

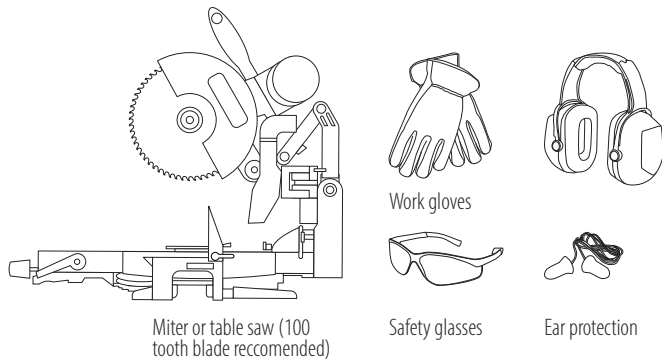
# STYX<sup>®</sup> Installation Guide

## Important Information

- Please read these instructions thoroughly prior to beginning the STYX installation. These instructions are intended for interior applications only.
- This instruction sheet is intended to provide a specific guide to follow for the installation of STYX. Contained within is the technical information and installation techniques required to complete an efficient, neat, and long-lasting installation.
- Prior to installation, inspect all materials for damage or missing parts. If you discover damaged or missing materials, please notify the factory at 800.233.8493 (US), or 888.895.8955 (Canada).
- STYX must be installed in accordance with these instructions! Failure to follow these instructions may void any product warranties and result in an unsuccessful installation. For specific questions regarding the installation of STYX, please call the factory 800.233.8493 (US).

## Cutting

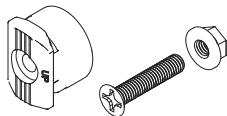
- Always be sure to wear appropriate PPE: gloves, eye & hearing protection.
- Cut using a miter saw or table saw.
- All field cuts are to be square, and edges deburred.



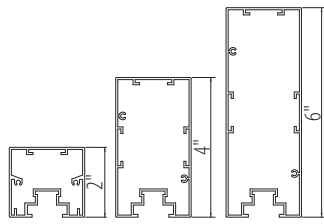
# STYX<sup>®</sup> Installation Guide

## Tools and Hardware

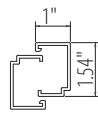
- Provided by CS
  - Quick Lock™ connectors
  - Quick Lock wrench
  - Self-drilling screws for installation rail
  - Flat head screws for end caps
  
- Recommended
  - Drill/Driver
  - Tape measure
  - Level or horizontal & vertical line laser
  - Clamps



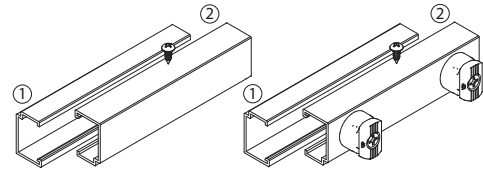
Quick Lock connectors



3 extrusion sizes



Installation rail



Pre-drilled rail

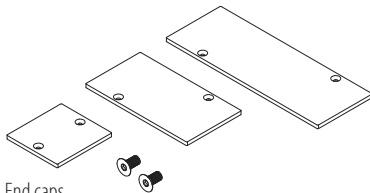
Pre-installed with Quick Lock connectors

- ① Installation rail wall side
- ② Installation rail profile side

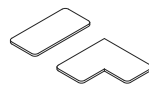
Note: Quick Lock connectors may or may not come pre-installed



