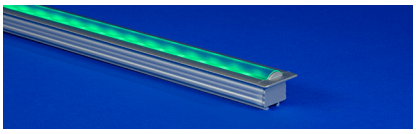
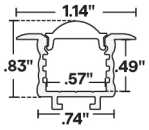
ESSENTIALS EMBD-OPTICS (02) RGB

24VDC Linear Fixtures - Recessed





- Recessed fixture designed for dryall and millwork installations
- Choose from 12°, 14°, 20°, 30°, 45° or 60° beam angles
- Mounting options include spring or magnet mounting clips
- Features painted end caps to match extrusion finish
- Can be suitable for exterior use when specified as wet, contact factory for more information
- Red, Green, and Blue LED allows for color changing applications
- Features 7 diodes per 2" cut point

INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1 PRODUCT	2 WATTS/ FT	3 CCT	4 RATED	5 EFFICIENCY	6 LENS
EB2RGB	6.0	RGB		STD	

ADDITIONAL INFORMATION REQUIRED TO ORDER

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

Sample Part Number: **EB2RGB-6.0-RGB-DRY-STD-20-P1-BW-BW-BK-CL2-SP-ST-48"-E**

1 PRODUCT

EB2RGB

See following pages for compatible power supplies.

2 WATTS/FT

6.0 6.0W/ft

3 CCT

RGB

4 RATED

DRY IP20
DMP IP54
WET IP67

Can be suitable for exterior use, contact factory for more information

5 EFFICIENCY

STD Standard

6 LENS

12 Optical 12°
14 Optical 14°
20 Optical 20°
30 Optical 30° DRY or DMP only
45 Optical 45° DRY or DMP only
60 Optical 60° DRY or DMP only

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")
CON6 Connector 6"
CON24 Connector 24"

BW Bare Wire (Standard 24")
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")
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

11 WIRE TYPE

CL2 Class 2
CL2P Plenum Rated

CL2P only available with bare wire leads (BW)

12 MOUNTING

SP Spring Clip
MG Magnet

13 FINISH

ST Satin
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.

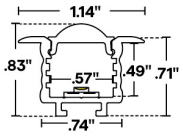
© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTLlighting | www.QTL.lighting

Specification subject to change. Rev-03-24-26

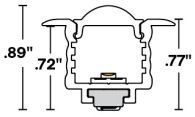
ESSENTIALS EMBD-OPTICS (02) RGB

24VDC Linear Fixtures - Recessed

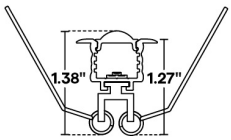
1 PRODUCT - DIMENSIONS



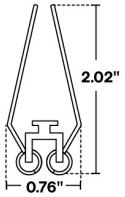
Profile with optical lens



Profile with optical lens and magnet mounting clip



Profile with optical lens and spring mounting clip



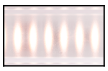
Spring mounting clip

2 DELIVERED LUMENS

[Calculated L70 = 55000 hrs]
Tested with EB2RGB-6.0-RGB-DRY-STD

	Red		Green		Blue		All
	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT	WAVELENGTH	LM/FT
12	69	633	146	523	40	469	234
14	78	633	163	523	45	469	262
20	81	633	171	523	47	469	275
30	84	633	177	523	48	469	284
45	92	633	194	523	53	469	312
60	92	633	193	523	53	469	310

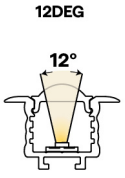
6 DIODE VISIBILITY



Optical lens

PHOTOMETRIC PERFORMANCE

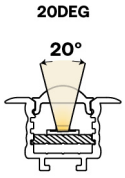
Nominal beam spread shown, beam spread varies based on light engine. For more detailed information, see photometric data.



