TLT24VTW | 24V Tunable White Performance LED Tapelight

WATTAGE	4.3W/Ft (3000K, both LEDs on full power)
LUMEN OUTPUT	211Lm/ft (3000K, both LEDs on full power)
LED DENSITY	36 LED/Ft (0.65" Spacing)
COLOR TEMPERATURE	Tunable White Light: 2200K – 4000K
CRI	90+
SYSTEM RATING	50,000 Hours @ 70% Lumen Maintenance
INPUT VOLTAGE	24V
DIMMING	Dimmable using TW Controllers or DMX Interface
RUN LENGTH	27 Ft Max
AMBIENT OPERATING TEMP	–4° to 104°F (–20° to 40°C)
LISTING	cCSAus Certified to UL Standards Suitable for Dry or Damp Locations Not Suitable for Wet Locations
WARRANTY	Full replacement guarantee after date of purchase: – Five years when installed with Mounting Channel – Three years when installed without Mounting Channel

0.12 IN

11.99 IN

0.65 IN

0.36 IN   0.31 IN

0.65 IN

Cut Every 3.94 IN ✂
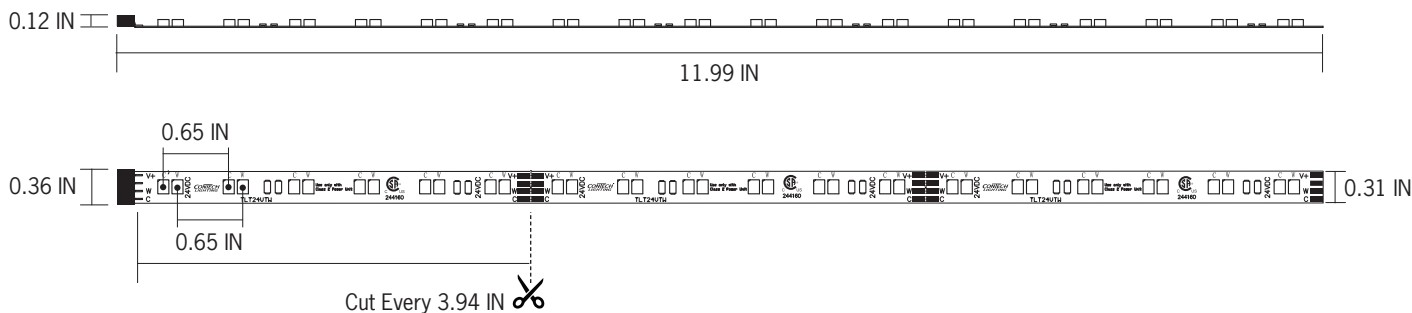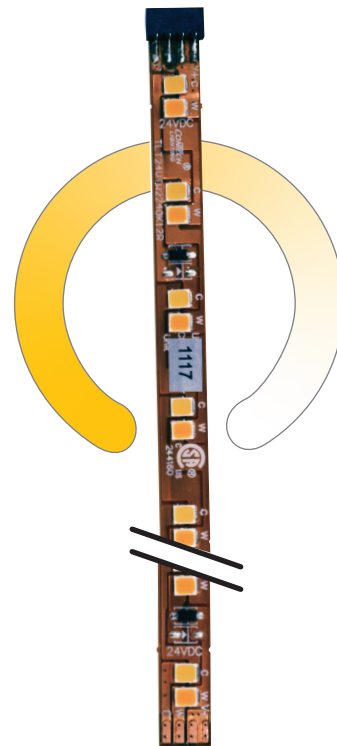
Ordering Information

Example Order: TLT24VTW2240K12R

Tapelight Series	Output	Color Temp	Length/Quantity
TLT24V - 24VDC Performance LED Tapelight	**TW** - Tunable White	**2240K** - Tunable White Light: 2200K – 4000K	**12** - 12 In Individual Segment **12R** - 20 Ft Reel of 12 In Segments (20 Pieces Total, Actual Length 19.75 Ft) **30CR** - 30 Ft Continuous Reel (Actual Length 29.35 Ft)

