ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

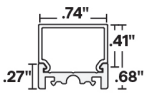
24VDC Linear Fixtures - Surface

410.2 & 410.16 Closet Rated in 1.5HE

BUY AMERICAN ACT COMPLIANT

BUILD AMERICA, BUY AMERICA COMPLIANT





- Linear fixture designed for surface mount and grid ceiling applications
- Diffused lens
- Three-sided illumination
- Mounting options include hidden stainless steel clip and plastic T-bar clips
- Features painted end caps to match extrusion finish
- Suitable for installation in the storage area of a clothes closet when specified with LEDs at 4.0 watts or less per foot per NEC regulations
- Used in applications where CCT and brightness need to be controlled separately
- When using DALI and DMX power supplies, LED wattage must be doubled

INFORMATION REQUIRED FOR LIGHTING SCHEDULE

1	2	3	4	5	6
PRODUCT	WATTS/ FT	CCT	RATED	EFFICIENCY	LENS
				STD	DF

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: **TR1DW-2.5HE-20/30-DRY-STD-DF-P1-BW-BW-BK-CL2-HSS-ST-48"-E**

1 PRODUCT

TR1DW
TR1DW-USA

Select USA option for BAA and BABA projects. Only DRY ratings apply.

LED engine is built with 3 wires requiring 0-10V, DMX or DALI control. Using DALI, DMX, or non QTL power supplies may double watts/ft. See following pages for compatible power supplies.

2 WATTS/FT

1.5HE	1.5W/ft HE
2.5HE	2.5W/ft HE
4.0HE	4.0W/ft HE

1.5HE	1.5W/ft HE
2.5HE	2.5W/ft HE

3 CCT

18/30	1800K/3000K
18/35	1800K/3500K
20/27	2000K/2700K
20/30	2000K/3000K
24/40	2400K/4000K
27/40	2700K/4000K
27/55	2700K/5500K

18/30	1800K/3000K
18/35	1800K/3500K
20/27	2000K/2700K
20/30	2000K/3000K
24/40	2400K/4000K
27/40	2700K/4000K
27/55	2700K/5500K

4 RATED

DRY	IP20

DMP	IP54

5 EFFICIENCY

STD	Standard

6 LENS

DF	Diffused

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
When using TBC Mounting, a bare wire S2 wire feed is recommended.
See install instructions for details.

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

HSS	Hidden Stainless Steel Clip
TBC-01	9/16" Flat or Tegular TB-Grid
TBC-02	15/16" Flat or Tegular TB-Grid

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.

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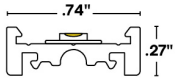
Specification subject to change. Rev-05-07-26

5 year warranty | Warranty only valid with QTL power supplies | Field modifications void warranty | Data subject to change, all data has +/- 5% tolerance

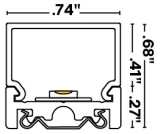
ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface

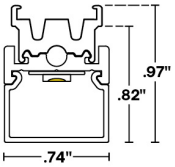
1 PRODUCT - DIMENSIONS



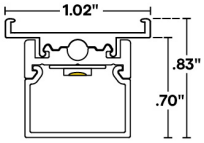
Profile



Profile with hidden stainless steel mounting clip



Profile with TBC-01



Profile with TBC-02

2 DELIVERED LUMENS

[Calculated L70 = 70000 hrs]
Tested with TR1DW-**-30-DRY-STD

	1.5HE W/FT		2.5HE W/FT		4.0HEW/FT	
	LM/FT	CRI	LM/FT	CRI	LM/FT	CRI
DF	130	98	205	98	318	98

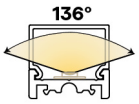
6 DIODE VISIBILITY

DF - Diffused lens

PHOTOMETRIC PERFORMANCE

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

DF



Diffused 136°

TEMPERATURE RATINGS

		DW 1.5 HE W/FT		DW 3.0 HE W/FT		DW 2.5 HE W/FT		DW 5.0 HE W/FT		DW 4.0 HE W/FT		DW 8.0 HE W/FT	
		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply		QTL power supply other than DALI, DMX		DALI, DMX, or non-QTL power supply	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DRY	Ambient Operating Temp - Surface	-4°F	145°F	-4°F	135°F	-4°F	135°F	-4°F	120°F	-4°F	125°F	-4°F	105°F
DMP	Ambient Operating Temp - Surface	-4°F	145°F	-4°F	135°F	-4°F	135°F	-4°F	120°F	—	—	—	—