Quick Lock Wrench

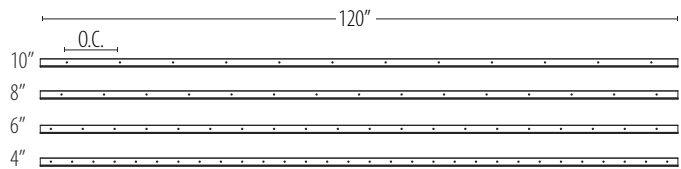


End caps



Splices

### Installation Rail On-center Spacing



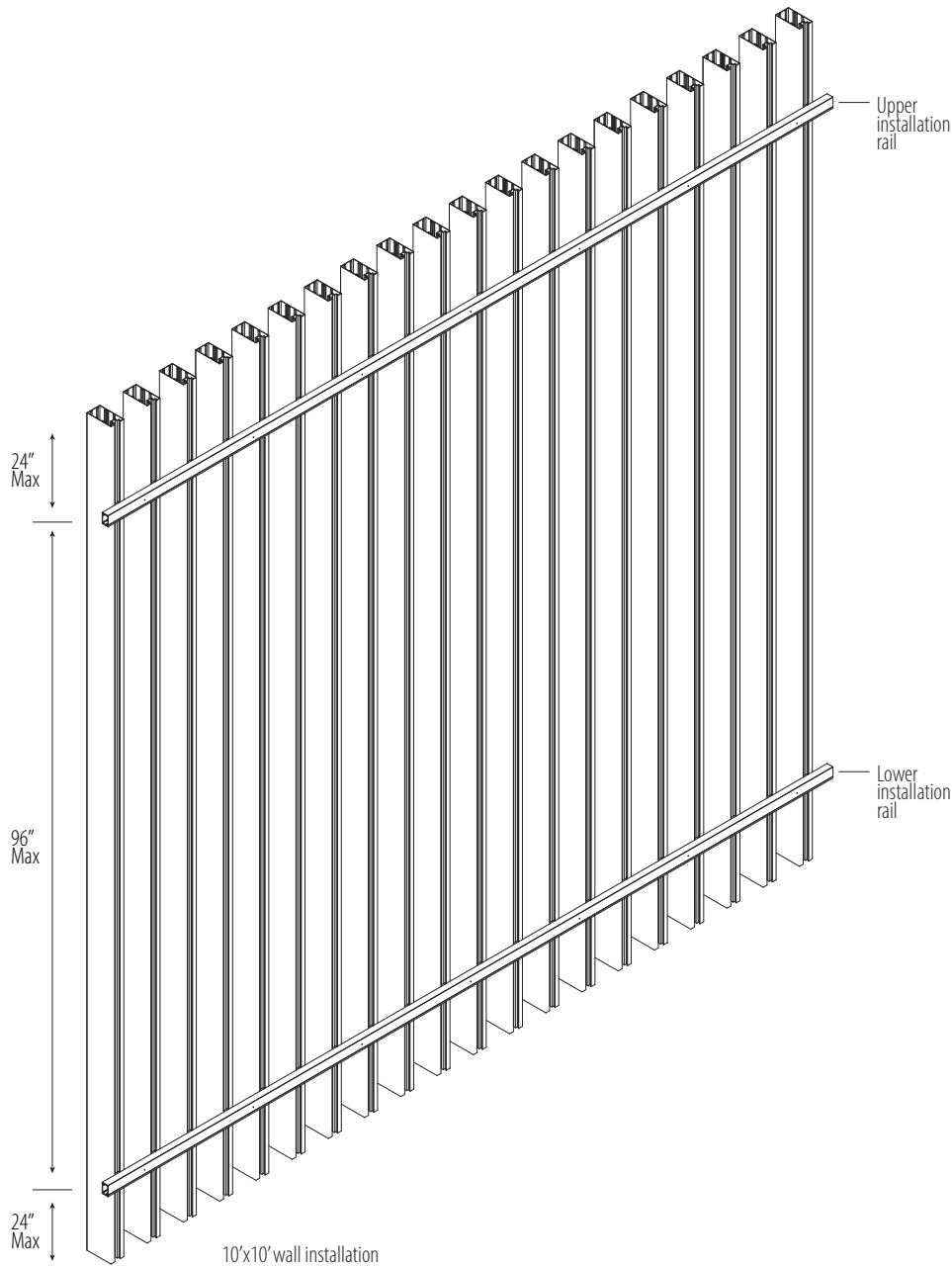
Note: The distance from end of the install rail to the first Quick Lock Connector is half the on-center (O.C.) spacing distance.

# STYX<sup>®</sup> Installation Guide

## Wall Installation Instructions

Note: Ensure walls are plumb, flat, smooth and finished prior to installation. For a wall application of 10' STYX<sup>™</sup> profiles, the installation rails are required at a maximum spacing of every 8' or two installation rail assemblies per standard 10' span.