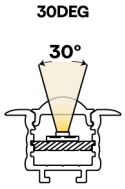
Optical 12°



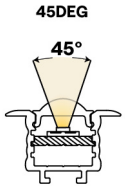
Optical 14°



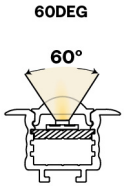
Optical 20°



Optical 30°
DRY and DMP LEDs only



Optical 45°
DRY and DMP LEDs only



Optical 60°
DRY and DMP LEDs only

TEMPERATURE RATINGS

		6.0 W/FT	
		Min	Max
DRY	Ambient Operating Temp - Recessed	-13°F	105°F
DMP	Ambient Operating Temp - Recessed	-13°F	105°F
WET	Ambient Operating Temp - Recessed	-13°F	100°F

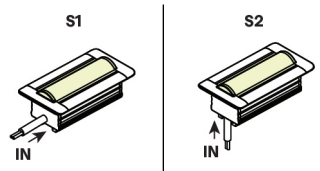
© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting

ESSENTIALS EMBD-OPTICS (02) RGB

24VDC Linear Fixtures - Recessed

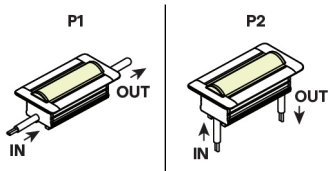
7 WIRE INPUT/OUTPUT

SINGLE (Input only)



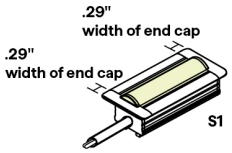
End Feed | Bottom Feed

PASS THROUGH (Input/Output)

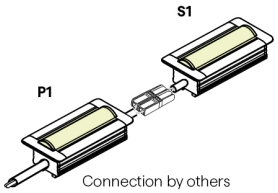


End Feed | Bottom Feed

CONFIGURATION OPTIONS

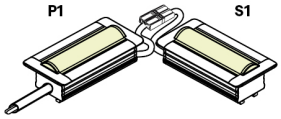


Single End Feed



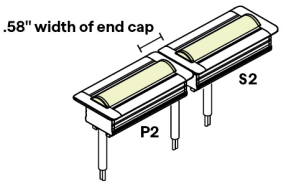
Connection by others

Non-Continuous End Feed

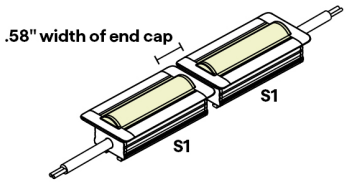


Connection by others

Non-Continuous Corner Feed



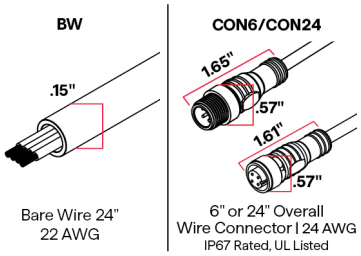
Non-Continuous Bottom Feed



Non-Continuous End to End Feed

8/9 CONNECTOR/WIRE – IN/OUT

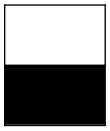
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



Bare Wire 24"
22 AWG

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

10 WIRE COLOR



White

Black

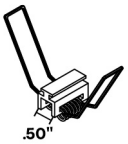
© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting

ESSENTIALS EMBD-OPTICS (02) RGB

24VDC Linear Fixtures - Recessed

12 MOUNTING

SP



Spring Clip

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

To order separately use SP-01

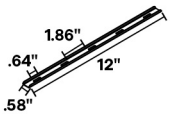
MG



Magnet Clip

One MG provided per foot
To order separately use MG-02

MMA-02



Magnet Mount
Accessory for MG-02

Sold separately, to order use MMA-02

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

Required when mounting to a non-magnetic surface

13 FINISH

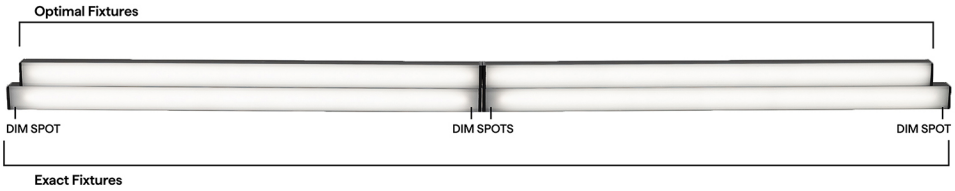
Satin

Custom finishes require a longer lead time, consult factory

14 EXACT/OPTIMAL FIXTURE LENGTH

E/O Length Calculator → E/O Explained →

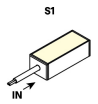
Exact fixtures are the exact length specified. Optimal fixtures' length is rounded down based on LED cut points to allow the fixture to be illuminated end to end. For runs with multiple fixtures that need to fill a specific length, it's recommended to order all optimal fixtures with an exact fixture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