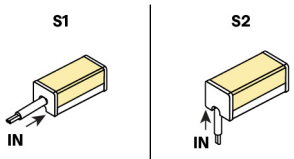
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ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface

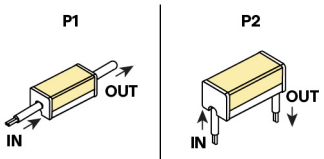
7 WIRE INPUT/OUTPUT

SINGLE (Input only)



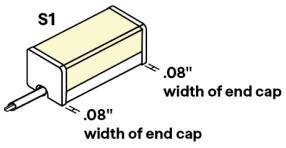
End Feed | Bottom Feed

PASS THROUGH (Input/Output)

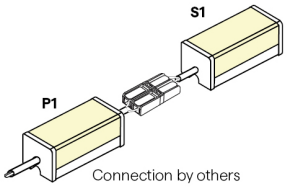


End Feed | Bottom Feed

CONFIGURATION OPTIONS

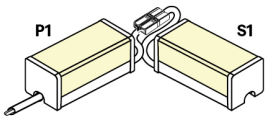


Single End Feed



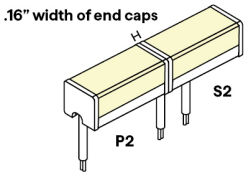
Connection by others

Non-Continuous End Feed

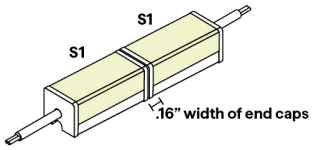


Connection by others

Non-Continuous Corner Feed



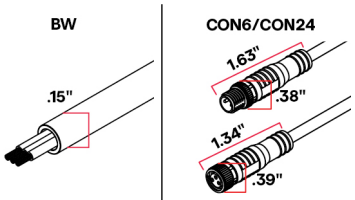
Continuous Bottom Feed



Continuous End to End Feed

8/9 CONNECTOR/WIRE – IN/OUT

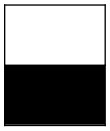
Connector/Wire In or Out not needed to specify product. Standard configuration is BW for Wire In and CLS for Wire out



Bare Wire 24"
22 AWG

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

10 WIRE COLOR



White

Black

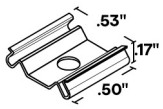
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ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface

12 MOUNTING

HSS



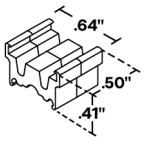
Hidden Stainless Steel Clip

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

To order separately use SST-02

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

TBC-01



Plastic T-Bar Clip

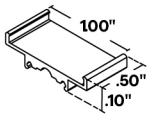
Use on 9/16" Flat or Tegular Drop Ceiling

2 clips provided for first 12"; 1 clip provided for each additional 12" or less length. 1 T-Bar Mounting Jig included with each fixture.

To order separately use TBC-01

Each pair of clips comes with M2.5 x 4mm

TBC-02



Plastic T-Bar Clip

Use on 15/16" Flat or Tegular Drop Ceiling

2 clips provided for first 12"; 1 clip provided for each additional 12" or less length. 1 T-Bar Mounting Jig included with each fixture.