P1

TLT24VTW | 24V Tunable White Performance LED Tapelight

Product Details

Features

- Flexible, low voltage linear LED accent lighting system provides high quality illumination for many indoor applications
- Modular "plug and play" system, no need for field soldering
- Tunable White tapelight requires 24VDC Power Supply and Tunable White Controller (sold separately)
- Available in:
  – Individual 12 inch Segments with male and female connector ends
  – 20 Foot Reels of connected, individual 12 inch segments
  – 30 Foot Continuous Reels (no midconnectors) with one male and one female connector end
- TLT24VTW Series can be cut (on the cut lines) in 4 inch increments
- Easy to install using the 3M Double Sided Adhesive on each segment; tape can be directly mounted to most surfaces
- For additional thermal heatsinking, protection of the LEDs and an overall cleaner aesthetic, using the aluminum mounting channel is recommended
- For added protection of the LEDs and subtle diffusion and glare control, a clear or frosted lens may be used; lens must be used with the aluminum mounting channel and is easily installed

Performance Summary

- High output LEDs provide excellent luminous intensities at low drive currents
- Low power consumption and consistent, stable performance
- Tunable White Light from 2200K to 4000K, 90+ CRI
- Delivers 224 lumens at 2.2W/ft (4000K); 172 lumens at 2.2W/ft (2200K); and 211 lumens at 4.3W/ft (3000K, both LEDs on full power)
- Single run length up to 27 feet on one 96W power supply
- Dimmable using TW Controllers or DMX Interface
- System designed and rated for 50,000 hours at 70% lumen maintenance when mounted in ConTech aluminum mounting channel
- cCSAus Certified to UL standards
- Suitable for dry or damp locations
- Not suitable for wet locations

Warranty

- Covered by ConTech's full replacement guarantee after date of purchase:
  – Five (5) year replacement guarantee when tape light is installed using the Aluminum Mounting Channel
  – Three (3) year replacement guarantee when installed without the Aluminum Mounting Channel

Run Lengths

TLT24V 24V POWER SUPPLY INPUT: 24V DC	TLT24VTW TUNABLE WHITE[2] 4.3W/FT	
WATTAGE	MAX RUN	MAX SPLIT
20W	4 FT	5 FT
36W	8 FT	9 FT
60W	14 FT	15 FT
90W	25 FT	40 FT
96W	27 FT	45 FT

- *Max split can be split more than once, without exceeding the max single run in each leg.*
- *Max Run refers to the total single run of tapelight that can go on a power supply. Max Split refers to the total amount of tapelight that can go on a driver if it were separated into two runs.*
- *Max Run lengths are calculated with 12V or 24V DC at the start of the tape run. Voltage drop may occur if not using proper wire gauge. Please refer to the Voltage Drop and Wire Length Distance chart.*
- *Max Run lengths are calculated with no more than 30% light loss from the start of the tape run to the end of the tape run for optimal light consistency. If run lengths are extended beyond the recommended lengths noted above, there will be inconsistent light output and voltage drop.*
- *Overall distance of LED tape under load [illuminated sections]. If exceeded damage to the power supply and LED tape may result.*

TLT24VTW | 24V Tunable White Performance LED Tapelight

Photometrics

TLT24VTW2240K12: BOTH LEDS ON; 3000K

Fixture Delivered Lumens: 211.2
Total Watts@120V: 7.26
Lumens Per Watt: 28.9
Center Beam Candle Power: 77.0
Beam Distribution: 115°
Spacing Criterion: 1.3
Color Rendering Index (CRI)[1]: 95
Color Temperature (CCT)[2]: 3028K

Designed for 50,000 Hour Lamp Life[3]
LM-63 Test No. G21010710
LM-79 Test No. S21022418

Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
2'	19.3	5.8
4'	4.8	11.6
6'	2.1	17.4
8'	1.2	23.2
10'	0.8	29.0
12'	0.5	34.8