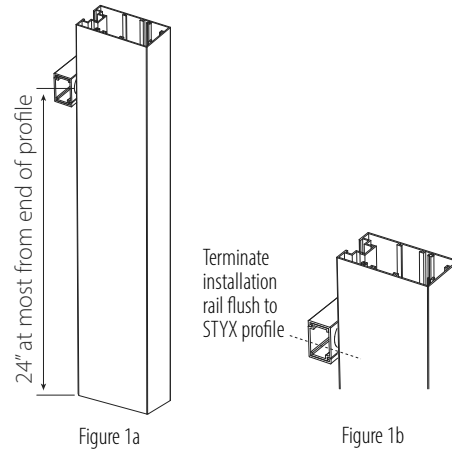
The installation rails should be no more than 24" away from the end of where the STYX profiles will line up.



# STYX<sup>®</sup> Installation Guide

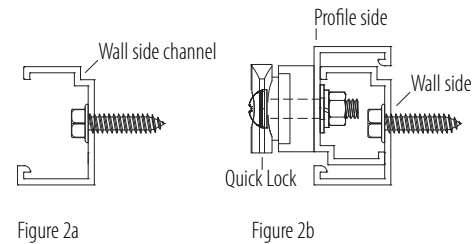
## Step 1: Mark Installation Rail Locations

- a. The lower installation rail should be no more than 24" away from the end of where the STYX™ profiles will line up (Figure 1a)
- b. The installation rails should line up flush with where the first STYX profile is to be placed (Figure 1b)
- c. For upper installation rail, measure and ensure 24" max from end of profiles



## Step 2: Attach Wall Side Installation Rails To Wall

- a. Ensure that the top of the wall side installation rail (Figure 2a) has a channel in it to allow for the hanging and suspension of the profile side rail (Figure 2b)
- b. Connect wall side installation rail to wall via secure fastener. The maximum fastener spacing is 32" on-center. (See chart below).
- c. Continue to install all lower and upper wall side installation rails required for your installation.



WALL CONDITION	SPECIFIED FASTENER	DRILL DIAMETER	
		WALL	RETAINER
Steel stud/gypsum wall	1/4-20 x 3" hex head bolt 1/4-20 x 2" toggler 1/4" lock washer	3/4"	N/A
Concrete/concrete block	1/4-20 x 1 1/2" hex head bolt 1/4" lock washer 1/4-20 x 1 1/4" 4-way lead shield	1/2"	N/A
Wood stud/gypsum wall	1/4" x 3" hex head lag screw 1/4" lock washer	3/16"	N/A

# STYX<sup>®</sup> Installation Guide

## Step 3: Install Profile Side Installation Rail

Note: If Quick Lock™ connectors are not pre-installed, use a 5/16" bit to pre-drill for Quick Lock installation. Install with provided hardware. (Figure 3a) If Quick Lock connectors are installed into rail, check tightness for a snug fit.

- Align and interlock the profile side rail so it is flush with the wall side rail. (Figure 3b)
- Insert a self-drilling screw through the top for a secure assembly. (Figure 3c)
- Continue to connect and secure profile side rails to wall side rails at lower and upper locations.

Tip: A laser can be used to check that upper and lower Quick Lock connectors are aligned. Sticks will not be straight if Quick Lock connectors are misaligned.

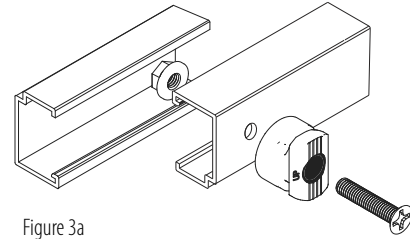


Figure 3a

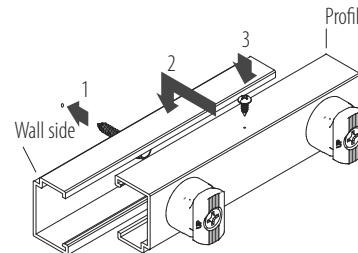


Figure 3b

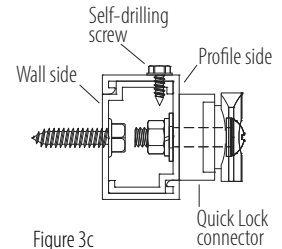


Figure 3c

## Step 4: Install STYX™ Profiles

- If applicable, install end caps at end of stick. For 4" and 6" models, end caps will be marked with a colored sticker to help identify correct installation. (Figure 4a)
- Ensure Quick Lock connectors are in a vertical position. (Figure 4b)
- Position the first STYX profile to sit on the left-most Quick Lock. (Figure 4c) Ensure the bottom of the STYX profile is at the desired height.
- Keep the STYX profile in place and simultaneously turn the Quick Lock wrench clockwise in a 90 degree rotation to engage the Quick Lock at the top and bottom. (Figure 4d)

Note: Engaging with the wrench will move the STYX profile; hold the profile steady.

