Application Note – Xicato Linear Tape (XLT) Installation Guide
Version 18.05.01

Introduction

The Xicato Linear Tape (XLT) is a flexible, adhesive-backed tape solution designed for cove, display case, under-cabinet, and other low-density applications. The purpose of this application note is to provide general guidance on installing Xicato XLT LED tape.

Safety and Warnings

⚠ Do not connect low voltage tape into line voltage.

⚠ Install in accordance with national and local electrical code regulations.

⚠ This product is intended to be installed and serviced by a qualified, licensed electrician.

⚠ Only install with a compatible Class 2 DC Constant Voltage LED driver.

⚠ Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.

⚠ Ensure applicable wires are installed between power supply, fixture, and any intervening control devices.

⚠ Disconnect power before cutting tape.

General Handling

Make sure your hands and tools are clean before handling XLT.

Do not drop XLT or allow tape to rattle in a loosely packed container. This may dislodge LEDs, damage tape backing, or break electrical contact.

Do not apply force on the LEDs or touch the phosphor coating on top of the LEDs (the light emitting surface). These surfaces are sensitive to scratches, contamination, and debris which may decrease LED performance. If any dust or debris accumulates on LED surface, clean the surface by blowing on it with clean air. The phosphor surface can also be cleaned by gently wiping with isopropyl alcohol.

Do not bend XLT tape to a diameter less than 60mm (2.36 inches).
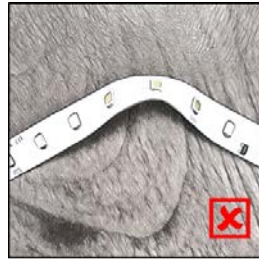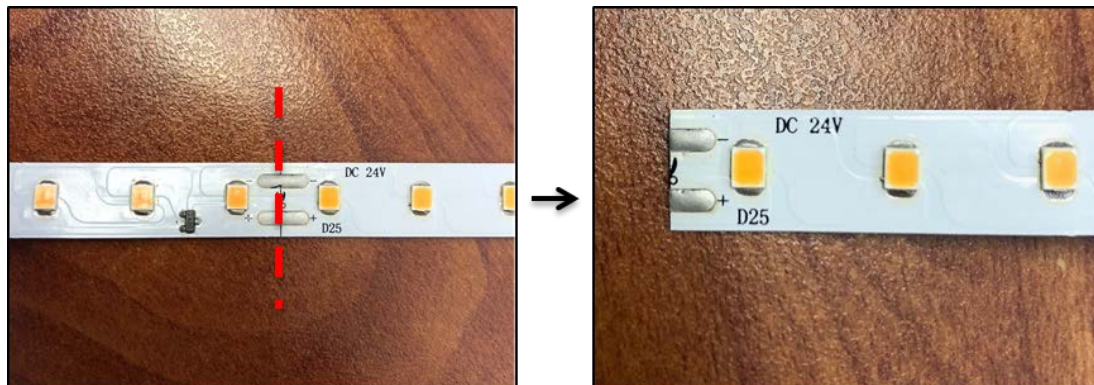

Do not bend tape on a horizontal plane.

Do not cover XLT tape with any materials

Installation

1. **Determine location to install components.**

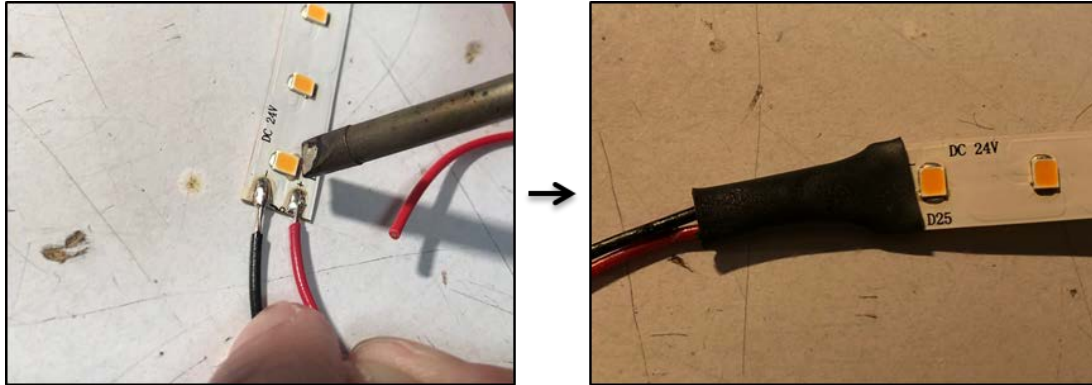2. **Cut XLT to desired length.**

   Important! If using a clamp style connector, skip ahead to **Step 3** for unique cutting instructions.