Candela Curve

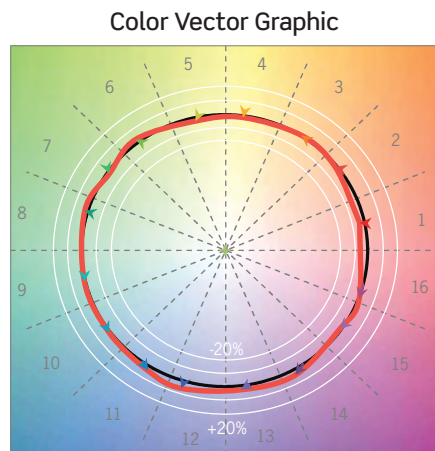#### Spectral Power Distribution Chart[4]
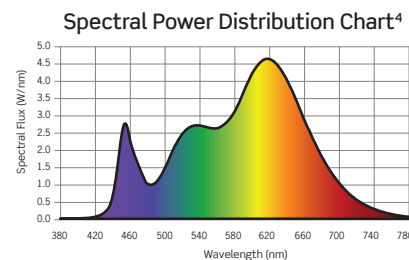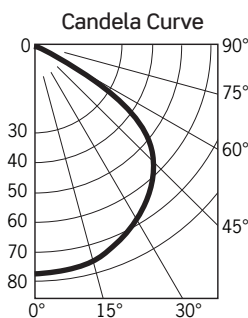
1. Accuracy of rendering colors   2. Color appearance of light source   3. Dependent on surrounding temperatures   4. Colors present within the light source
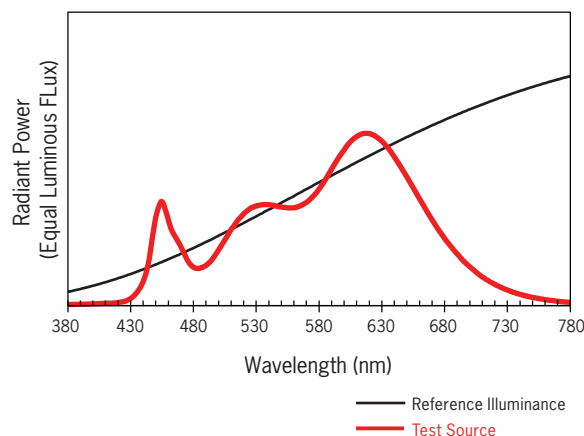
TM-30 Data

ANSI/IES TM-30-18 Color Rendition Report Test No. S21022418

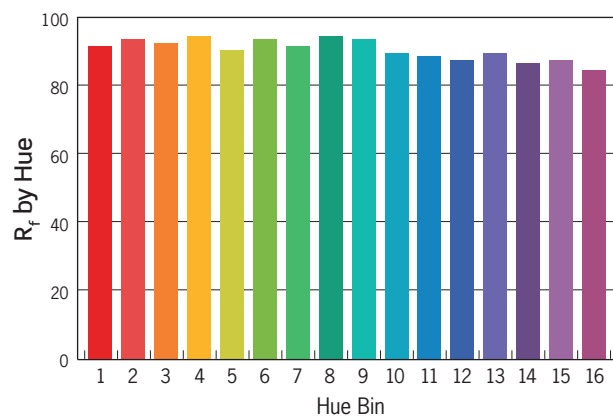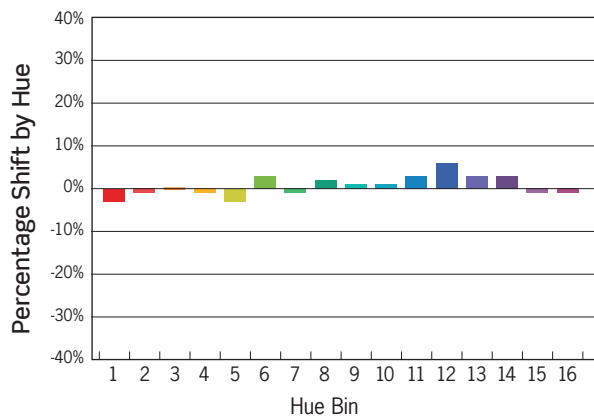|	
R_f	92
R_g	101
CCT(K)	3028K
D_{uv}	−0.0032
u^I	0.2508
v^I	0.5164

Color Vector Graphic

Reference Illuminance   Test Source

Spectral Power Distribution Comparison

Reference Illuminance
Test Source

Colors are for visual orientation purposes only

PERFORMANCE LED TAPELIGHT | 24V Power Supplies

24V Plug-In Power Supplies

TLP24VP Series
Plug-and-Play Power Supply

120VAC/24VDC. Includes AC wall plug and female power output barrel plug for easy installation. Class 2 listed.

For use with 24V LED Tapelight.

Power Supply/Wattage	Quantity
TLP24VP36 - 36W	
4-1/4" L x 2" W x 1-3/8" H	
TLP24VP60 - 60W	
4-1/2" L x 2" W x 1-3/8" H	
TLP24VP96 - 96W	
6-1/8" L x 2-3/8" W x 1-1/2" H	

24V Hardwire Power Supplies

TLP24VHW Series
Hardwire Power Supply

120VAC/24VDC. Includes stripped and tinned wire pigtails on the input and output sides. MUST BE MAINTAINED WITHIN AN ENCLOSURE THAT MEETS LOCAL BUILDING CODES AND NEC (SUPPLIED BY OTHERS). 1 Ft Wire leads. Class 2 recognized.