- Continue installing STYX onto Quick Locks until your wall installation is complete.

For lengths longer than 10', see splicing instructions.

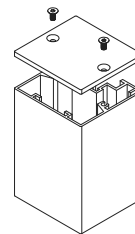


Figure 4a

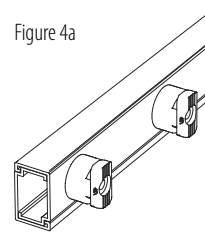


Figure 4b

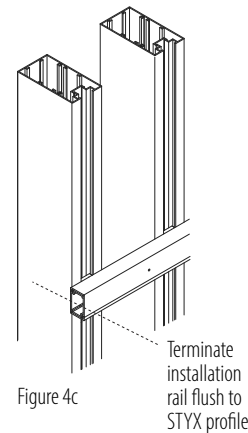


Figure 4c

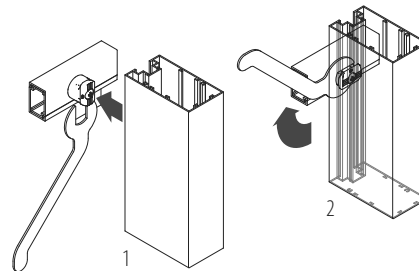


Figure 4d

# STYX® Installation Guide

## Ceiling Installation Instructions

**Important Notes:**

- When working overhead, we recommend wearing a hard hat.
- CS is not responsible for rigging requirements, but below are conditions and recommendations for attachment:

CEILING CONDITION	SPECIFIED FASTENER	DRILL DIAMETER	
		WALL	RETAINER
Steel stud/gypsum ceiling	1/4-20 x 3" hex head bolt 1/4-20 x 2" toggler 1/4" lock washer	3/4"	N/A
Concrete/concrete block	1/4-20 x 1 1/2" hex head bolt 1/4" lock washer 1/4-20 x 1 1/4" 4-way lead shield	1/2"	N/A
Wood stud/gypsum ceiling	1/4" x 3" hex head lag screw 1/4" lock washer	3/16"	N/A

### Step 1: Installation Rails

- There is a specific direction in which the installation rail should be positioned. The ceiling side of the installation rail has a channel in it that allows for the hanging and suspension of the profile side rail. (Figure 1) Ensure that all ceiling side rails are aligned in the same direction, as this makes it easier for installation.
- A connection is required at a maximum of every 8' (two installation rails per standard 10' span).
- We recommend two people install simultaneously.
- Depending on site conditions and local codes, the installation rail can be adapted and connected to fit a variety of suspended ceiling products.
- Connect installation rail to ceiling specified for site conditions.

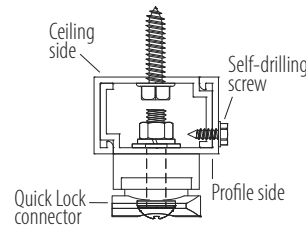
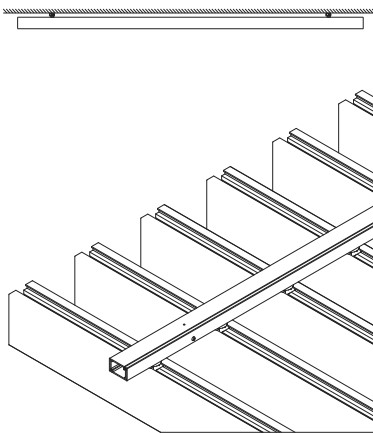
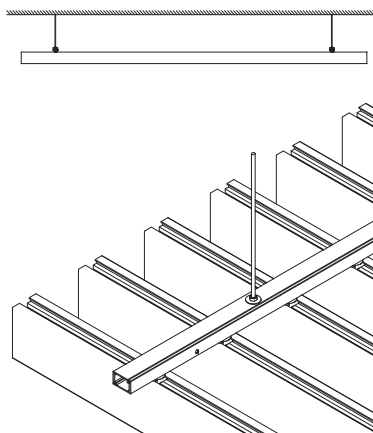


