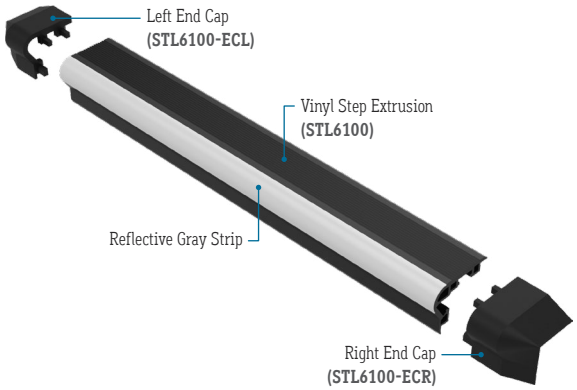
CALI CALIFORNIA ACCENT LIGHTING INC

STL6100 | INSTALLATION

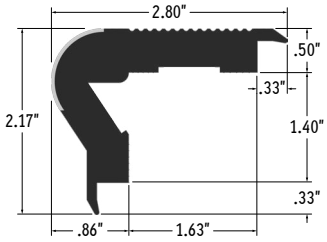
Overview



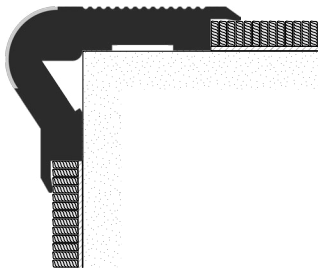
READ ENTIRE GUIDE BEFORE STARTING INSTALLATION

IMPORTANT NOTICE: VERIFY CORRECT LUMINAIRE WAS RECEIVED WITH CORRECT COLOR TEMPERATURE, VOLTAGE, AND WATTAGE BEFORE CUTTING OR INSTALLING. CALI WILL NOT BE RESPONSIBLE IF INCORRECT LUMINAIRE IS INSTALLED.

END VIEW



MOUNTING OPTION



Carpeted Steps
Note: Do no install StepLITE on top of carpet. Install directly onto concrete or wood floor.

FEATURES	
APPLICATIONS	Carpeted Steps
LAMP TYPE	Contains No Lighting
MOUNTING	Adhesive
WEIGHT	0.73 lbs per foot
CONSTRUCTION	Black Vinyl Extrusion
LENGTH	Built to Order
FINISH	Matte Black
LISTING	Dry Location Only UL2108, CSA C22.2 #9 UL8750, CSA250
INSTALLATION	Link to Installation Instructions
ELECTRICAL	
VOLTAGE	Contains No Lighting

PRODUCT INFORMATION

- Step extrusion for stairs
- Indoor installations are field cuttable
- Can be ordered to specific lengths longer than 4" for easier installation
- Available with raceway and end caps

ELECTRICAL

- STL6100 contains no lighting

INSTALLATION RECOMMENDATIONS

- StepLITE can be mounted directly to concrete or wood
- Provide run lengths at time of order plus 3" to 6" for field adjusting or cutting if exact dimensions are not known. CALI will not be responsible for incorrect dimensions provided.
- StepLITE is suitable for indoor (Dry Location) installations.

INSTALLATION TOOLS REQUIRED

- Electric Hammer Drill
- 14.4 to 28 Volt Cordless Drill
- Phillips Bits
- Utility Knife
- Electrical Cord
- Marker
- Wire Stripper
- Long Nose Pliers
- Drill Bits - Concrete or Wood
- Electrical Three Ways
- Safety Glasses
- Measuring Tape
- Chalk Line

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Product Care & Maintenance

WARNING

When using StepLITE for any application, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.
StepLITE must be installed in accordance with the NEC or CEC as applicable.
CALI will not be responsible for any damage or malfunction caused by the following:

- Ensure power is off before installation begins, during replacements, additions, or repairs.
- Do not use StepLITE if damaged, such as broken boards, loose connections, or frayed wire insulation. Inspect before installing.
- Do not install StepLITE in hazardous locations.
- Do not cover StepLITE with any material, as it may cause LEDs to overheat, melt, or ignite. **(Fig. 1)**
- Do not paint on or over fixture lens or LEDs. Paint or any other substance on lens or LEDs will cause a shift in color temperature.
- Soffit must be evenly painted with a neutral white to avoid color shift.
- Do not modify StepLITE in the field.
- Do not overlap StepLITE luminaires in any way. **(Fig. 2)**
- Only use StepLITE with specified rated voltages. Do not exceed the specified voltage for any StepLITE luminaire.
- Surge protector must be set up for electrical power system to avoid damaging StepLITE lighting system.
- Do not connect wires together, follow provided wiring diagrams.
- Do not cut wire while energized.
- Do bend extrusion past permitted bend radius.
- Do not connect StepLITE lightstrip to power source while spooled or coiled. **(Fig. 3)**
- Do not exceed maximum run lengths.
- Do not mount StepLITE with staples, nails, or like means that might damage the insulation. Mount with double-sided tape and mounting clips.
- Do not penetrate StepLITE lightstrip with any foreign object. **(Fig. 4)**
- Do not mount StepLITE inside tanks or enclosures of any kind.
- Do not force StepLITE into a space that is too small.
- Do not submerge StepLITE in any liquid. **(Fig. 5)**
- Do not install StepLITE in any area that is continuously exposed to flowing or pooling water, such as underneath drain pipes, sprinklers, fountains, misters, etc.
- Do not cut, puncture, or penetrate StepLITE housing, end caps, or lens covers.
- Do not drop, bang, or rest weight upon StepLITE.
- Do not apply excessive pressure to any part of StepLITE lightstrip or LEDs. **(Fig. 6)**
- Do not bend StepLITE power cord or continuous connector past permitted bend radius. Bending past permitted bend radius will damage the insulation. 1.5" minimum bend radius.
- Do not install StepLITE lightstrip in a zig zag fashion. **(Fig. 7)**
- Do not fold, crease, or twist StepLITE lightstrip. **(Fig. 8)**
- Do not bend lightstrip along a horizontal plane. **(Fig. 9)**
- Do not overlap StepLITE at any location. **(Fig. 10)**
- Do not cross or overlap extrusions and twist lightstrip to overlap. **(Fig. 11)**
- Do not install StepLITE in places where the power cord is subject to continuous flexing.
- Do not twist continuous connector, power cord, or LED modules. **(Fig. 12)**
- Do not hold, carry, or suspend StepLITE by the power cord.