RGB DRY DMP LENGTHS BY INCH

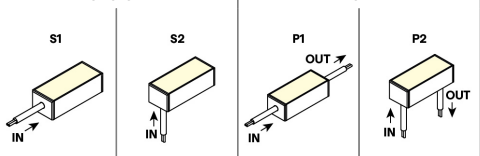
EXACT LENGTH

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"	10.51"	10.86"
13"	12.51"	12.86"
14"	12.51"	12.86"
15"	14.51"	14.86"
16"	14.51"	14.86"
17"	16.51"	16.86"
18"	16.51"	16.86"
19"	18.51"	18.86"
20"	18.51"	18.86"
21"	20.51"	20.86"
22"	20.51"	20.86"
23"	22.51"	22.86"
24"	22.51"	22.86"
36"	34.51"	34.86"
48"	46.51"	46.86"
60"	58.51"	58.86"
72"	70.51"	70.86"
84"	82.51"	82.86"
96"	94.51"	94.86"



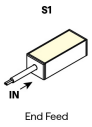
© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting

ESSENTIALS EMBD-OPTICS (02) RGB

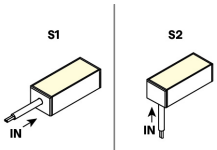
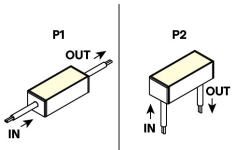
24VDC Linear Fixtures - Recessed

RGB WET 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"	10.66"	11.06"
13"	12.66"	11.06"
14"	12.66"	13.06"
15"	14.66"	13.06"
16"	14.66"	15.06"
17"	16.66"	15.06"
18"	16.66"	17.06"
19"	18.66"	17.06"
20"	18.66"	19.06"
21"	20.66"	19.06"
22"	20.66"	21.06"
23"	22.66"	21.06"
24"	22.66"	23.06"
36"	34.66"	35.06"
48"	46.66"	47.06"
60"	58.66"	59.06"
72"	70.66"	71.06"
84"	82.66"	83.06"
96"	94.66"	95.06"

COMPATIBLE POWER SUPPLIES

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

DIM TO LEVEL	INDOOR	OUTDOOR
	RGB	RGB
0.1%	QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DMX QTM-eLED+DALI-DT8 QTM-eLED+DMX QZ-DMX	Q-SET-QZ-DMX QOM-eLED+DALI-DT8 QOM-eLED+DMX QOM-eLED+PS-DALI-DT8 QZ-DMX
1%	QZ-DALI-DT8	Q-SET+QZ-DALI-DT8 QZ-DALI-DT8
10%	Non-Dim Power Supply with RGB App Dongle	

DIMMING PROTOCOL	INDOOR	OUTDOOR
	RGB	RGB
DMX	QTM-eLED+DMX QZ-DMX	Q-SET-QZ-DMX QOM-eLED+DMX QZ-DMX
DALI-2: DT8	QT-CAB-eLED+DALI-DT8 QTM-eLED+DALI-DT8 QZ-DALI-DT8	Q-SET+QZ-DALI-DT8 QOM-eLED+DALI-DT8 QZ-DALI-DT8

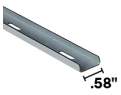
© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting

ESSENTIALS EMBD-OPTICS (02) RGB

24VDC Linear Fixtures - Recessed

COMPATIBLE MOUNTING ACCESSORIES

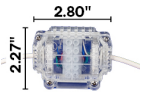
MMA-02



Magnet Mount Accessory of MG-02

COMPATIBLE WIRING ACCESSORIES

Q-mini-J5



UL Listed, miniature junction box, DRY/DMP (WET rated with silicone)