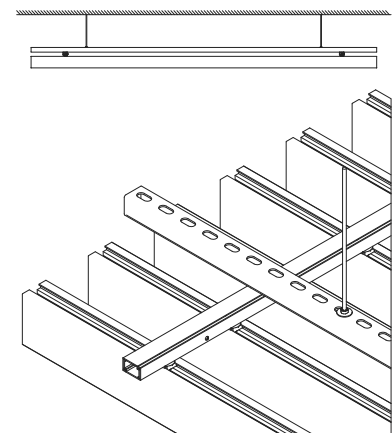
Figure 1



Finished ceiling



Threaded rod to rail



Rail to Unistrut

# STYX® Installation Guide

## Step 2: Quick Lock™ Connectors

- a. If Quick Lock connectors are pre-installed (Figure 2a) check tightness for a snug fit.
- b. If not installed (Figure 2b) secure Quick Lock connectors into profile side installation rail with provided hardware. Ensure Quick Locks are in the same orientation as the STYX profiles will be positioned.

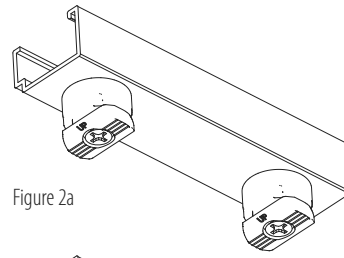


Figure 2a

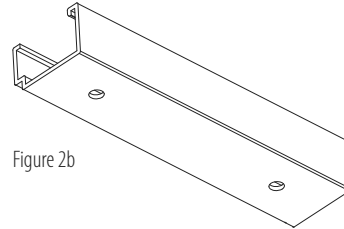


Figure 2b

## Step 3: Install Profile Side Installation Rail

- a. Connect the profile side installation rails to ceiling side installation rails. (Figure 3a)

We recommend two people simultaneously install the ceiling side installation rails.

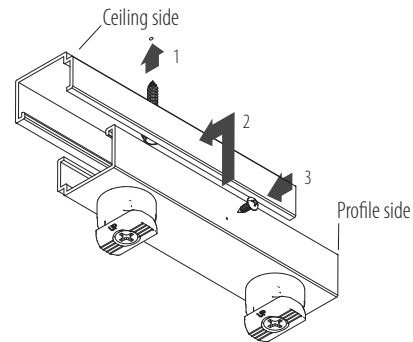


Figure 3a

- b. Secure installation rail assembly together with provided self-tapping screws. (Figure 3b)

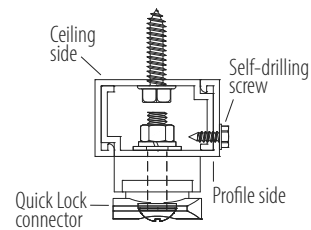


Figure 3b

## Step 4: Install STYX Profiles

- a. If applicable, install end caps at either end of each stick. (Figure 4a)

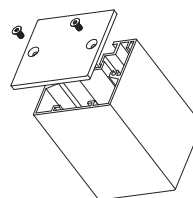


Figure 4a

# STYX® Installation Guide

## Step 4: Install STYX™ Profiles (continued)

b. Ensure Quick Lock connectors are in the same orientation that the sticks will be positioned. (Figure 4b)

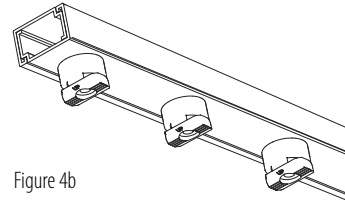


Figure 4b

c. Position the first STYX profile to sit on the left-most Quick Lock. Ensure the end of the STYX profile is at the desired location. (Figure 4c)