FIGURES

Fig. 1

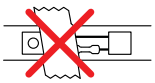


Fig. 2

Fig. 3

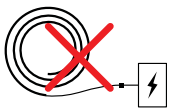


Fig. 4

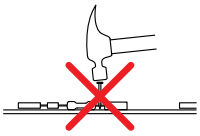


Fig. 5

Fig. 6

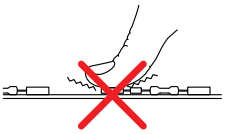


Fig. 7

Fig. 8

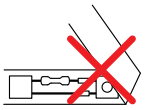


Fig. 9

Fig. 10

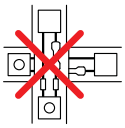


Fig. 11

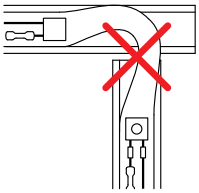
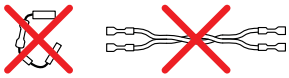


Fig. 12



CLEANING MATERIALS

The use of solvents and/or cleaners which are not compatible with polycarbonate will result in the softening, crazing, and/or cracking of the plastic part. This is especially true of polycarbonate lamps and mounting bases which may be under stress in their normal applications.

COMPATIBLE WITH POLYCARBONATE

- Mild soap and water
- Mineral Spirits
- Isobutyl alcohol
- VM and P Naphtha
- Varsol No.2
- Mexane
- Freone TF and TE-35
- Ethanol
- Dirtex
- 2% Sol. Reg. Joy
- 10% Sol Bon Ami
- White Kerosene
- Methyl alcohol
- Heptane
- Petroleum Ether/65 degrees C
- Isopropyl alcohol
- Lacryl PCL-2035 polycarbonate cleaner

NOT COMPATIBLE WITH POLYCARBONATE

- Trichlor
- Gasoline
- Liquid Detergents
- Acetone
- Carbon Tetrachloride
- Pink Lux (Phosphate free)
- Triclene
- Chlorinated Hydrocarbons
- #1 & #3 denatured alcohol
- Methyl Ethyl Keytone (MEK)
- Texize-8006, 8129, 8758
- MIBK
- Liquid Cleaner – 8211
- Toluol
- Agitene
- Benzol
- Ajax
- Kleenol Plastics
- Lysol
- Stanisol Naphtha
- Oils
- Lemon Joy (phosphate free)
- Diversol
- Lestoil

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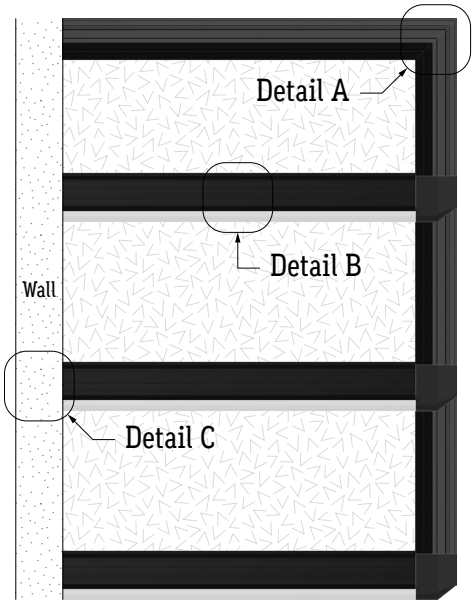
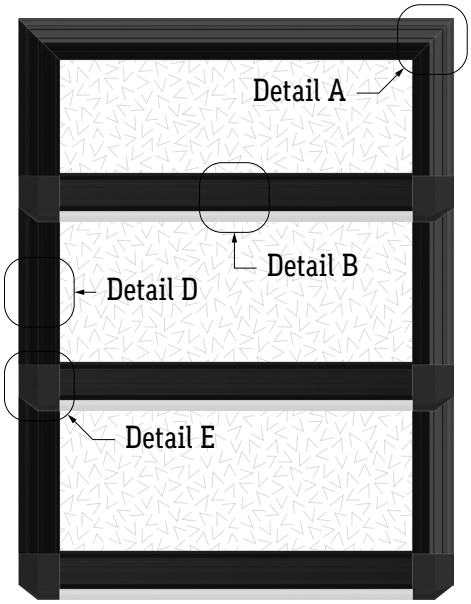
Design Guidelines

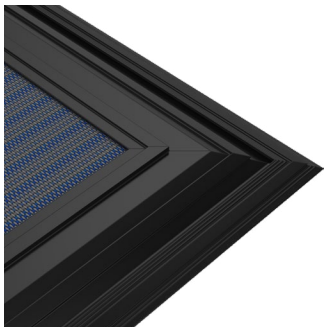
SINGLE SIDE STEPS



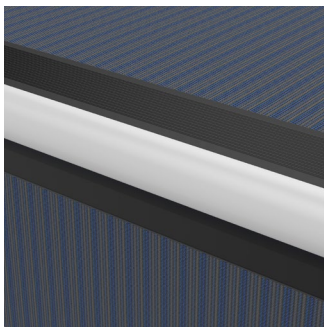
DUAL SIDE STEPS



DETAILS

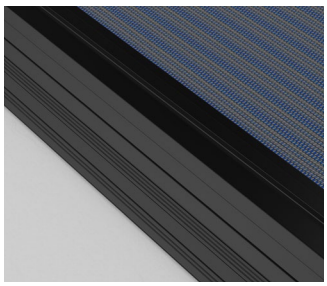


Detail A
Raceway (Miter Detail)
(STL6100-RW)

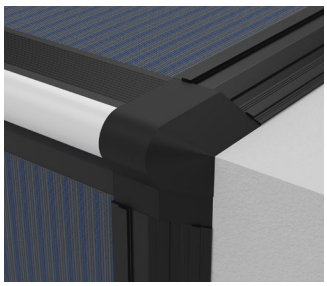


Detail B
Step Extrusion
(STL6100)