To order separately use TBC-02

13 FINISH

Satin

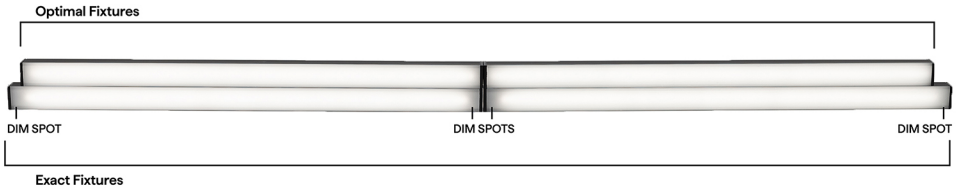
Custom finishes require a longer lead time, consult factory

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.



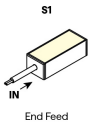
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ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

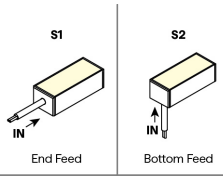
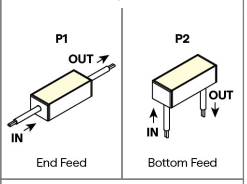
24VDC Linear Fixtures - Surface

DW-HE 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"	

COMPATIBLE POWER SUPPLIES

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

DIM TO LEVEL	INDOOR
	DW-HE Tunable Applications
0.1%	QT-CAB-eLED+DALI-DT6 QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QT-CAB-eLED+TW QTM-eLED+DALI-DT6 QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QTM-eLED+TW QZ-DMX
1%	QZ-DALI-DT8
10%	Non-Dim Power Supply with TW App Dongle

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ESSENTIALS TRE3-FLAT (01) FOR TUNABLE APPLICATIONS

24VDC Linear Fixtures - Surface

DIMMING PROTOCOL	INDOOR
	DW-HE Tunable Applications
0-10V	QT-CAB-eLED+TW QTM-eLED+TW
Lutron Athena	QT-CAB-eLED+DALI-DT8-AWN QTM-eLED+DALI-DT8-AWN
DMX LED wattage must be doubled for DW-HE products	QZ-DMX
DALI-2: DT6 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT6 QTM-eLED+DALI-DT6
DALI-2: DT8 LED wattage must be doubled for DW-HE products except for AWN	QT-CAB-eLED+DALI-DT8 QT-CAB-eLED+DALI-DT8-AWN QTM-eLED+DALI-DT8 QTM-eLED+DALI-DT8-AWN QZ-DALI-DT8
SCENE App Dimmed	Non-Dim Power Supply with TW App Dongle