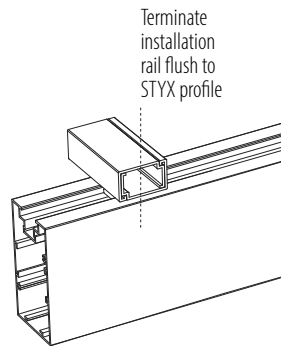


Figure 4c

d. Keep the STYX profile in place and simultaneously turn the Quick Lock wrench clockwise in a 90 degree rotation to engage the Quick Lock connectors at the top and bottom. (Figure 4d)

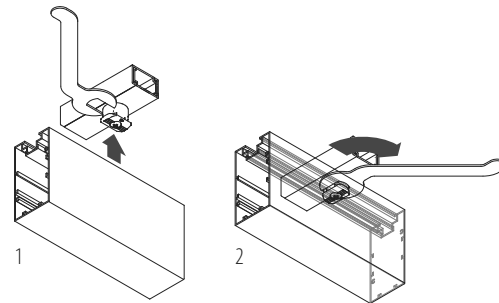


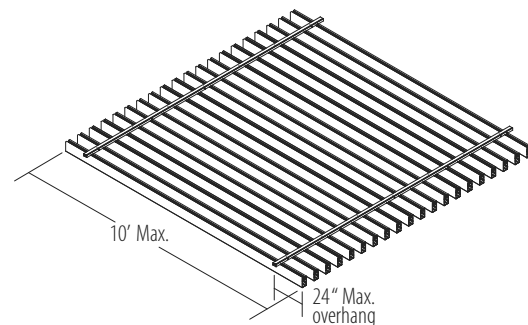
Figure 4d

Note: engaging with the wrench will move the STYX profile; hold the profile steady.

e. Continue installing STYX onto Quick Locks until your ceiling installation is complete. For lengths longer than 10', see splicing instructions.

### Additional Ceiling Notes

For a multi-grid installation: if STYX spacing, size and overall weight of the module permits, STYX can be pre-installed into installation rails and mounted as a grid instead of stick by stick.

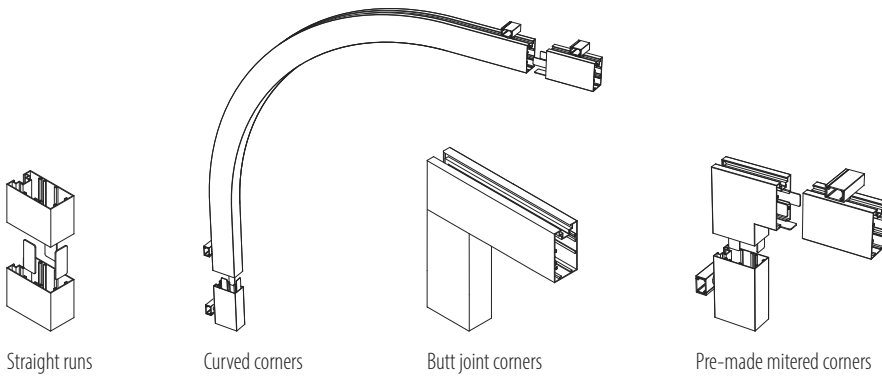


Finished ceiling assembly

# STYX® Installation Guide

## STYX Splices

Splicing can be applicable to multiple conditions including:



### Step 1: Apply Epoxy

Apply small dabs of 10-minute epoxy to the splice plate channels inside the STYX profile, prior to insert splice plates. (Figure 1)

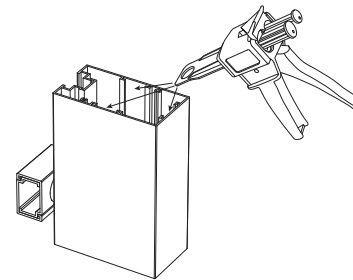


Figure 1

### Step 2: Insert Splice Plate

Insert splice plates into the STYX profile channels with epoxy in the profile. (Figure 2)

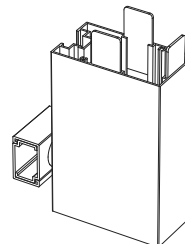


Figure 2

### Step 3: Join STYX Profiles

Repeat steps 1-2 for the next STYX profile. Once the epoxy has cured (10-15 minutes), push together for a tight seam. (Figure 3)

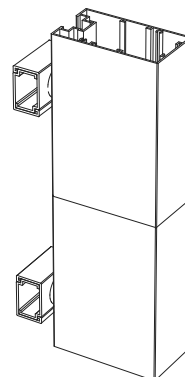


Figure 3

Note: Ensure 2" minimum spacing from center of installation rail to end of STYX profile to allow for installation of splice plates."