Detail C
Step Extrusion to Wall
(STL6100)



Detail D
Raceway (Linear Segment)
(STL6100-RW)



Detail E
End Cap
(STL6100-ECR)

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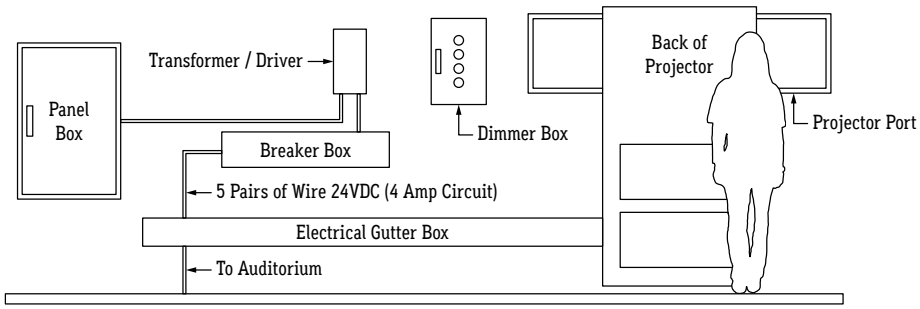
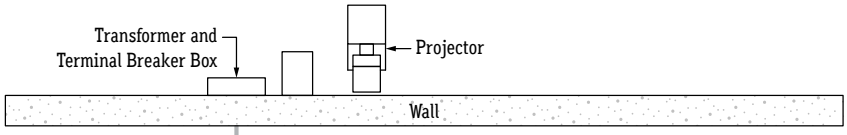
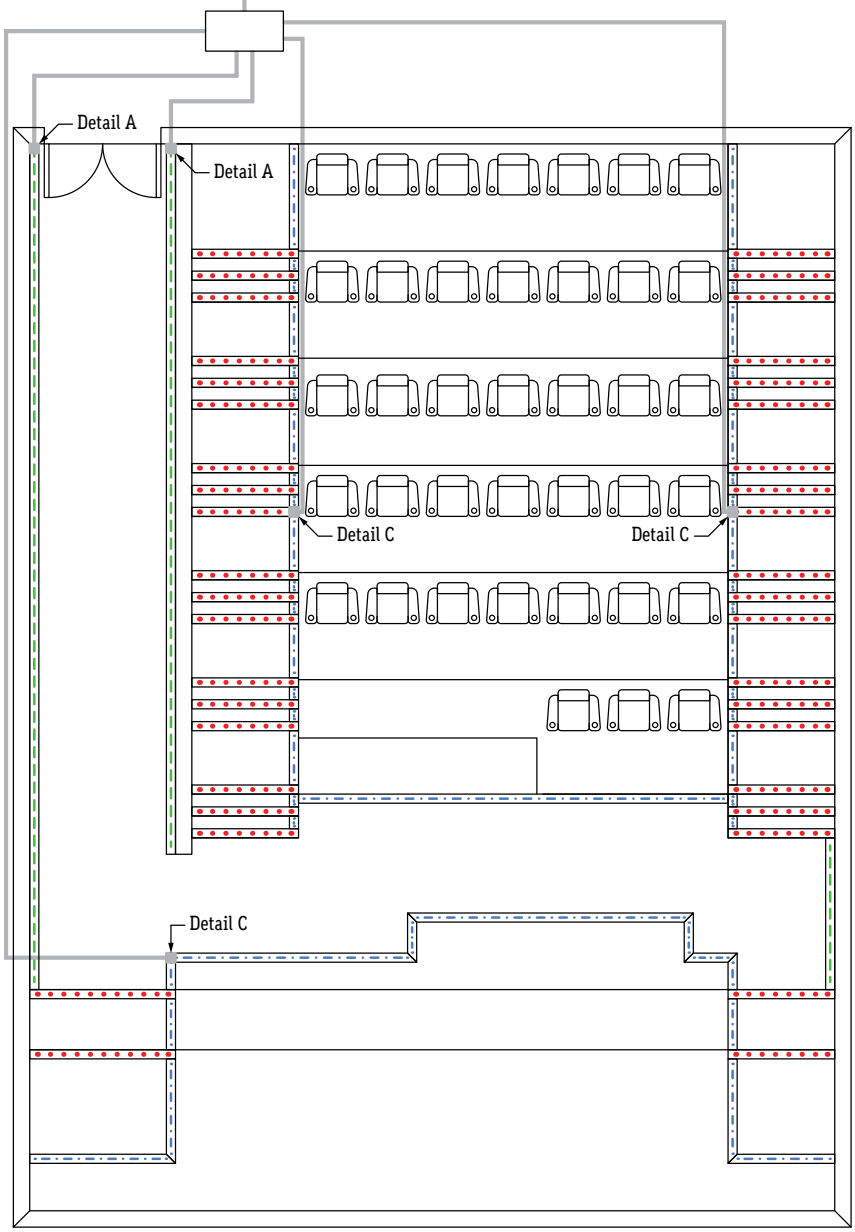
Typical Layout 1







LEGEND

PATTERN	DESCRIPTION
• • • • • • • • • • • • • • • •	Step Extrusion
- · - · - · - · - · - · - · - · -	Carpet to Floor
— — — — — — — — — — — — — — —	Carpet to Wall

TYPICAL LAYOUT FOR AUDITORIUM

(With less than 25 steps per side)

Install 5 J-Boxes (By Others) in the following locations:

- J-Box 1: Right side of entrance
- J-Box 2: Left side of entrance
- J-Box 3: Front of entrance
- J-Box 4: Left side of aisle
- J-Box 5: Right side of aisle

TRANSFORMER

Typical transformer used is TRA300-6F-120V-24VDC (Magnetic Forward Phase)

See Features on page 1for other dimming options

Note: Use separate wires for each circuit.
Do not use a common ground.
Use 14 Gauge Stranded Wire.
Use separate colors to identify circuits.