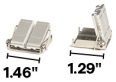
COMPATIBLE MOUNTING ACCESSORIES

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

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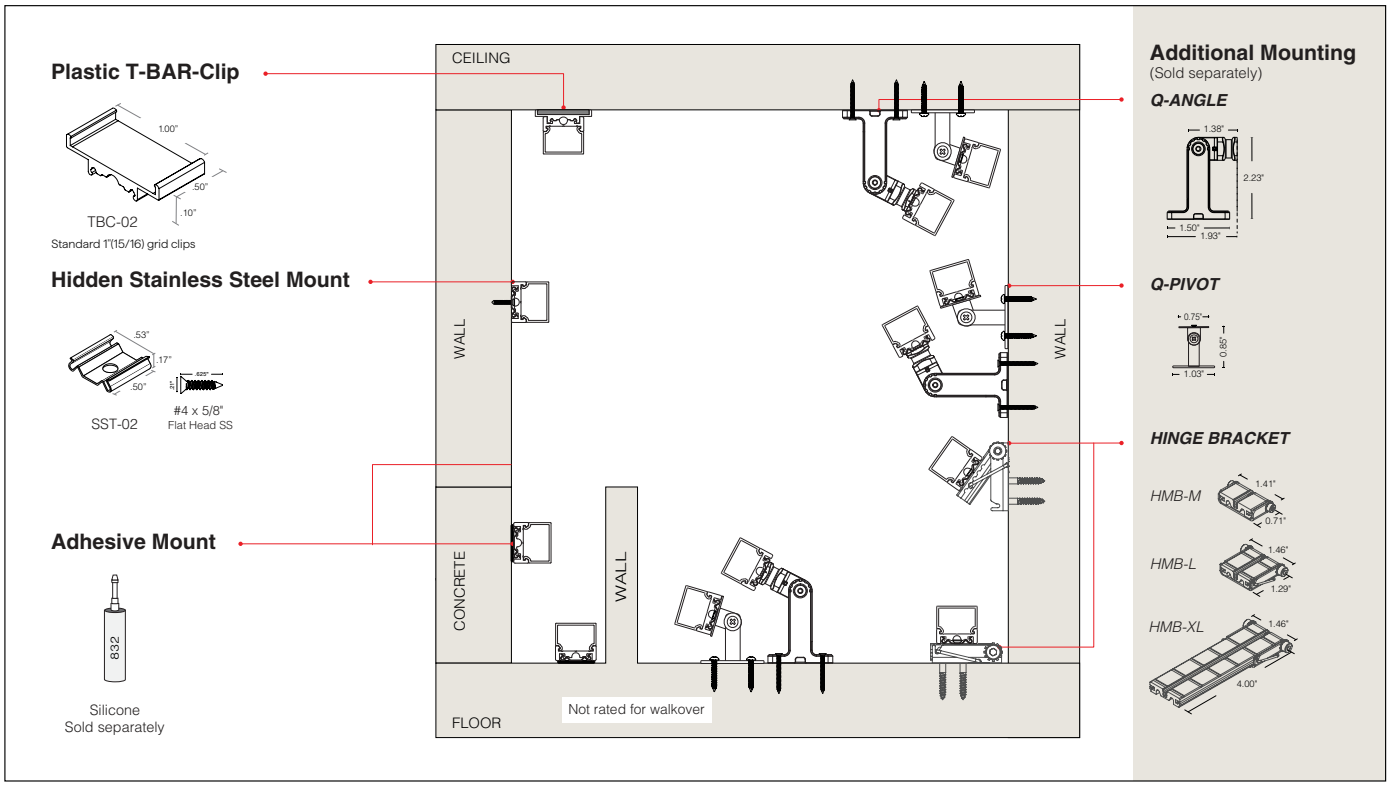
ESSENTIALS TRE3

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
- Surface mount
- 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



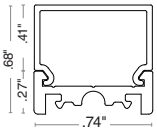
SURFACE MOUNTING METHOD

- Silicone Mount (page 4)
- Hidden Stainless Steel Clip Mount (page 5)
- Plastic T-BAR Clip Mount (page 6)

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ESSENTIALS TRE3

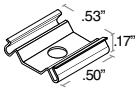
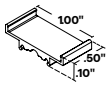
Linear Fixture Installation Instructions



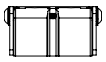
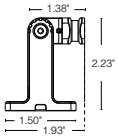
TRE3-FLAT (01)

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

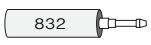
HIDDEN STAINLESS STEEL CLIP	PLASTIC T-BAR CLIP	
 SST-02 Included:  Flat Head Screw #4x5/8"	 TBC-01 9/16" Flat or Tegular TB-grid clips	 TBC-02 15/16" Flat or Tegular TB-grid clips
• 2 clips provided for 4' or less; 4 clips provided for greater than 4"	• 2 Clips provided per first 12", 1 clip provided per additional foot.	• 2 Clips provided per first 12", 1 clip provided per additional foot.

ACCESSORIES SOLD SEPARATELY

HINGE BRACKET; sold individually	Q-ANGLE; sold in pairs	Q-PIVOT; sold in pairs
 Image shows HMB-M HMB-M HMB-L HMB-XL	 Q-ANGLE	 Q-PIVOT
Included • 3/4" long mount screw • 1/4" #4 clip mount screw	Included • 4 SS #6x1.25" Flat head wood screws • 2 SS 4-40 Flat head clip screws • 2 SS 6-32 Fillister screws	Included • SS #4-40x3/16 Flat head screws • 2 #4x3/4 Pan Head screws