COMPATIBLE CONTROL ACCESSORIES

SCENE APP DONGLE



Wi-Fi or Bluetooth Connectivity

iQ-DMX-STICK-GA2



DMX controller for changing color & dimming

iQ-DMX-STICK-DE3



DMX controller for changing color & dimming

COMPATIBLE APPS

NFC APP

Q-NFC

Read and write DMX addresses and adjust voltage

© 2026 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | www.QTL.lighting

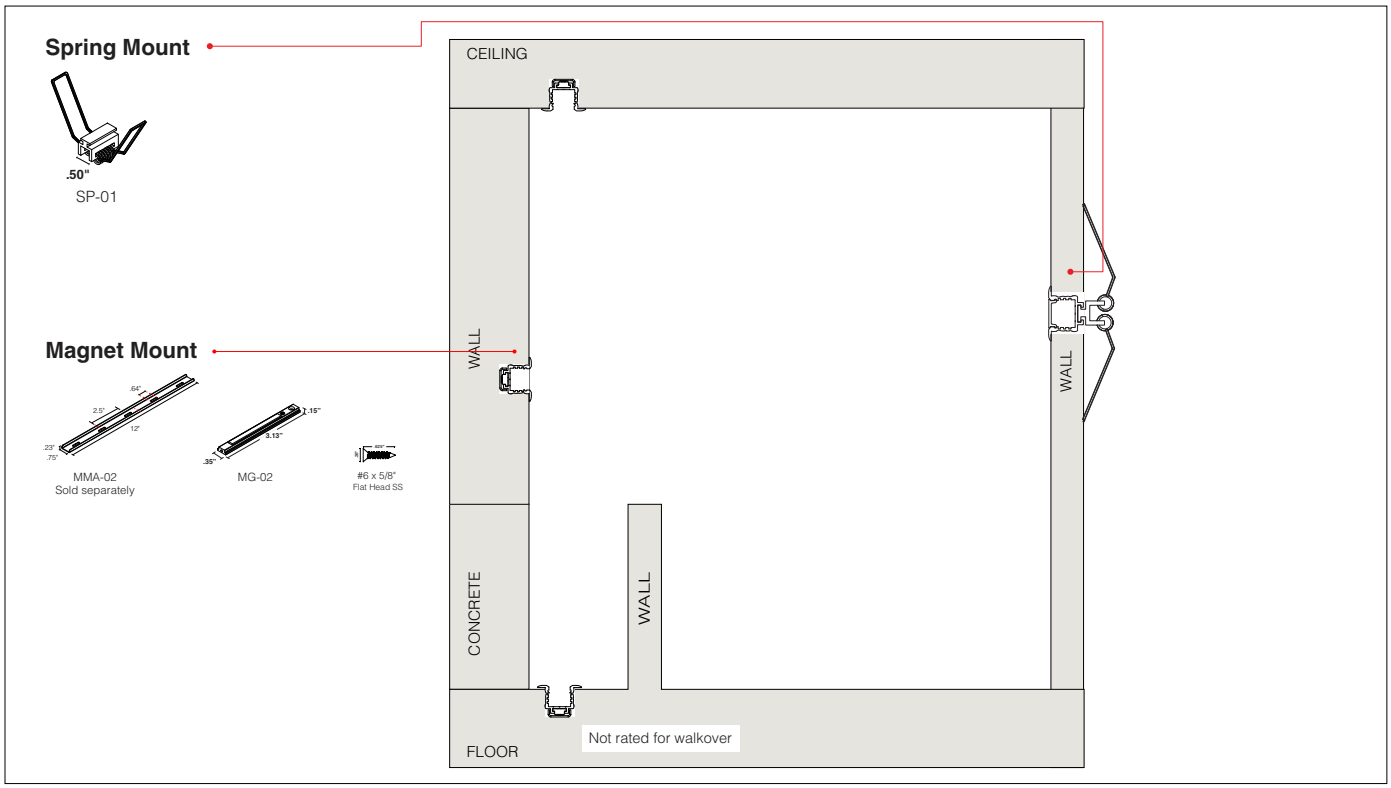
ESSENTIALS EMBD

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 — Warranty only valid with QTL power supplies
- 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:



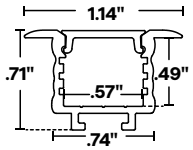
Recessed Mounting Method

- Spring Mount : Millwork (page 4)
- Magnet Mount : Millwork (page 5)

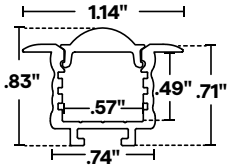
© 2024 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | QTL.lighting

ESSENTIALS EMBD

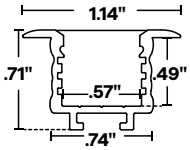
Linear Fixture Installation Instructions



EMBD-01



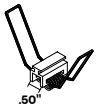
EMBD-02

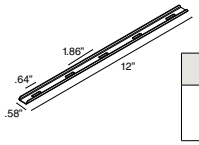


EMBD-03

COMPONENTS & HARDWARE

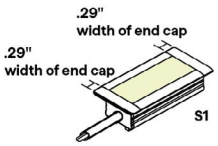
Alternate screw lengths can be used in installation as long as the screw diameter size is consistent with the included screw diameter size

SPRING CLIP	MAGNET CLIP
 SP-01	 MG-02 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

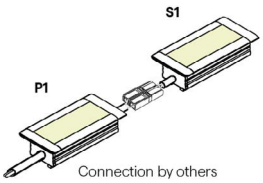
ACCESSORIES SOLD SEPARATELY
MAGNET MOUNT ACCESSORY; sold individually
 MMA-02   Included: Flat Head Screw #6x5/8"
• MMA-02 comes in 12" pieces; use at least one clip per MMA-02 accessory   • MMA-02 can be cut into smaller pieces, if desired

© 2024 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | QTL.lighting

CONFIGURATION OPTIONS

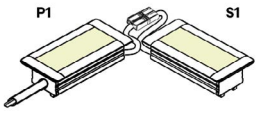


Single End Feed



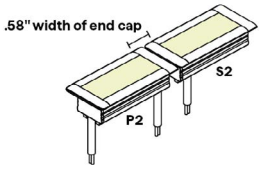
Connection by others

Non-Continuous End Feed

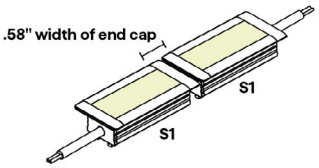


Connection by others

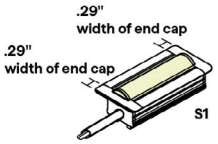
Non-Continuous Corner Feed



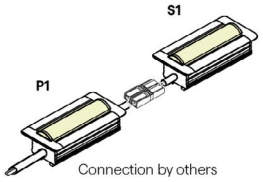
Continuous Bottom Feed



Continuous End to End Feed

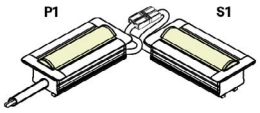


Single End Feed



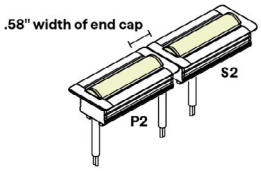
Connection by others

Non-Continuous End Feed

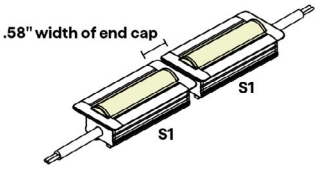


Connection by others

Non-Continuous Corner Feed



Continuous Bottom Feed



Continuous End to End Feed

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

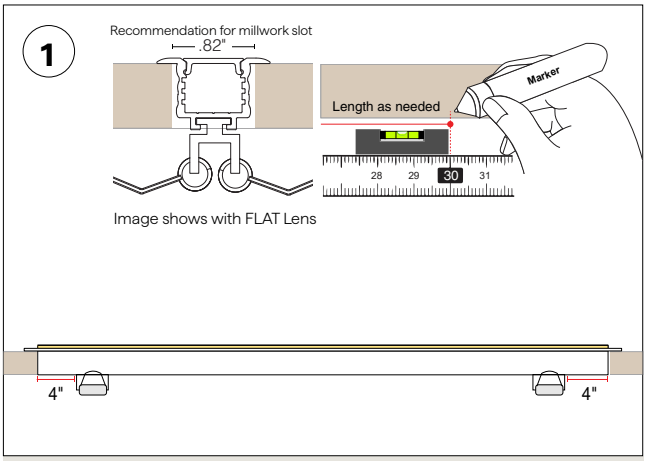
© 2024 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | QTL.lighting