DETAILS

See "Typical Layouts 1 & 2 Details" on page 6

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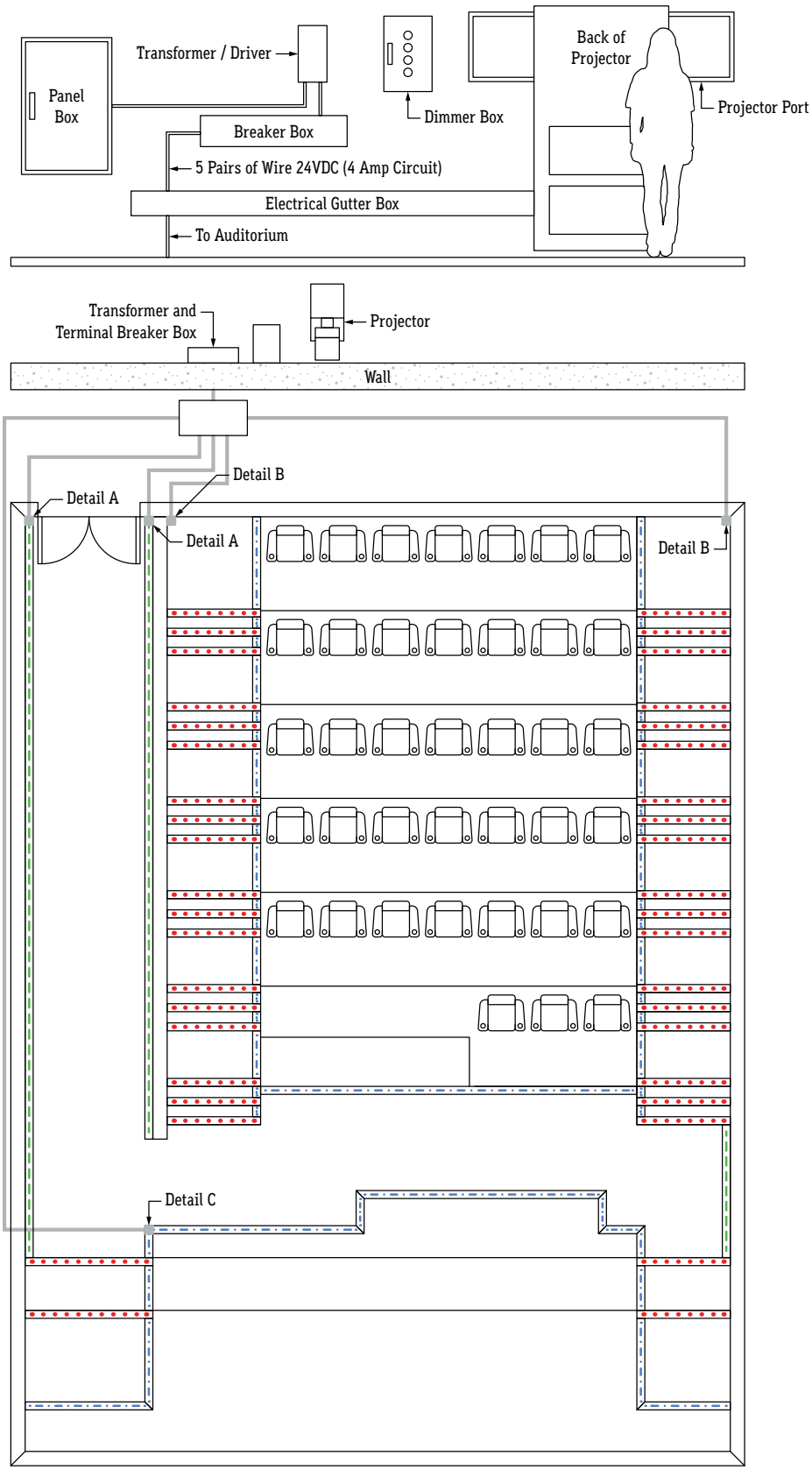
Typical Layout 2



LEGEND

PATTERN	DESCRIPTION
• • • • • • • • • • • • • • • •	Step Extrusion
- · - · - · - · - · - · - · - · -	Carpet to Floor
— — — — — — — — — — — — — — —	Carpet to Wall

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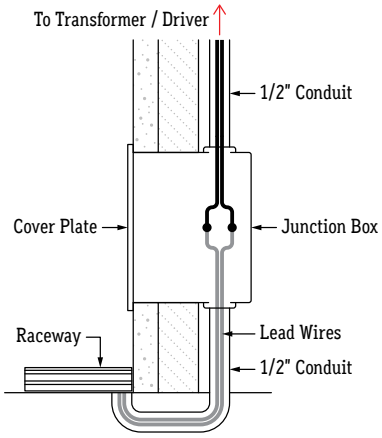
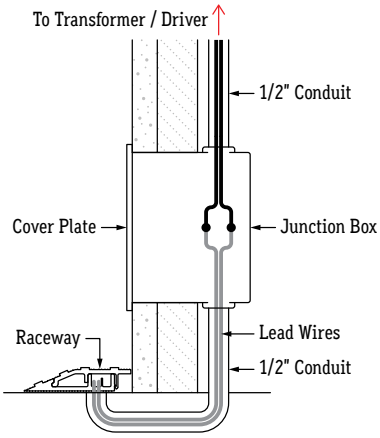
Typical Layout 1 & 2 Details