ADHESIVE SOLD SEPARATELY

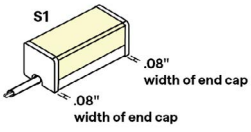
SILICONE



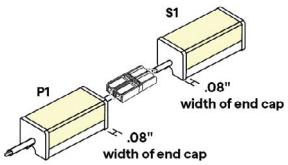
DOWSIL 832

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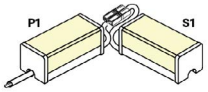
CONTINUOUS WIRING CONFIGURATION OPTIONS



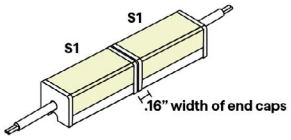
Single End Feed



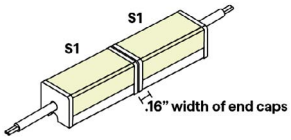
Non-Continuous End Feed



Non-Continuous Corner Feed



Continuous End to End Feed



Continuous End to End Feed

Review wire method to ensure clean installation prior to mounting extrusion.

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

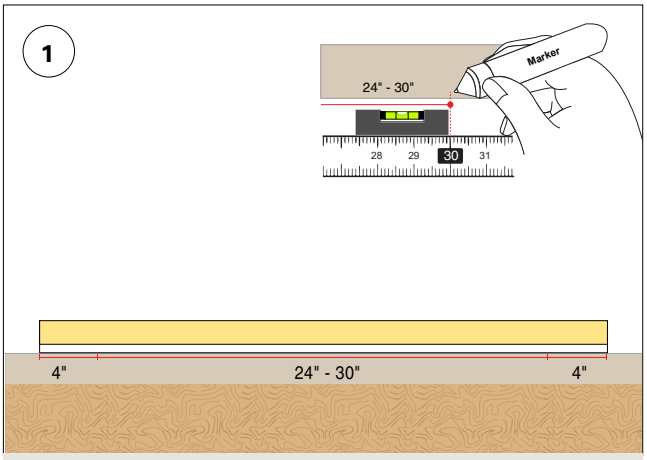
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ESSENTIALS TRE3

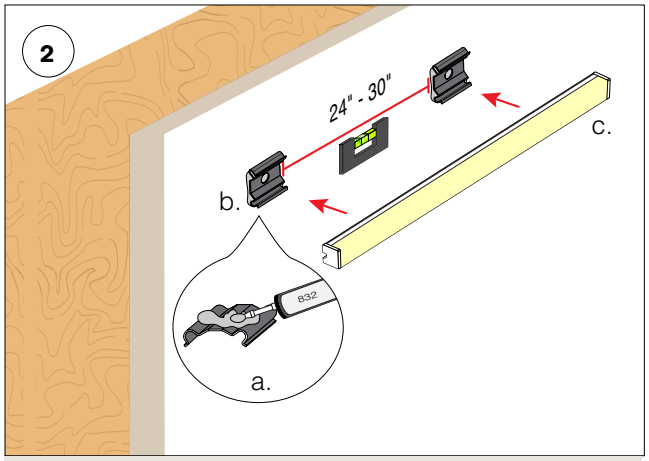
Linear Fixture Installation Instructions

SURFACE MOUNTING METHOD: **SILICONE**

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



Determine the TRE3 extrusion(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".

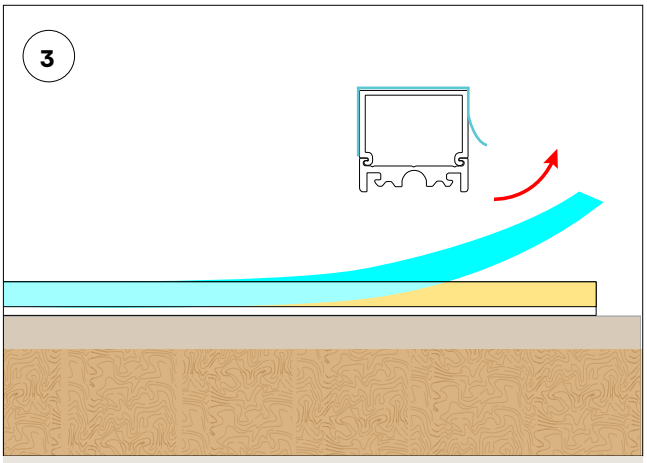


a. Firmly press the silicone-coated clips on the marked reference points.