   If not using a clamp style connector, cut at line indicated.

   Solder lead wires onto terminal. Take care not to damage LED when soldering.

   Place ½" shrink tube on lead wires. Do not cover LED with shrink tube. Shrink the tube with heat gun.

Proceed to **Step 4.**

3. **If using clamp style connector**, do not cut at line indicated in **Step 2**.

    Instead, cut XLT along outside edge of the solder pad so the full solder points remain intact.
    This will ensure length of clamp connector closes properly.
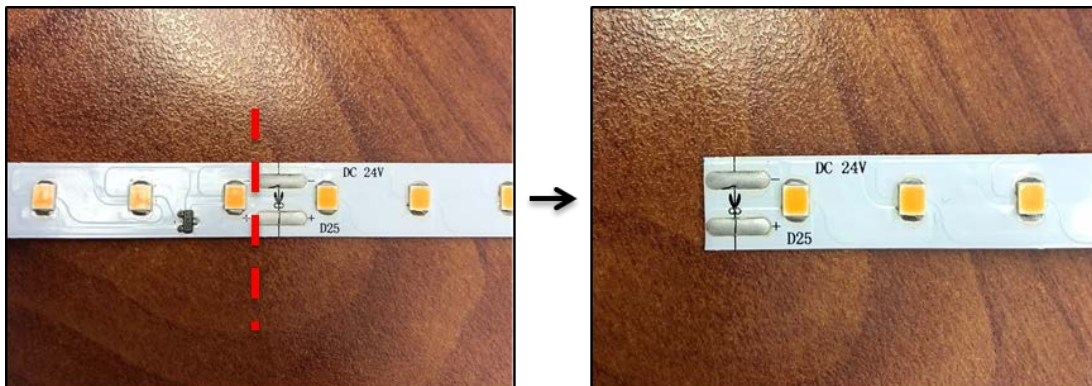
Insert XLT into clamp style connector. Ensure tape is oriented properly for correct polarity.
Verify contact/solder points of XLT are directly underneath metal conductors of clamp style
connector.

Firmly close connector.

4. Test Connection.

Connect 24V Class 2 LED power supply. Turn on power and verify all components are working properly. Turn off power again before mounting.

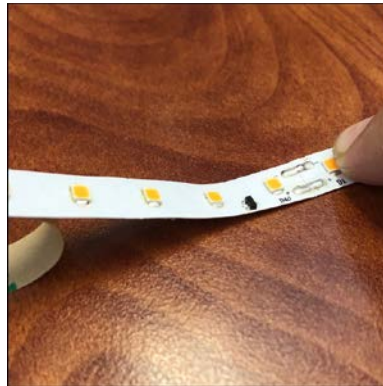**5. Prepare surface for mounting XLT.**

Thoroughly clean the area where XLT will be installed. Using a 50/50 alcohol mix, clean the area where tape will be applied. Allow time for alcohol to dry.

For porous materials like wood and brick, apply paint or primer to the surface. This will help create a better bonding surface for the adhesive backing.

6. Mount the XLT.

Remove the 3M™ adhesive backing. Do not remove more of the backing than is needed to prevent dust and debris from contaminating the adhesive.

Apply firm pressure to the bonding surface, working one end to the other. Avoid pressing directly on LEDs.

Traditional Wiring Diagram

AC ON/OFF Switch

AC Power

Install applicable wire gauge & type.

V+

24V Constant Voltage PSU

V-

N

L

PSU may not require ground fault connection. Refer to PSU specifications for more info.

DC 24V

XLA5095274024A/01

DC 24V

DC 24V

XLA5095274024A/01

5m maximum series run limit