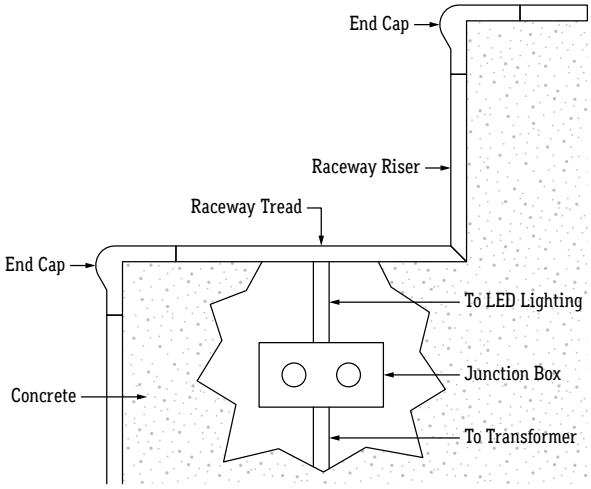
DETAIL A: Side View of Raceway



DETAIL B: End View of Raceway



DETAIL C: Side View of Step



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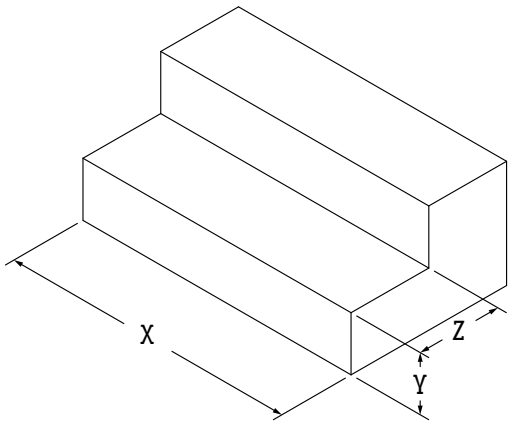
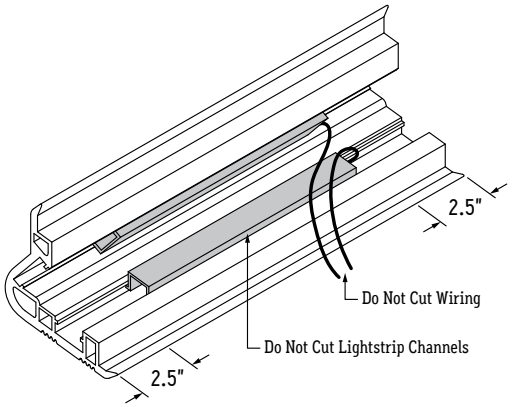
Mounting Fixture (Single Side) 1 of 2

Diagram of Steps

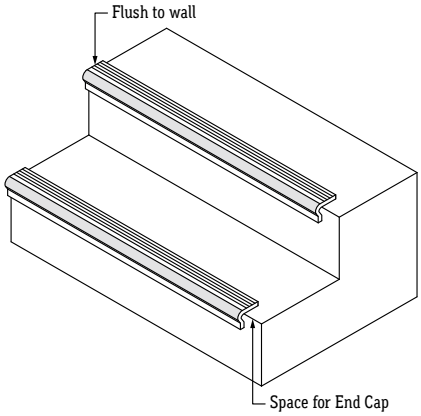


1. Measure the width (X) of the treads where step extrusion will be installed. Subtract 2-1/2" from the X value to compensate for the width of 1 End Cap.

2. If applicable, cut 2-1/2" off one end of extrusion to create space for the End Cap. Place lighting bullnose down, then measure from end of extrusion and mark a cut line. Slowly cut with a miter saw to prevent tearing or rough edges.
Note: Do not cut lightstrip or wiring.

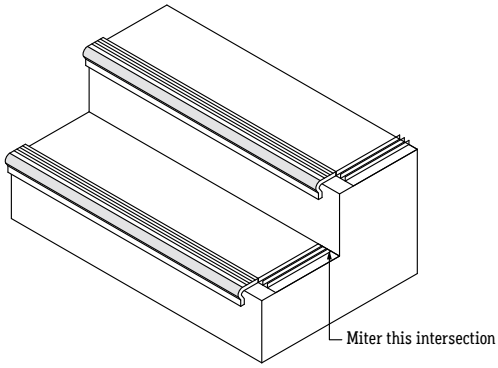


3. Apply a generous amount of adhesive to the underside of a clean, dry step extrusion. Apply step extrusion to clean, dry concrete or wood step.
Note: Smooth out extrusion after placing to eliminate adhesive bumps.



4. Measure the depth (Z) of the treads where the Raceway will be installed. Subtract 2" from the Z value to compensate for the depth of the End Cap.

5. Miter the Raceways that meet at the intersection of the Tread depth and tread height. Apply a generous amount of adhesive to the underside of a clean, dry raceway base. Apply raceway base to clean, dry concrete or wood step. Secure raceway base with 3/16" x 1-1/4" flat head tapcon screws for concrete. Use wood screws for wood steps. Refer to Raceway Mitering on page 12 for additional details.
Note: Smooth out extrusion after placing to eliminate adhesive bumps.



6. Measure the height (Y) of the treads where the raceway will be installed. Subtract 1-3/4" from the Y value to compensate for the height of the End Cap.

7. Miter the raceways that meet at the intersection of the tread depth and tread height. Apply a generous amount of adhesive to the underside of a clean, dry raceway base. Apply raceway base to clean, dry concrete or wood step. Secure raceway base with 3/16" x 1-1/4" flat head tapcon screws for concrete. Use wood screws for wood steps. Refer to Raceway Mitering on page 12 for additional details.
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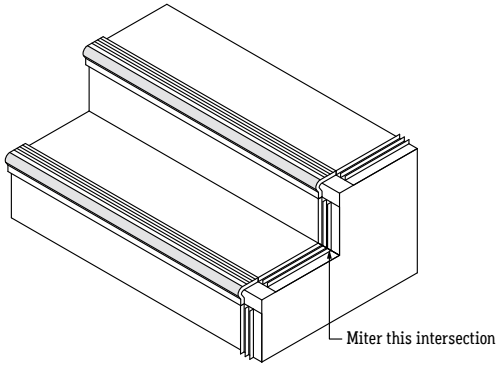

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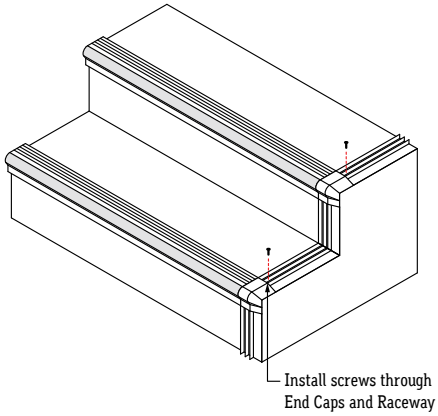
Mounting Fixture (Single Side) 2 of 2

8. Install End Caps by using them as a template to drill pilot holes. Secure end cap with 3/16" x 1-1/4" flat head tapcon screws for concrete. Use wood screws for wood steps. Note: Do not crush wiring with End Caps.



9. Install raceway covers onto all raceway bases. Snap in as shown below. Do not pinch wires with raceway cover or allow wires to be exposed.