# STYX<sup>®</sup> Installation Guide

## LED & Electric Installation Guide

### Warnings

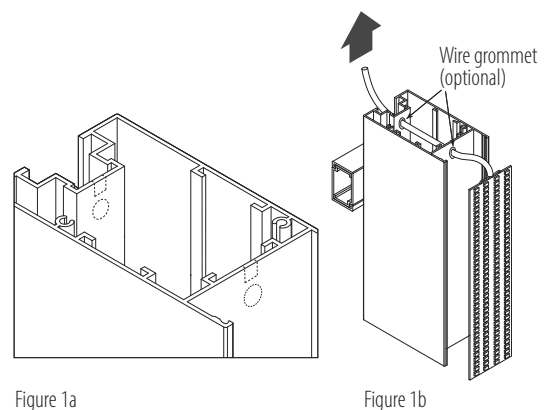
- LED strips shall be UL listed, 24 volt DC max, 10.5 watts per foot total load for front and back strips.
- Disconnect power from the electrical circuit before installing or making any modifications to LED components.
- Do not connect LED equipment directly to line voltage. STYX operates on 24V DC low voltage and must be powered by a 24VDC Class 2 power supply.
- All LED components are part of a listed system configuration.
- For indoor use only, not rated for exterior applications.

### Notes and Considerations

- Coordinate installation with all related trades to ensure proper integration.
- All electrical work must be performed by a licensed electrician and comply with local, state, and national electrical codes.
- Install in accordance with the manufacturer's instructions. Failure to follow installation guidelines will void the warranty.
- Clean the LED channel with denatured alcohol prior to installation.
- Mount the STYX front light profile as the electrician connects the lead wire.
- Do not twist, bend, fold, or crease the LED tape. Do not try to remove LED tape after it has been applied.
- Ensure that the lead wire extends at least 24" from the wall to facilitate connection and installation.
- If a metal backer plate is present in the wall, use a protective collar at the wire exit point to prevent damage.
- Confirm that access locations meet applicable local, state, and national codes.
- Coordinate wire drop and pass-through locations with the electrical trades.
- Each power supply supports a specific maximum run length of LED tape; refer to standard product options for correct selection.
- Output lead wires from the power supply must be 16 AWG (by others). Voltage drop calculations are the responsibility of the installer or electrician.

### Step 1: Lead Wire Location Planning

- Determine location at end of stick for starting point for the lead wire. In some instances, slight modifications to STYX may be required for a clean and minimally disruptive installation. For example, on front light profile installations, a notch (Figure 1a) will need to be made by drilling through the front face at the edge, and through the aluminum at the rear in order to allow the cable to pass to the back of the stick. (Figure 1b)



# STYX® Installation Guide

## Step 2: Measure LED Tape

- b. Measure out the length of LED tape needed for the specific run. (Figure 2a) Cut the tape at the first cut location short of the stick's length. Do not cut through the tape anywhere else as this will damage the circuit. (Figure 2b)

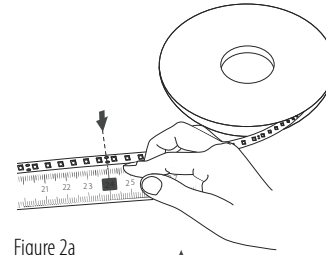


Figure 2a

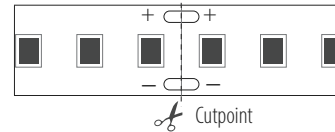


Figure 2b

## Step 3: Install LED Tape

- a. Using a 50/50 alcohol mix, thoroughly clean surface area where LED will be installed. Allow 5 minutes to dry
- b. Peel back 0.5" of the adhesive tape's protective film on one end of LED and use firm pressure to adhere it to the desired surface, avoiding air bubbles. Continue peeling the film and adhering. (Figure 3a)