ESSENTIALS EMBD

Linear Fixture Installation Instructions

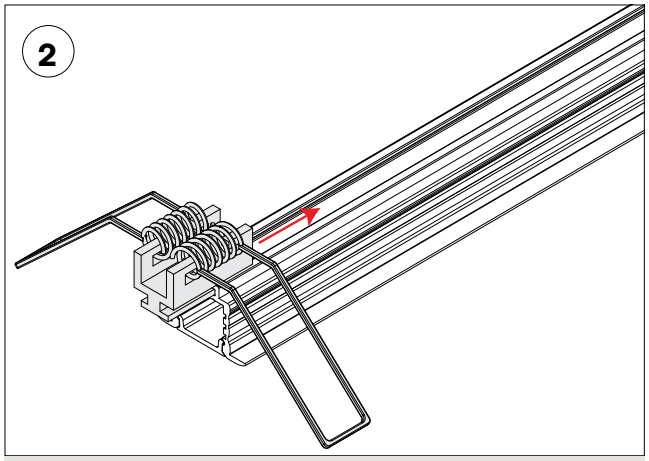
SURFACE MOUNTING METHOD: **SPRING MOUNT**

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

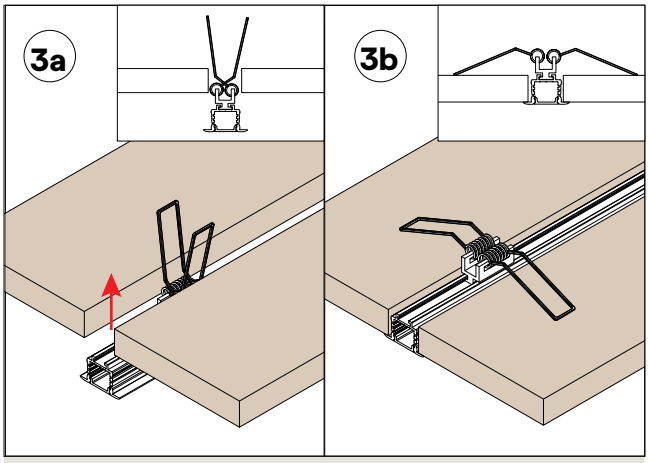


Determine the EMBD fixture(s) location and positioning on desired surface; evenly distribute clips. Make any necessary reference markings to indicate where each clip is to be secured in place. Recommended every 24" - 30".

NOTE: the drywall cut out should be 0.82 wide.

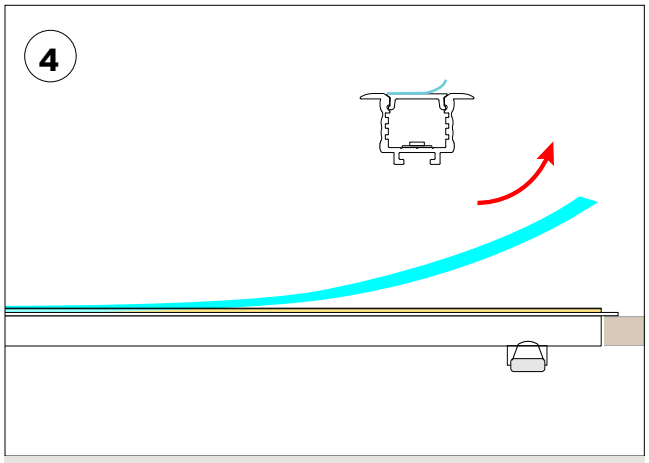


Slide in the spring clip from each end of the fixture.



a. Squeeze the spring clip's arms together and push it through the drywall cut out.

b. Once the spring arms have cleared the top of the drywall, they will snap back and secure the extrusion in place.