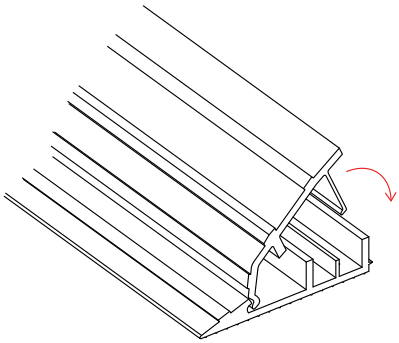
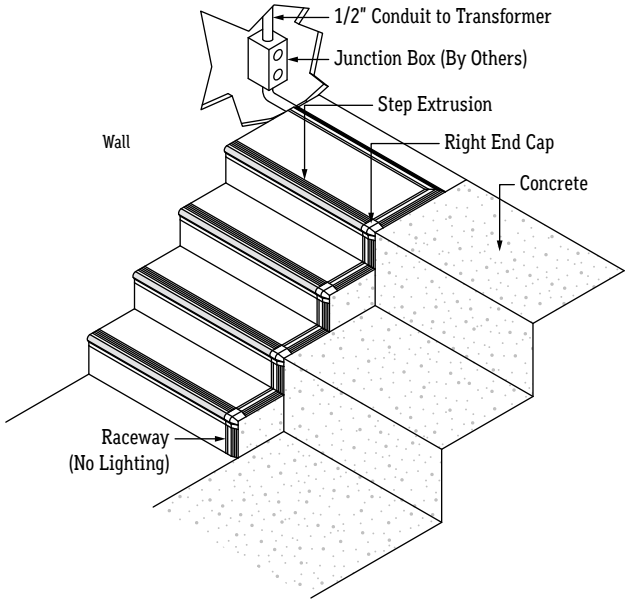


Diagram of Complete Assembly



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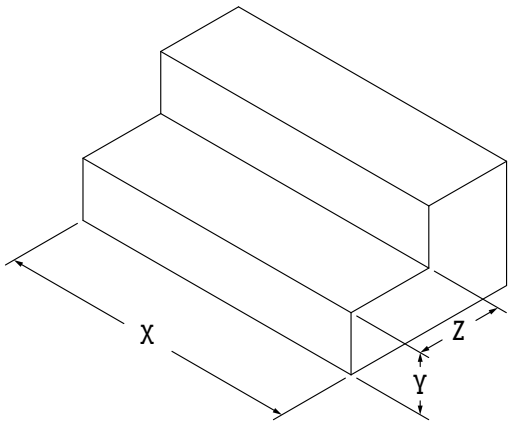
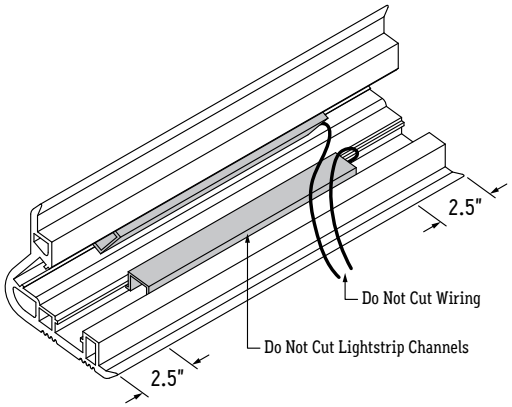
Mounting Fixture (Dual Side) 1 of 2

Diagram of Steps

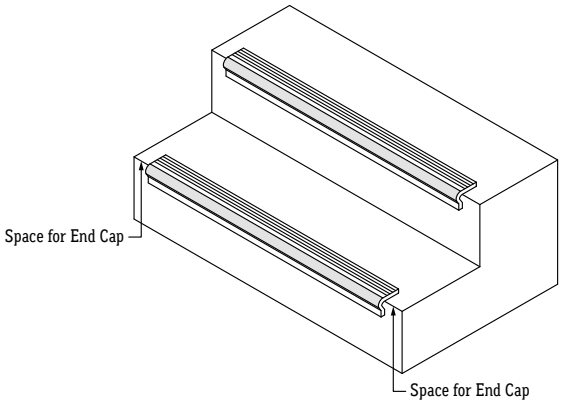


1. Measure the width (X) of the treads where step extrusion will be installed. Subtract 5" from the X value to compensate for the width of 2 End Caps.

2. If applicable, cut 2-1/2" off both ends of extrusion to create space for the End Caps. Place lighting bullnose down, then measure from end of extrusion and mark a cut line. Slowly cut with a miter saw to prevent tearing or rough edges.
Note: Do not cut lightstrip or wiring.

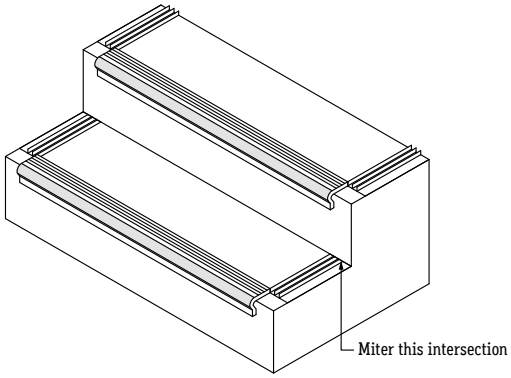


3. Apply a generous amount of adhesive to the underside of a clean, dry step extrusion. Apply step extrusion to clean, dry concrete or wood step.
Note: Smooth out extrusion after placing to eliminate adhesive bumps.



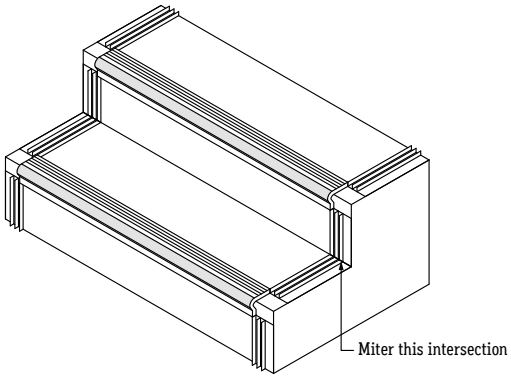
4. Measure the depth (Z) of the treads where the Raceway will be installed. Subtract 2" from the Z value to compensate for the depth of the End Cap.

