | 3% |
| 8 | 98 | 0% | 1% |
| 9 | 94 | 0% | 4% |
| 10 | 91 | 1% | 6% |
| 11 | 91 | 3% | 6% |
| 12 | 92 | 5% | 0% |
| 13 | 95 | 1% | -3% |
| 14 | 93 | 4% | -4% |
| 15 | 92 | 0% | -2% |
| 16 | 90 | 2% | -8% |

## LL1SW-ID-5.0-30-DRY-STD-PR

3134 K

**CRI:** 98.2

**CRI R9:** 97.6

**TM30 Rf:** 94.4

**TM30 Rg:** 101.0

**CQS:** 95.5

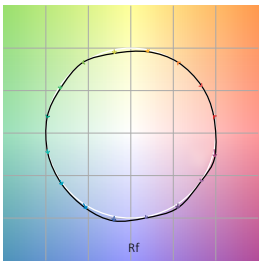
**X:** 0.427

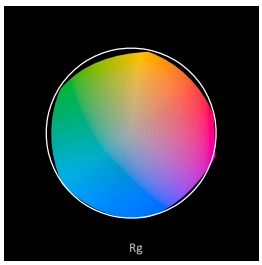
**Y:** 0.398

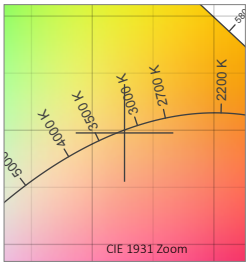
**U:** 0.247

**V:** 0.345

**Δuv:** -0.0011




| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 98.0 | 99.4 | 96.5 | 98.6 | 98.5 | 97.2 | 98.8 | 98.8 | 97.6 | 98.9 | 96.4 | 83.2 | 98.2 | 97.0 | 98.1 |

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 94.0 | 97.1 | 91.8 | 92.4 | 95.6 | 98.3 | 95.5 | 97.3 | 97.2 | 97.2 | 97.9 | 98.3 | 98.3 | 96.5 | 95.9 |

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 96.3 | 97.9 | 96.8 | 95.3 | 93.7 | 97.2 | 93.5 | 98.1 | 94.1 | 91.0 | 91.0 | 92.3 | 95.6 | 93.2 | 92.6 | 90.3 |

| TM30 | | | |
|---|---|---|---|
| Hue Bin | $R_f$ | Chroma | Hue |
| 1 | 96 | 0% | 1% |
| 2 | 98 | 0% | 0% |
| 3 | 97 | 0% | 0% |
| 4 | 95 | -2% | -1% |
| 5 | 94 | -4% | 1% |
| 6 | 97 | 0% | 1% |
| 7 | 94 | -2% | 3% |
| 8 | 98 | 0% | 1% |
| 9 | 94 | 0% | 4% |
| 10 | 91 | 1% | 5% |
| 11 | 91 | 3% | 6% |
| 12 | 92 | 5% | 0% |
| 13 | 96 | 1% | -3% |
| 14 | 93 | 4% | -3% |
| 15 | 93 | 0% | -2% |
| 16 | 90 | 2% | -8% |

**NOTES:**
- CRI R values, only R1-R8 are used to calculate RA CRI values
- TM30 C values, 16 binned values out of total of 99 C values
- CQS Q values
- Data subject to change, all data has +/- 5% tolerance

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Specification subject to change. Rev-02-02-26