For use with 24V LED Tapelight.

TLP24VHW20	Quantity
20W 24V 120VAC: 5-3/4"L x 1-1/2"W x 1-1/4"D	
TLP24VHW60	
60W 24V 120VAC: 6-1/3" L x 1-3/4" W x 1-1/4" D	
TLP24VHW96	
96W 24V 120VAC: 8-3/4" L x 2-2/3" W x 1-1/2" D	

TLP24VHW * -ENC Series
Hardwire Class 2 Enclosed Driver

120VAC/24VDC. Dimmable Class 2 listed driver. Compact self-enclosed driver with two (2) knockouts. Auto Reset and short circuit protection. Dimmable with standard MLV/Incandescent TRIAC (Leading Edge) dimmers; 8W Min. load required for smooth dimming.

TRIAC Driver dimming not recommended when using TW/RGB/RGBW controllers.

For use with 24V LED Tapelight.

TLP24VHW20-ENC	Quantity
20W 24V 120VAC: 6-3/4" L x 2-2/3" W x 1-1/4" D	
TLP24VHW60-ENC	
60W 24V 120VAC: 6-3/4" L x 2-2/3" W x 1-1/4" D	
TLP24VHW96-ENC	
96W 24V 120VAC: 6-3/4" L x 2-2/3" W x 1-1/4" D	
TLP24VHW96-ENC277V	
96W 24V 277VAC: 10" L x 3" W x 3" D	

TLP24VHW * MV-ENC Series
Hardwire Class 2 Constant Voltage Driver

120 – 277VAC/24VDC Dimming and non-dimming Class 2 Constant Voltage LED Drivers. UL Listed enclosure with built-in junction boxes. No minimum load requirement. Auto-reset protection for short circuit and over-temperature. Over load protection in CC mode. 0–10V Dimming driver delivers smooth flicker free linear dimming down to 1% with most LEDs and a wide variety of compatible dimmers.

0–10V Driver dimming not recommended when using TW/RGB/RGBW controllers.

For use with 24V LED Tapelight.

TLP24VHW60MV-ENC	Quantity
60W 24V 120-277VAC, Non-Dimming Driver	
TLP24VHW60MVD2-ENC	
60W 24V 120-277VAC, 0-10V Dimming Driver	
TLP24VHW96MV-ENC	
96W 24V 120-277VAC, Non-Dimming Driver	
TLP24VHW96MVD2-ENC	
96W 24V 120-277VAC, 0-10V Dimming Driver	

L3D0 Series
Hardwire Hi-Lume Premier Driver

Enclosed Class 2 96W Constant Voltage Driver with dimming down to 0.1% with compatible controls. Universal 120 - 277VAC input. Output wattage range 25-96W.

For use with 24V LED Tapelight.

L3D0-96W24V-U	Quantity
96W 24V 120-277VAC: 5.5" W x 2" H x 10.5" L	

PERFORMANCE LED TAPELIGHT | 24V Tunable White (TW) Connectors

Hardwire Power Connectors

TLCIP12HWTW
24V Tunable White Male Power Connector
Includes wire pigtail end and one (1) male flex tape connector. Use with TW Controller and LED Power Repeater.
Use with 24V Tunable White (TW) Performance LED Tapelight only

TLCIP12HWTW - 12 IN Tunable White Hardwire Male Power Connector	Quantity

TLCOP12HWTW
24V Tunable White Female Power Connector
Includes wire pigtail end and one (1) female flex tape connector. Use with TW Controller and LED Power Reapeater.
Use with 24V Tunable White (TW) Performance LED Tapelight only

TLC0P12HWTW - 12 IN Tunable White Hardwire Female Power Connector	Quantity

Linear Connectors

TLCM * RGB Series
Bridge Connector
Blank section used to bridge gaps where LEDs are not necessary.
Use with RGB and Tunable White (TW) Performance LED Tapelight only