5. Miter the Raceways that meet at the intersection of the Tread depth and tread height. Apply a generous amount of adhesive to the underside of a clean, dry raceway base. Apply raceway base to clean, dry concrete or wood step. Secure raceway base with 3/16" x 1-1/4" flat head tapcon screws for concrete. Use wood screws for wood steps. Refer to Raceway Mitering on page 12 for additional details.
Note: Smooth out extrusion after placing to eliminate adhesive bumps.



6. Measure the height (Y) of the treads where the raceway will be installed. Subtract 1-3/4" from the Y value to compensate for the height of the End Cap.

7. Miter the raceways that meet at the intersection of the tread depth and tread height. Apply a generous amount of adhesive to the underside of a clean, dry raceway base. Apply raceway base to clean, dry concrete or wood step. Secure raceway base with 3/16" x 1-1/4" flat head tapcon screws for concrete. Use wood screws for wood steps. Refer to Raceway Mitering on page 12 for additional details.
Note: Smooth out extrusion after placing to eliminate adhesive bumps.



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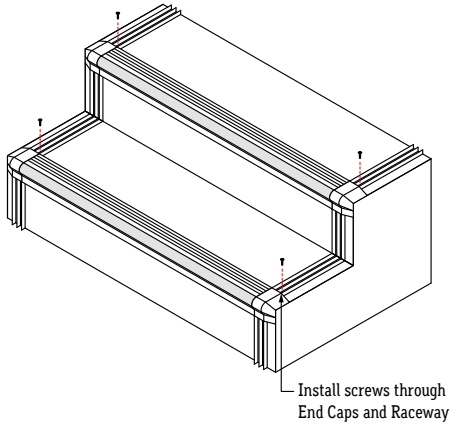
Mounting Fixture (Dual Side) 2 of 2

8. Install End Caps by using them as a template to drill pilot holes. Secure end cap with 3/16" x 1-1/4" flat head tapcon screws for concrete. Use wood screws for wood steps. Note: Do not crush wiring with End Caps.



9. Install raceway covers onto all raceway bases. Snap in as shown below. Do not pinch wires with raceway cover or allow wires to be exposed.

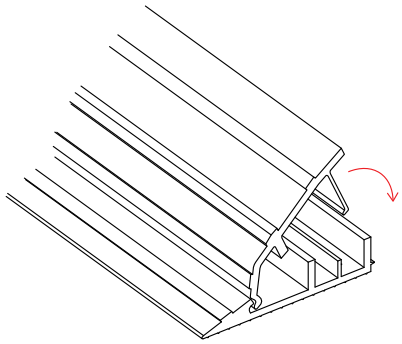
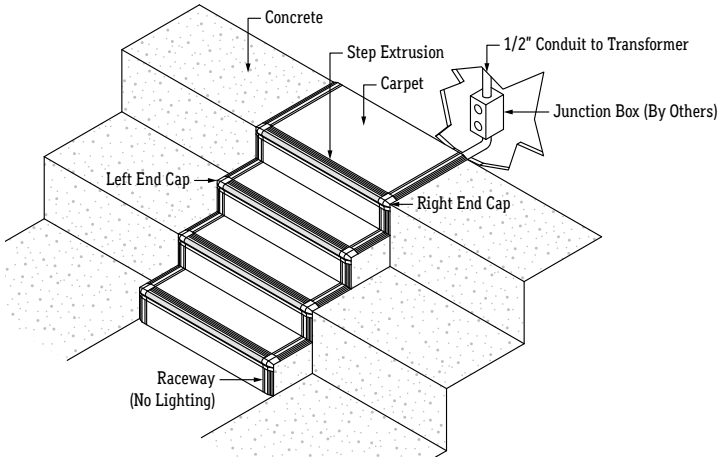


Diagram of Complete Assembly



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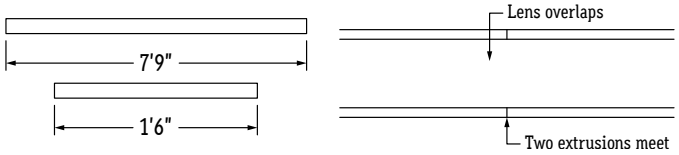
Miter Cut Guide

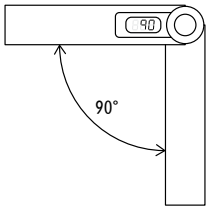
EXAMPLE: 90° MITER

Miter cuts are only to be performed on unassembled dry location products. Do not attempt to modify wet location products.

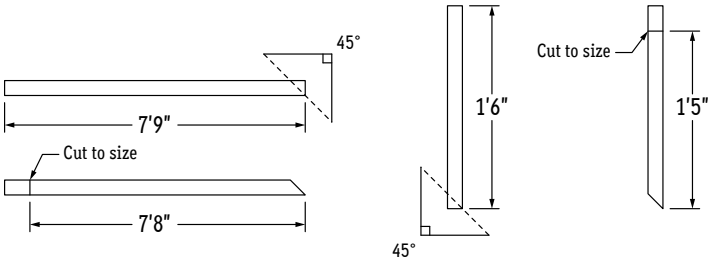
1. Measure area where mitered fixture will be installed. Cut extrusion and lens to size +1".
Example: 7'8" extrusion to meet 1'5" extrusion. Cut extrusions to 7'9" and 1'6"
Note: Plan your cuts so that lens will always overlap where two extrusions meet
Overlapping lenses helps keep extrusions in line and prevents light leaks.



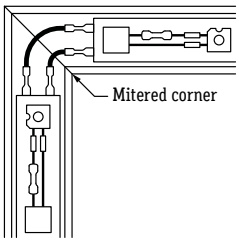
2. Measure angle where fixture will be mitered. Use an angle finder to determine exact angle.
Example: 90° Angle



3. Divide measured angle by 2 (90° ÷ 2 = 45°). Set miter saw to 45° and cut the end of each extrusion and lens where they will intersect. Verify the miter closes properly and fits in area, then trim excess extrusion on the end without the miter to exact size.