# ESSENTIALS LALO-FLAT-DIMMER-SW(01)

Linear Fixtures Color Data

## LL1SW-ID-5.0-30-DRY-STD-DF

3110 K

**CRI:** 98.2

**CRI R9:** 96.5

**TM30 Rf:** 94.4

**TM30 Rg:** 100.9

**CQS:** 95.4

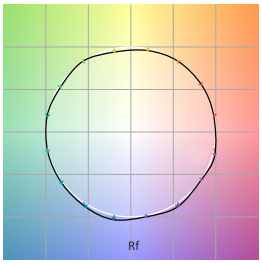
**X:** 0.428

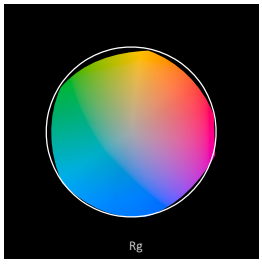
**Y:** 0.398

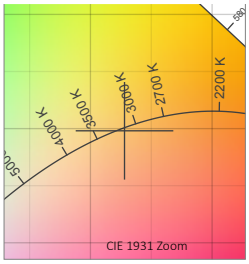
**U:** 0.247

**V:** 0.345

**Δuv:** -0.0011




| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 98.2 | 99.3 | 96.8 | 98.8 | 98.6 | 97.2 | 98.5 | 98.4 | 96.5 | 98.9 | 96.6 | 83.5 | 98.3 | 97.1 | 98.4 |
| **Q1** | **Q2** | **Q3** | **Q4** | **Q5** | **Q6** | **Q7** | **Q8** | **Q9** | **Q10** | **Q11** | **Q12** | **Q13** | **Q14** | **Q15** |
| 94.0 | 97.0 | 91.8 | 92.4 | 95.5 | 98.2 | 95.4 | 97.1 | 97.3 | 97.1 | 97.7 | 98.4 | 98.5 | 96.4 | 95.8 |
| **C1** | **C2** | **C3** | **C4** | **C5** | **C6** | **C7** | **C8** | **C9** | **C10** | **C11** | **C12** | **C13** | **C14** | **C15** | **C16** |
| 96.3 | 97.9 | 96.8 | 95.3 | 93.8 | 97.3 | 93.6 | 98.1 | 94.1 | 91.1 | 91.1 | 92.3 | 95.4 | 93.1 | 92.6 | 90.3 |

| TM30 | | | |
|---|---|---|---|
| Hue Bin | $R_f$ | Chroma | Hue |
| 1 | 96 | -1% | 1% |
| 2 | 98 | 0% | 0% |
| 3 | 97 | 0% | 0% |
| 4 | 95 | -2% | -1% |
| 5 | 94 | -4% | 1% |
| 6 | 97 | 0% | 1% |
| 7 | 94 | -2% | 3% |
| 8 | 98 | 0% | 1% |
| 9 | 94 | 0% | 4% |
| 10 | 91 | 1% | 5% |
| 11 | 91 | 3% | 6% |
| 12 | 92 | 5% | 0% |
| 13 | 95 | 1% | -3% |
| 14 | 93 | 4% | -4% |
| 15 | 93 | 0% | -2% |
| 16 | 90 | 2% | -8% |

**NOTES:**
- CRI R values, only R1-R8 are used to calculate RA CRI values
- TM30 C values, 16 binned values out of total of 99 C values
- CQS Q values
- Data subject to change, all data has +/- 5% tolerance

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# ESSENTIALS LALO-FLAT-DIMMER-SW-HE(01)

Linear Fixtures Color Data

## LL1SW-ID-6.0HE-30-DRY-STD-FR

3122 K

**CRI:** 98.0

**CRI R9:** 95.8

**TM30 Rf:** 93.3

**TM30 Rg:** 99.8

**CQS:** 95.0

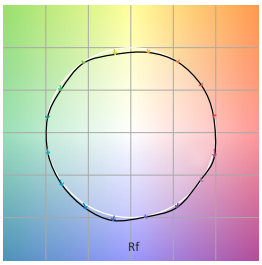
**X:** 0.428

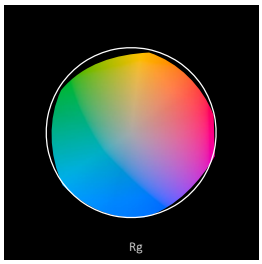
**Y:** 0.400

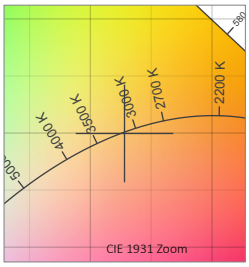
**U:** 0.247

**V:** 0.346

**Δuv:** -0.0005




| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 98.3 | 99.2 | 97.4 | 99.0 | 98.1 | 97.0 | 97.6 | 97.5 | 95.8 | 99.4 | 97.7 | 81.2 | 98.3 | 97.5 | 97.9 |
| **Q1** | **Q2** | **Q3** | **Q4** | **Q5** | **Q6** | **Q7** | **Q8** | **Q9** | **Q10** | **Q11** | **Q12** | **Q13** | **Q14** | **Q15** |
| 91.8 | 96.5 | 92.3 | 91.8 | 93.8 | 96.3 | 96.8 | 97.5 | 97.5 | 97.9 | 98.3 | 98.1 | 98.2 | 96.3 | 94.8 |
| **C1** | **C2** | **C3** | **C4** | **C5** | **C6** | **C7** | **C8** | **C9** | **C10** | **C11** | **C12** | **C13** | **C14** | **C15** | **C16** |
| 95.0 | 97.3 | 96.7 | 93.3 | 92.6 | 97.0 | 91.3 | 96.4 | 91.7 | 88.7 | 90.2 | 91.8 | 94.7 | 92.6 | 91.4 | 90.0 |