TLCM2RGB - 2 IN TLCM6BRGB - 6 IN	Quantity
TLCM12RG - 12 IN	
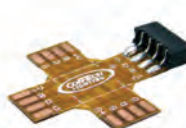
TLCXRGB
Cross Connector
Used to connect up to four (4) tapelight segments. May be cut to create 2-way "L" connection or 3-way "T" connection.
Use with RGB and Tunable White (TW) Performance LED Tapelight only

TLCXRGB - RGB and Tunable White Cross Connector	Quantity

TLCFFRGB
Short Female-to-Female Connector
Used to connect male tapelight ends (when tapelight is cut two male ends remain).
Use with RGB and Tunable White (TW) Performance LED Tapelight only

TLCFFRGB - RGB and Tunable White Short Female-to-Female Connector	Quantity

PERFORMANCE LED TAPELIGHT | TLT Series
Tunable White Controllers

TLPTWMTC
Tunable White Touch Controller

Dial Touch Controller, select color temperature by color circle. Speed and brightness control. Receiver power input 12-24VDC; Max current load 9A. 3Ax3 Channels; Max output power 108W (12V)/216W (24V).

5-5/16" L x 1-3/16" W x 7/8" H

Remote frequency: 433.92mHz

Remote dimensions: 4-1/8" L x 2-1/4" W x 3/8" H

Use with 24V Tunable White Performance LED Tapelight

TLPRGBWTC - RGB/RGBW Touch Controller	Quantity

TLPTWV2RF
Tunable White Premium Controller

Premium RF remote, push button control for color temperature, speed and brightness, pre-programmed scenes and two (2) program-mable scenes.

Receiver power input, 12-24VDC
Max current load, 12A, 3Ax4 Channels
Max output power, 144W (12V)/288W (24V)

5" L x 1-3/8" W x 7/8" H

Remote frequency: 2.4GHz
Remote dimensions: 5-3/4" L x 1-5/8" W x 1/2" H

Use with 24V Tunable White Performance LED Tapelight

TLPTWV2RF - Tunable White Premium Controller	Quantity

TLPINT
DMX 512 CV Decoder

Designed to convert universal DMX 512 signal to PWM signal when used with a DMX 512 console (by others). Use with non-dimming tapelight power supplies.

Not UL listed for outdoor use.

6-3/16" L x 3-1/8" W x 1-5/8" D

Use with 12V or 24V Performance LED Tapelight; can control white, single color or RGB LEDs

TLPINT - 12V/24V DMX 512 CV Decoder	Quantity

TLPRTW
4-Channel Power Repeater

Enables synchronized control of multiple runs from one controller.

5-5/16" L x 1-3/4" W x 1-1/8" D

Use with 12V or 24V Static Color, TW, RGB or RGBW Performance LED Tapelight

TLPRTW - 12V/24V LED 4-Channel Power Repeater	Quantity

PERFORMANCE LED TAPELIGHT | Mounting Channels and Accessories

Product Details

Aluminum Mounting Channel

• Provides excellent heat sinking and protection to the LEDs while ensuring a clean, straight run
• 6 Ft long, Silver or Black Aluminum
• Outdoor/Wet listed Performance LED Tapelight is not compatible with channel end caps or diffusion lenses, except when using the Deep Standard Channel
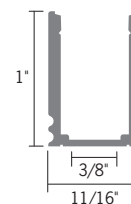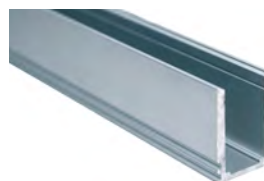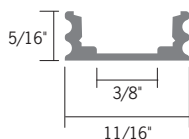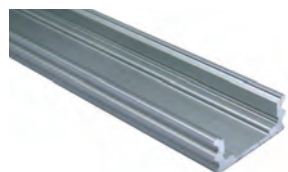
Channel Mounting Clips

• Four (4) Mounting clips and four (4) Philips head screws per package
• 24 Inches between clips recommended for most applications
• Stainless Steel

Channel End Caps

• Creates a clean finish to the mounting channel
• Two (2) end caps: one open, one closed
• ABS Plastic

Standard and Deep Mounting Channels

TLACS6 - 6 Ft Standard Channel, Aluminum
TLACS6-B - 6 Ft Standard Channel, Black

Quantity

TLAC8T6 - 6 Ft Deep Standard Channel, Aluminum
TLAC8T6-B - 6 Ft Deep Standard Channel, Black