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

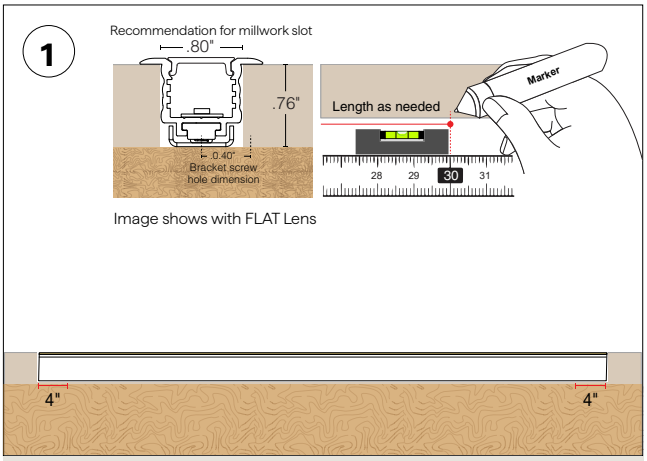
© 2024 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | QTL.lighting

ESSENTIALS EMBD

Linear Fixture Installation Instructions

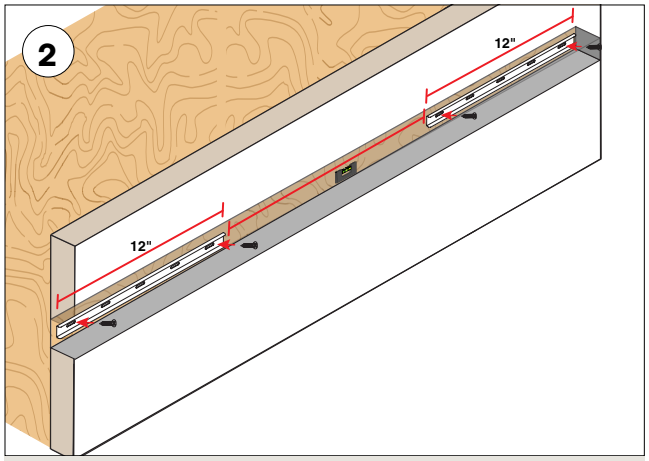
RECESSED MOUNTING METHOD: **MAGNET MILLWORK**

- One magnet clip per foot
- MMA-02 comes in 12" pieces; use at least one clip per MMA-02 accessory
- MMA-02 can be cut into smaller pieces, if desired



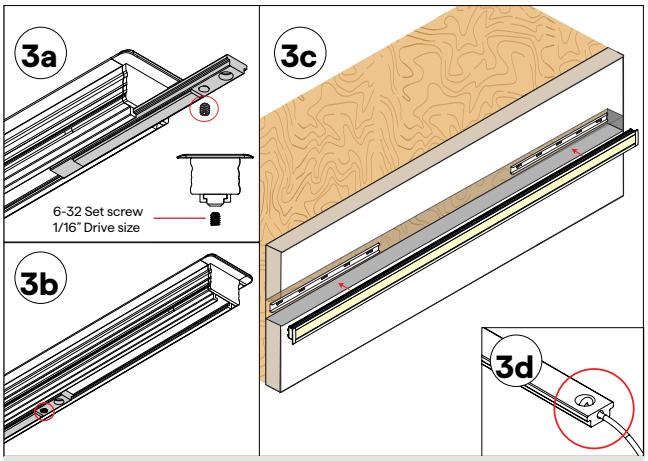
Determine the EMBD fixture(s) location and positioning on desired surface. Make any necessary reference markings to indicate where the magnet mount accessory bracket is to be secured in place.