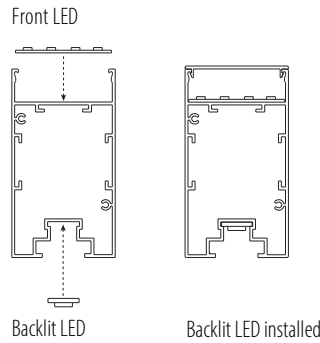


Figure 3a

- c. Depending on connection method, installer may plug, screw connect, peel and slide connectors or solder connections for jumping to next run. (Figure 3b)
- d. Ensure polarity is aligned before any crimping or soldering. Be sure not to bend or crimp the tape when inserting into connector.

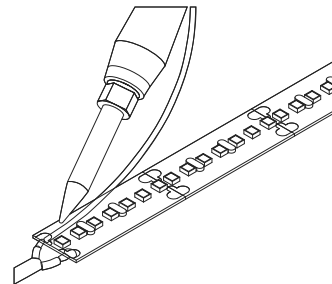


Figure 3b

## Step 4: Install End Caps

- a. Install ends caps if specified and ensure wires are positioned to the back of the stick. (Figure 4a)

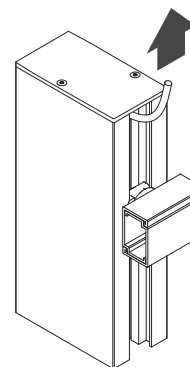


Figure 4a

# STYX<sup>®</sup> Installation Guide

## Step 5: Cut Diffuser Lens to Length

- a. After assembling the LED tape and end caps, measure and cut the diffuser lens to the length of the run with razor knife or slowly with chop saw. (Figure 5a)

Note: The diffuser lens should run as long as possible when pre-made corners, spliced seams, or curved corners are used.

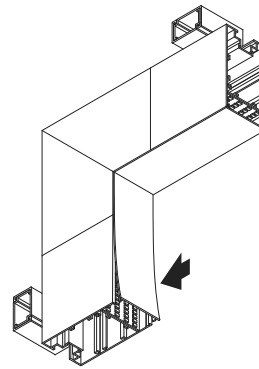


Figure 5a

## Step 6: Backlit LED Installation

- a. Backlit LED will not be interrupted by the Quick Lock™ or provided hardware. Using different hardware with the Quick Lock may damage the LED strip. (Figure 6a)
- b. Using a 50/50 alcohol mix, thoroughly clean surface area where LED will be installed. Allow 5 minutes to dry.
- c. Peel back 0.5" of the adhesive tape's protective film on one end of LED and use firm pressure to adhere it to the desired surface, avoiding air bubbles. Continue peeling the film and adhering

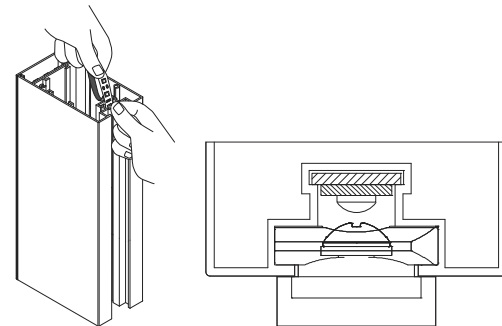


Figure 6a

## Step 7: Install Diffuser Lens

- a. Starting at one end, align and compress the flexible legs of the diffuser lens into the snap fit channel of the STYX™ front light profile. Progressively install the diffuser lens down the length of the stick. (Figure 7a)

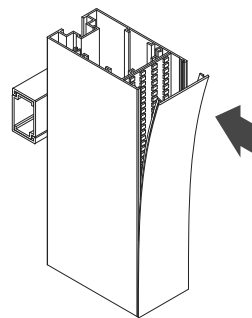


Figure 7a

## Step 8: Install Light Termination Block (Optional)

- a. Install the provided Light Termination Block at the end of the lens. (Figure 8a)

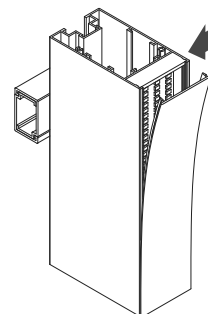


Figure 8a