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

c. Snap extrusion onto clips.

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

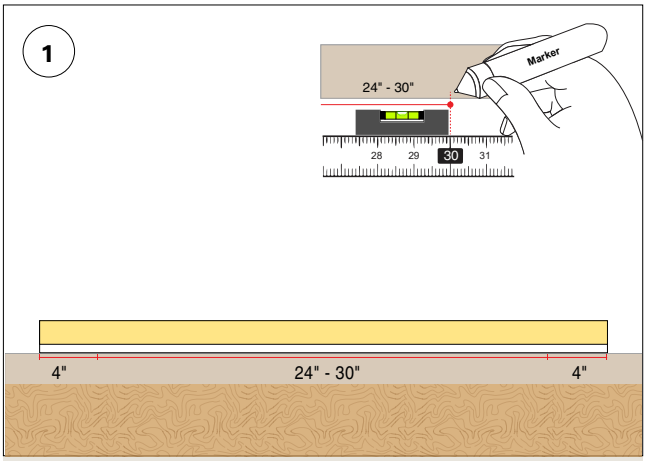


Remove protective film from the surface of the extrusion's lens.

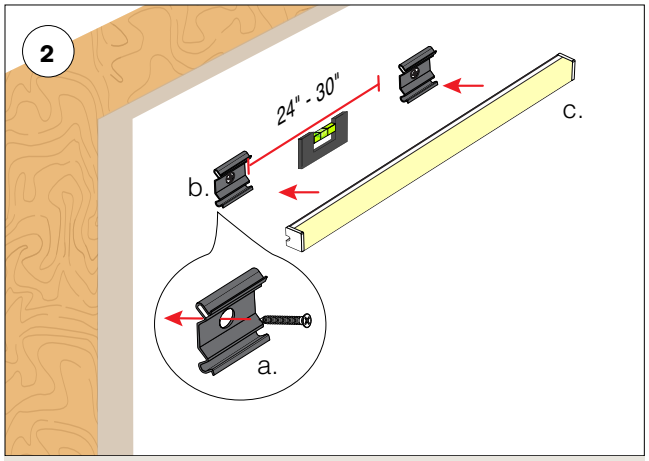
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SURFACE MOUNTING METHOD: **HIDDEN STAINLESS STEEL CLIPS**

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



Determine the TRE3 extrusion(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".

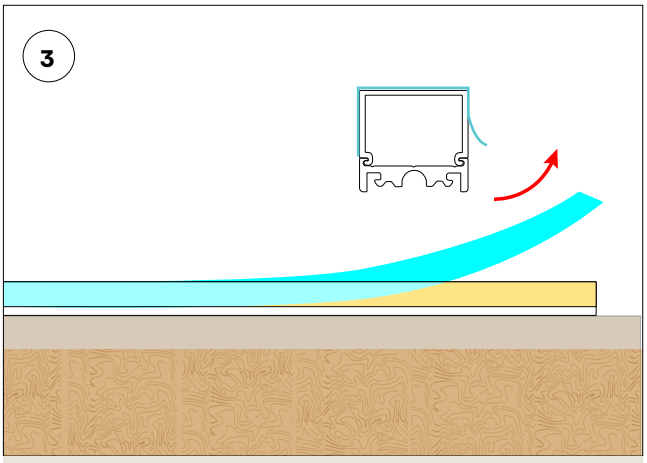


a. Secure clips using the #4 flat head hardware provided.

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

c. Snap extrusion 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.