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



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

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



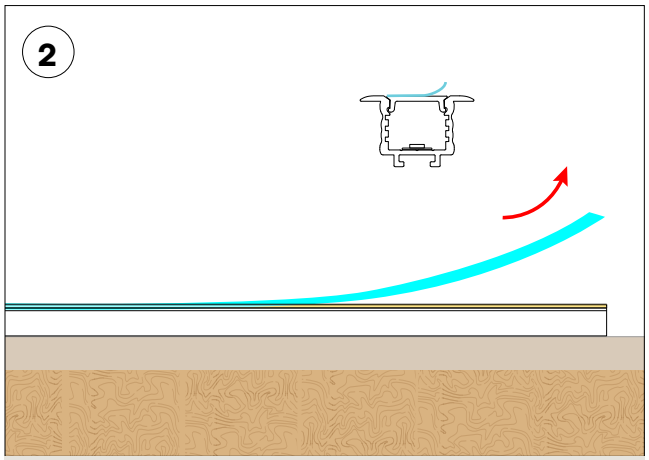
a. Slide magnet into the mounting track

b. Using the supplied set screw fasten the Non-Feed endcap that was removed, and secure the magnet clips into your desired location.

c. Place the assembled fixture onto the magnet mount bracket.

d. For installations requiring seismic precautions, monofiliment may be used with magnet clips as pictured.

NOTE: The magnet clips should be offset to the flat heads used to secure the bracket, to maximize magnetic connection.



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

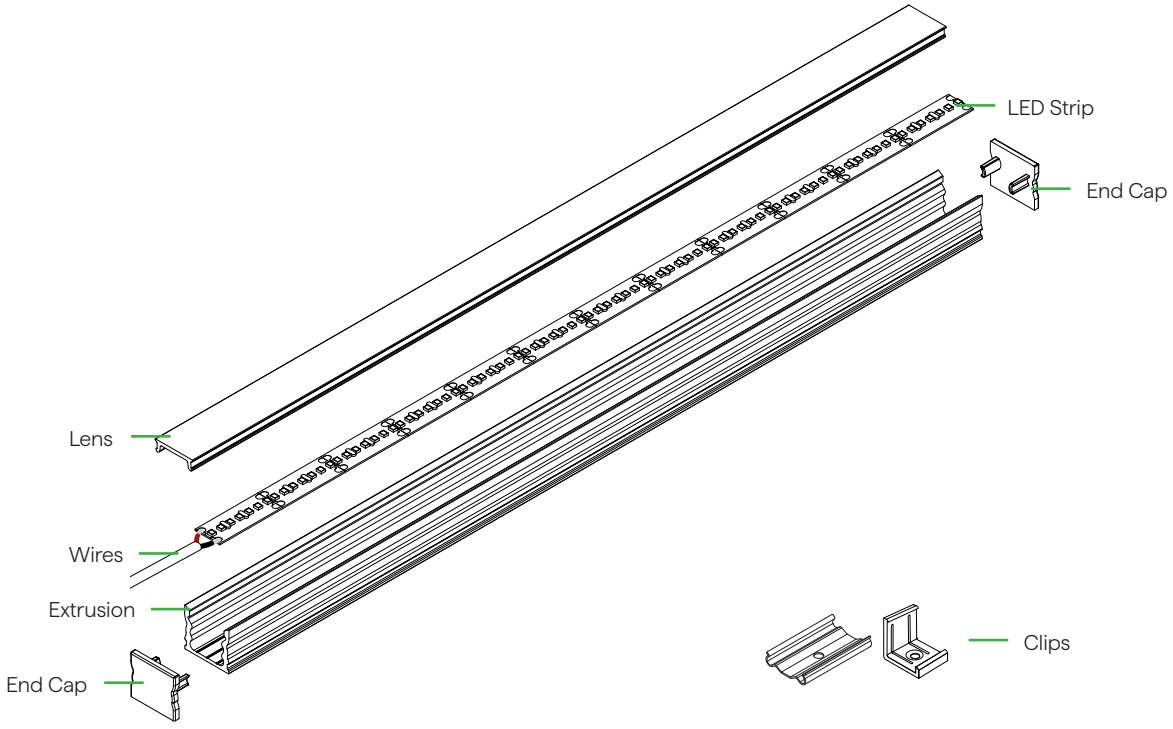
© 2024 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | QTL.lighting

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 Plastic End Caps Plastic Clips	LED Strip Wires	Extrusion Metal End Caps	Stainless Steel Clips

© 2024 QTL. All rights reserved | 155 Hill St. Milford, CT 06460 | 203-367-8777 | sales@QTL.lighting | QTL.lighting