Quantity

Standard and Deep Channel Mounting Clips

TLACSC4 Standard   TLACSCA4 Angled
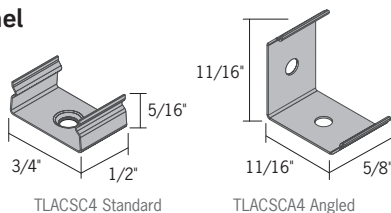
TLACSC4 - Four Standard Channel Mounting Clips
TLACSCA4 - Four Standard Channel Angled Mounting Clips

Quantity

Standard and Deep Channel End Caps

TLACSE2 Standard

TLAC8TE2 Deep

TLACSE2   - Two Standard Channel End Caps, Grey
TLACSE2-B - Two Standard Channel End Caps, Black
TLAC8TE2   - Two Deep Channel End Caps, Grey
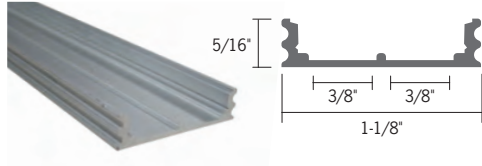**TLAC8TE2-B** - Two Deep Channel End Caps, Black

Quantity

PERFORMANCE LED TAPELIGHT | Mounting Channels and Accessories

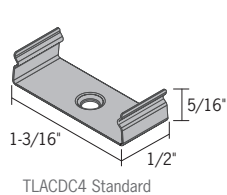## Double Wide Mounting Channel

5/16"
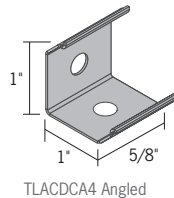3/8"   3/8"
1-1/8"

	Quantity
TLACD6 - 6 Ft Double Wide Channel, Aluminum	
TLACD6-B - 6 Ft Double Wide Channel, Black	

Double Wide Channel Mounting Clips

5/16"
1-3/16"   1/2"

TLACDC4 Standard

1"
1"   5/8"

TLACDCA4 Angled

Double Wide Channel End Caps

	Quantity
TLACDC4 - Four Double Wide Standard Mounting Clips	
TLACDCA4 - Four Double Wide Angled Mounting Clips	

	Quantity
TLACDE2 - Two Double Wide End Caps, Grey	
TLACDE2-B - Two Double Wide End Caps, Black	

45° Angled Mounting Channel

1-1/8"
3/8"
13/16"
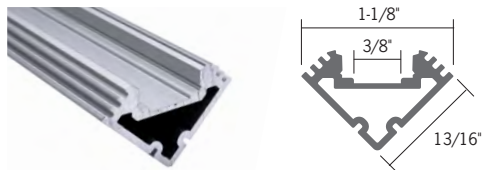
	Quantity
TLACA6 - 6 Ft 45° Angled Channel, Aluminum	
TLACA6-B - 6 Ft 45° Angled Channel, Black	

45° Angled Channel Mounting Clips
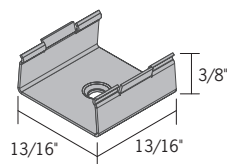
3/8"
13/16"   13/16"

45° Angled Channel End Caps

	Quantity
TLACAC4 - Four Angled Channel Mounting Clips	

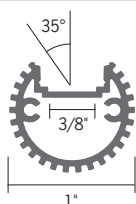|	Quantity
TLACAE2 - Two Angled Channel End Caps, Grey	
TLACAE2-B - Two Angled Channel End Caps, Black	

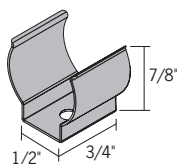# PERFORMANCE LED TAPELIGHT | Mounting Channels and Accessories

Round Mounting Channel

| TLACO6 | - 6 Ft Round Channel, Aluminum | Quantity |
| TLACO6-B | - 6 Ft Round Channel, Black | |

Round Channel Mounting Clips

Round Channel End Caps

| TLACOC4 - Four Round Mounting Clips | Quantity |

| TLACOE2 | - Two Round End Caps, Grey | Quantity |
| TLACOE2-B | - Two Round End Caps, Black | |

Wall Mount "T" Mounting Channel
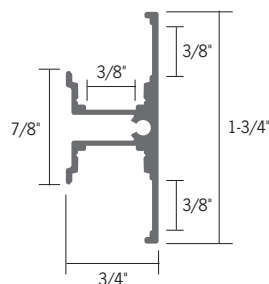
TLACT6	- 6 Ft Wall Mount "T" Channel, Aluminum	Quantity
TLACT6-B	- 6 Ft Wall Mount "T" Channel, Black	
TLACT6-P	- 6 Ft Wall Mount "T" Channel, White	