| TM30 | | | |
|---|---|---|---|
| Hue Bin | $R_f$ | Chroma | Hue |
| 1 | 95 | -1% | 1% |
| 2 | 97 | 0% | 0% |
| 3 | 97 | 0% | 0% |
| 4 | 93 | -3% | -2% |
| 5 | 93 | -6% | 0% |
| 6 | 97 | -1% | 1% |
| 7 | 91 | -4% | 4% |
| 8 | 96 | 0% | 2% |
| 9 | 92 | 0% | 6% |
| 10 | 89 | 1% | 7% |
| 11 | 90 | 4% | 6% |
| 12 | 92 | 6% | 0% |
| 13 | 95 | 1% | -4% |
| 14 | 93 | 3% | -4% |
| 15 | 91 | -1% | -1% |
| 16 | 90 | 2% | -8% |

**NOTES:**
- CRI R values, only R1-R8 are used to calculate RA CRI values
- TM30 C values, 16 binned values out of total of 99 C values
- CQS Q values
- Data subject to change, all data has +/- 5% tolerance

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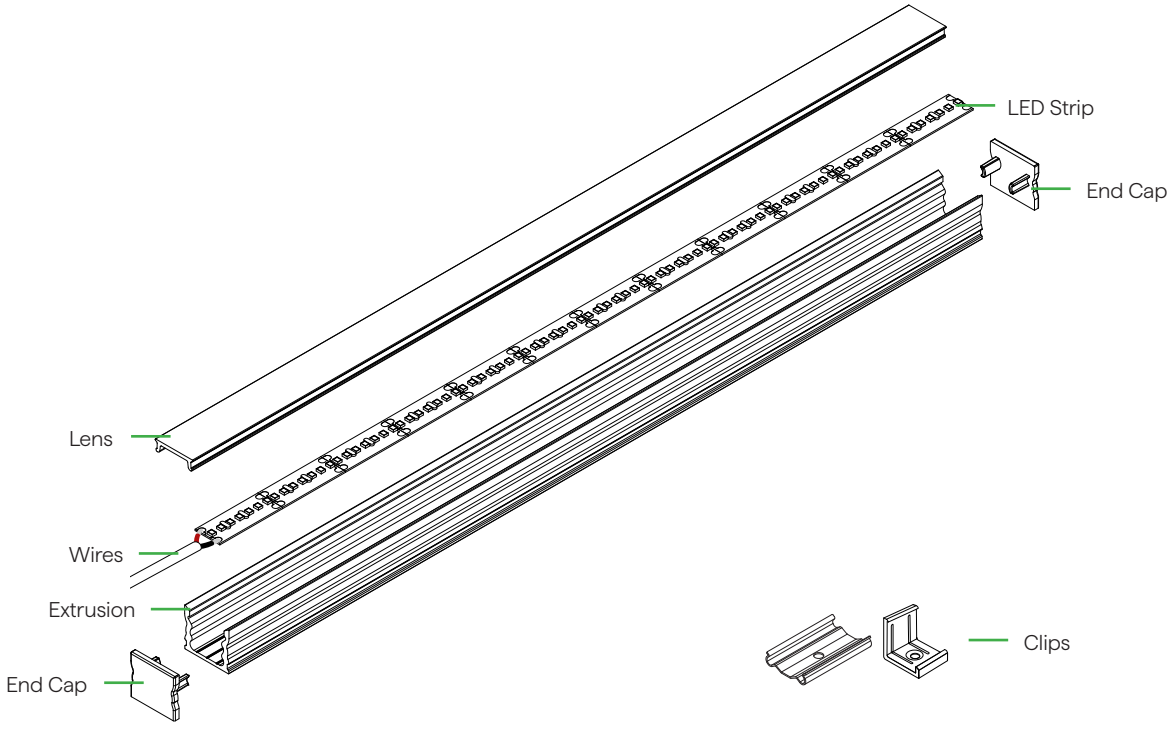
Specification subject to change. Rev-02-02-26

# MATERIAL RECYCLING

LINEAR FIXTURES/EXTRUSIONS

You may be done with your products, but chances are they still have more to give. Follow these instructions to break down and sort recyclable components. Check with local recycling collection to ensure they accept the materials listed below.

Additionally, Q-Tran offers a Takeback Program. Contact factory for information.




| 7 | E | 41 | 40 |
|---|---|---|---|
| Lens<br>Plastic End Caps<br>Plastic Clips | LED Strip<br>Wires | Extrusion<br>Metal End Caps | Stainless Steel Clips |

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