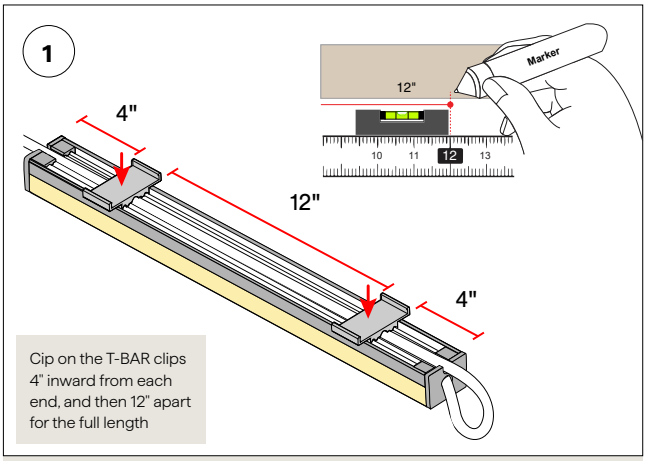


Remove protective film from the surface of the extrusion's lens.

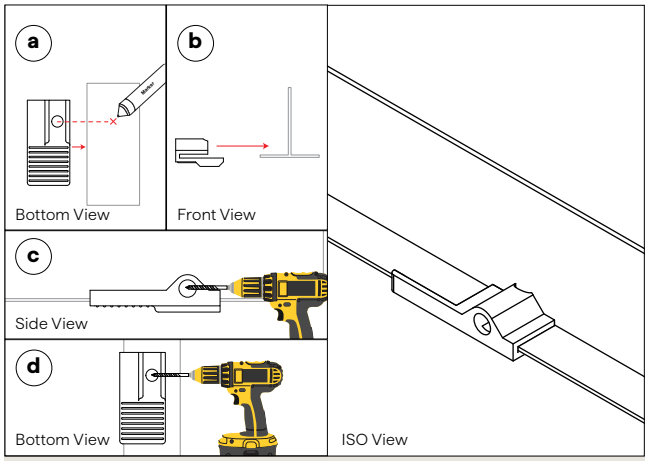
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SURFACE MOUNTING METHOD: **PLASTIC T-BAR CLIPS**

- 2 Clips provided per first 12", 1 clip provided per additional foot.



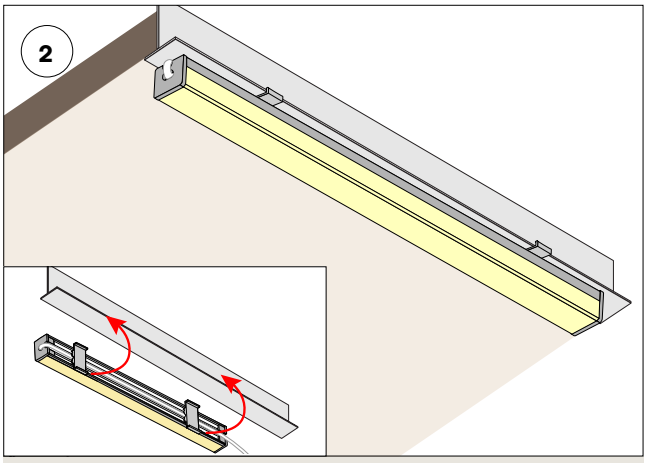
Determine the TRE3 extrusion(s) location and positioning on desired surface; evenly distribute clips. Make any necessary reference markings to indicate where each clip is to be secured in place. Recommended every 12".