Wall Mount "T" Channel Mounting Clips

Wall Mount "T" Channel End Caps

| TLACTC4 - Four Wall Mount "T" Channel Mounting Clips | Quantity |

TLACTE2	- Two Wall Mount "T" End Caps, Grey	Quantity
TLACTE2-B	- Two Wall Mount "T" End Caps, Black	
TLACTE2-P	- Two Wall Mount "T" End Caps, White	

PERFORMANCE LED TAPELIGHT | Mounting Channels and Accessories

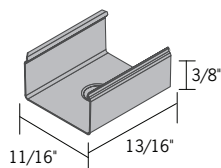## Recessed Mounting Channel

| 1" |
| 1/4" | 5/16" |
| 3/8" |
| 5/8" |
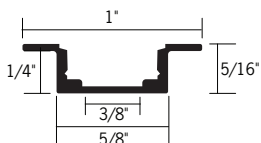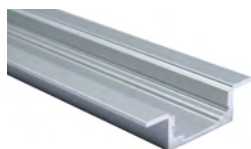
TLACR6 - 6 Ft Recessed Mounting Channel, Aluminum
TLACR6-B - 6 Ft Recessed Mounting Channel, Black

Quantity

Recessed Channel Mounting Clips

3/8"
11/16"   13/16"

TLACRC4 - Four Recessed Mounting Clips
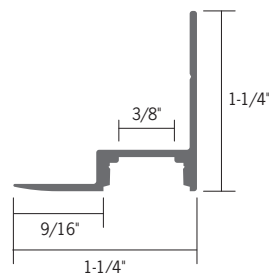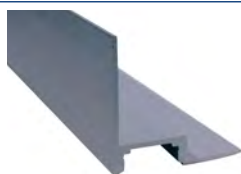
Quantity

Recessed Channel End Caps

TLACRE2 - Two Recessed End Caps, Grey
TLACRE2-B - Two Recessed End Caps, Black

Quantity

Ceiling Edge Mounting Channel

1-1/4"
3/8"
9/16"
1-1/4"

TLACE6 - 6 Ft Ceiling Edge Channel, Aluminum
TLACE6-B - 6 Ft Ceiling Edge Channel, Black
TLACE6-P - 6 Ft Ceiling Edge Channel, White

Quantity

Ceiling Edge Channel Mounting Clips

Mounting clips are not availalble for the Ceiling Edge Mount Mounting Channel

Mount the channel by drilling holes through channel and mounting surface and screwing into place

Ceiling Edge Channel End Caps

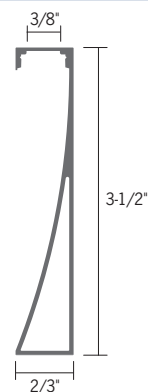End caps are not availalble for the Ceiling Edge Mount Mounting Channel

PERFORMANCE LED TAPELIGHT | Mounting Channels and Accessories

Toe Kick Mounting Channel

3/8"

3-1/2"

2/3"

		Quantity
TLACK6	- 6' Toe Kick Channel, Aluminum	
TLACK6-B	- 6' Toe Kick Channel, Black	
TLACK6-P	- 6' Toe Kick Channel, White	

Toe Kick Channel Mounting Clips

Mounting clips are not available for the Toe Kick Mounting Channel

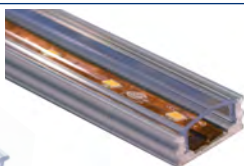Mount the channel by using construction adhesive or 3M™ VHB™ tape

Toe Kick Channel End Caps

		Quantity
TLACKE2	- Toe Kick End Caps, Grey	
TLACKE2-B	- Toe Kick End Caps, Black	
TLACKE2-P	- Toe Kick End Caps, White	

Diffusion Lenses

Frosted   Clear

• Use with mounting channels

• Provides extra protection for the LEDs as well as diffusion to reduce glare

		Quantity
TLALC6	- 6 Ft Clear Lens	
TLALF6	- 6 Ft Frosted Lens	
TLALCD6	- 6 Ft Double Wide Clear Lens	
TLALFD6	- 6 Ft Double Wide Frosted Lens	

9/16"   1"

1/4"   Standard   1/4"   Double Wide