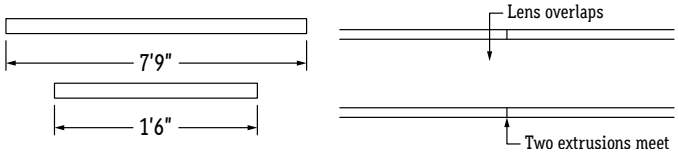


4. Use a continuous connector between mitered extrusions.
Do not bend lightstrip to turn corner. Refer to Application Guidelines for connector steps.

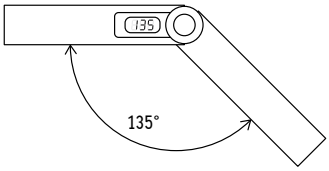


EXAMPLE: 135° MITER

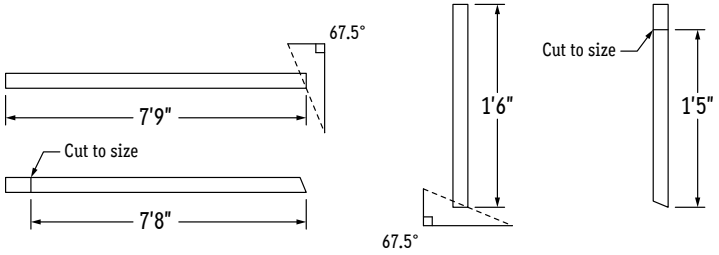
1. Measure area where mitered fixture will be installed. Cut extrusion and lens to size +1".
Example: 7'8" extrusion to meet 1'5" extrusion. Cut extrusions to 7'9" and 1'6"
Note: Plan your cuts so that lens will always overlap where two extrusions meet
Overlapping lenses helps keep extrusions in line and prevents light leaks.



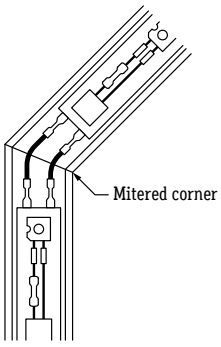
2. Measure angle where fixture will be mitered. Use an angle finder to determine exact angle.
Example: 135° Angle



3. Divide measured angle by 2 (135° ÷ 2 = 67.5°). Set miter saw to 67.5° and cut the end of each extrusion and lens where they will intersect. Verify the miter closes properly and fits in area, then trim excess extrusion on the end without the miter to exact size.



4. Use a continuous connector between mitered extrusions.
Do not bend lightstrip to turn corner. Refer to Application Guidelines for connector steps.



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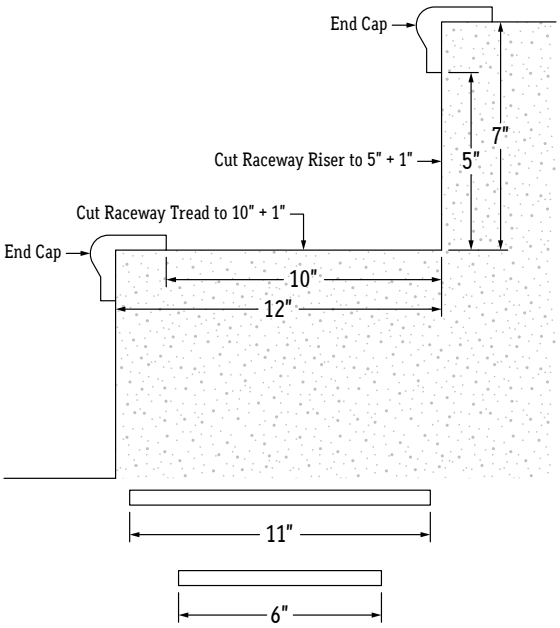
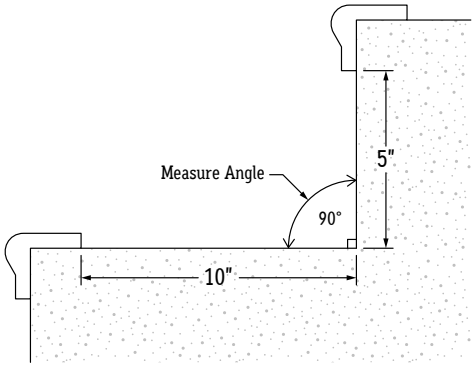
Raceway Mitering

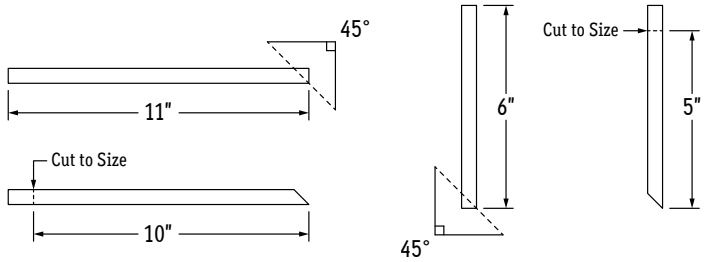
1. Measure Tread from end of End Cap to riser. **Example:** 10"
Measure Riser from bottom of End Cap to Tread. **Example:** 5"
Cut Raceway extrusions to size +1". **Example:** 11", 6"



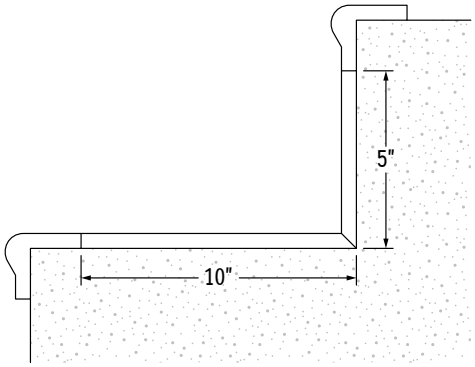
2. Measure angle where raceway will be mitered. Do not assume the angle.
Note: Use an angle finder to determine exact angle. **Example:** 90°



3. Divide measured angle by 2 (90°/2 = 45°). Set miter saw to this angle and cut the end of Raceway extrusions where they will intersect. Trim excess raceway on opposite end to size.



4. Install Raceway extrusions using the steps from Mounting Fixture (Single Side) or Mounting Fixture (Dual Side), depending on your application.



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