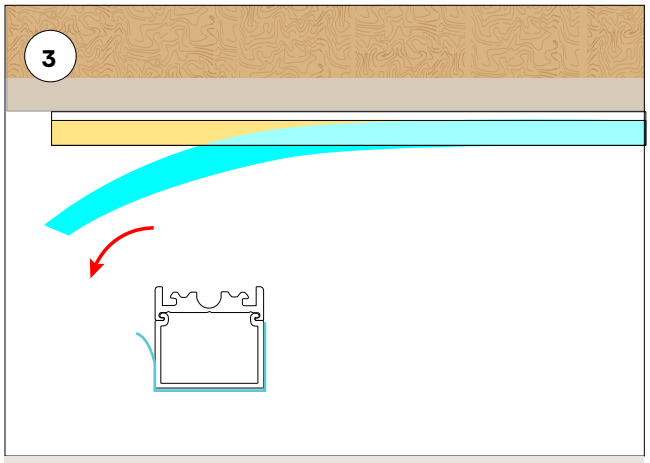
OPTIONAL - REQUIRED FOR S2/P2

Use provided jig to drill a hole in the t-bar ceiling grid, which will allow the wire to feed into the ceiling.

- **a.** Mark where wire will go through the T-Bar.
- **b.** Slide T-Bar Drill jig over T-Bar.
- **c.** Using a 3-16" Drill bit drill through the side hole.
- **d.** Then using a 3-16" Drill bit drill through the bottom hole.



Snap extrusion onto T-BAR.



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

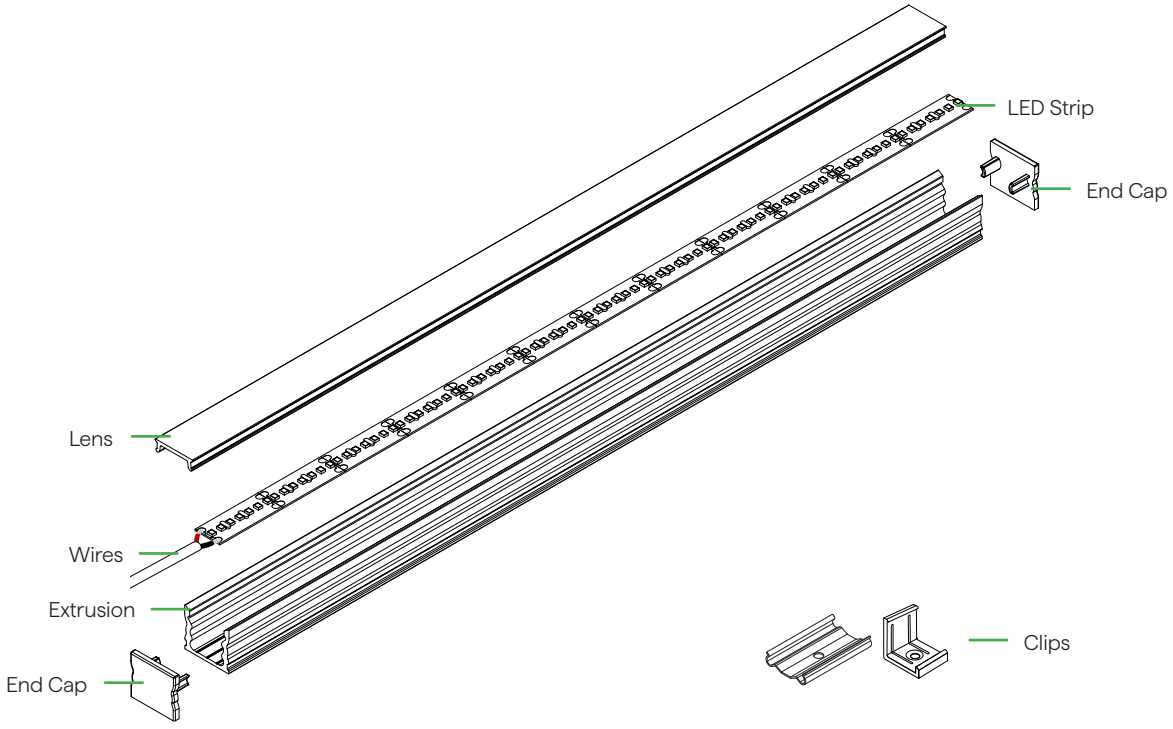
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MATERIAL RECYCLING

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

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