SNAP/SNIP 1" (25 mm) Clear Acrylic Standoffs (10 pack) . . . . P/N: L-SPSTND1-1
SNAP/SNIP 2" (51 mm) Clear Acrylic Standoffs (10 pack) . . . . P/N: L-SPSTND2-1

Installation Instructions
Standoffs for SNAP & SNIP Panels

Tresco's® LED SNAP and SNIP Panel Lights are designed for backlighting, shelf lighting and cabinet lighting applications (indoor locations only). This system is dimmable.

READ ALL INSTRUCTIONS BEFORE INSTALLING SYSTEM.

Before beginning installation, be sure power is turned OFF to light system.

WARNING: Do NOT handle or assemble while SNAP and SNIP Panels are turned on. The electrostatic discharge could damage the LEDs.

This document lists how Tresco® SNAP & SNIP Panels can be backlit in certain applications.

The instructions provided are recommendations based on typical installation. When you use these instructions, you are consenting to be bound by the provisions in this paragraph. These instructions provide an illustrative method for using and installing Tresco® Lighting standoffs. These instructions are recommendations based off a typical installation and are not intended to address every possible contingency that might be encountered during installation or endorse the use of any tools or accessories.

Tresco® Recommended Products for Backlighting:

- LED SNAP Panel Lights
- LED SNIP Panel Lights

Type of Surface Material

The most important component is the translucency of the surface. Everyone will tell you their material is translucent, and you can light it up! However, this isn't always the case. Translucency is a spectrum. Every stone, for example, is different - even if it comes from the same place. In some materials, the translucency may change even within the same surface, so there are spots that do not let any light pass.

We recommend that you test your surface to determine how well it will respond to light. Inspect the slab you are buying first or get a sample beforehand. There can be a lot of variation from material to material.

Testing Translucency of a Surface

The easiest and quickest way is to just take your phone flashlight and put it behind the material you want to illuminate.

Start by placing the light directly on the back of the surface. If you see a dot with a slight halo of light around it, like the planet Saturn, then that is a good indication the surface is translucent. As you move your phone away from the back of the surface, the halo should get bigger with more of the surface illuminating. This indicates the surface will 'carry' the light and will produce a fantastic glow. Of course, if you can see the entire phone through the surface, then you don't need to test, it is almost transparent.

On the other hand, if you just see an illuminated dot with very little halo, that is not a good sign that the surface is very translucent. As you move the light away from the back six inches or so, does the light become fainter and you can barely see the defined dot, let alone a growing halo? Then that means to illuminate that surface, then you must create that level of light across your entire surface, basically 1000 little light dots, which is difficult.

Color Temperature of the Light Source

The color temperature of the light source will impact the tone of the surface. Lights can be purchased at various color temperatures. The range generally runs from 2700K (kelvin) to 6500K (kelvin) . Color temperatures near 2700K will present a warm or yellow look and temperatures closer to 6500K will present a cool or blue look.

Countertops

1. Use Tresco® LED SNAP and SNIP Panels when backlighting a countertop.

2. When using these LEDs, a proper substrate support structure is required to fasten the LED panels in place. Tresco® recommends using a sheet of 1/8"(3 mm) Masonite or plywood on top of the cabinet. Please note, the thickness of this substrate will change based on application.

3. The lights will be fastened by screwing the LED panel to the Masonite or plywood. For convenience, you may want to have access to the panels from the inside of the cabinet for easy maintenance. Please note, the Tresco® LED life expectancy is 50,000 hours. SNIP Panels have preapplied 3M™ adhesive tape for additional mounting options in locations where screws may damage the substrate or be less desirable.

Please note, surface product should be properly supported with no movement or flex; follow manufacturer or fabricator recommendations on how to support the surface product.

Adding Standoffs

1. Using the Tresco® LEDs, the back of the countertop product needs to be at least 1" (25 mm) away from the lights. If the lights are not properly spaced away from the countertop, you can see the light shine through as individual LEDs instead of a consistent glow.

2. Providing the proper support is critical to assure the structural integrity of the countertop product. To achieve this, Tresco® has used 1" x 1" (25 x 25 mm) **standoffs** made of acrylic square rods cut to 1" (25 mm) or 2" (51 mm) in length, placed directly above the cabinet walls or cabinet supports.
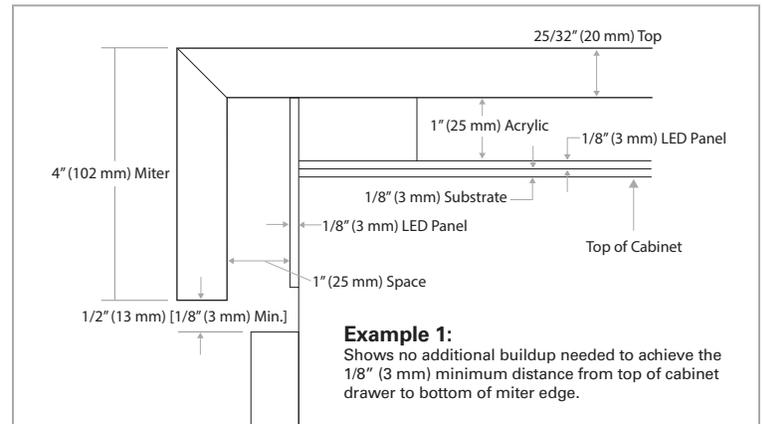
   The standoffs will be placed on top of the LED panels and should be spaced a maximum of 18" (460 mm) on center from each other. The standoffs should rest on the center of the LED panel, so the plate underneath the panel carries the load and does NOT rest on any component of the SNAP/SNIP panels.
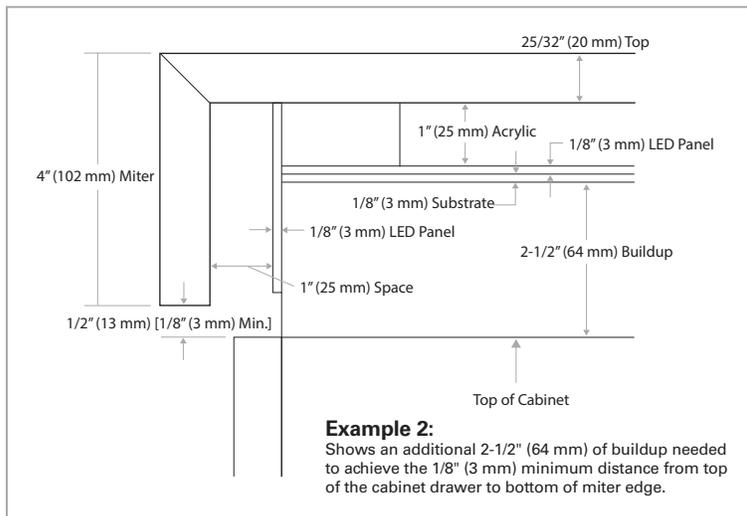
3. We recommend approximately 2 standoffs per square foot (300 x 300 mm) of material and a minimum of 4 standoffs total to provide support for all edges. However, this is only a starting estimate, and your installer should be consulted to ensure appropriate support for the selected countertop material based on shape, material thickness and other job-specific parameters.

   NOTE: All rod cubes have saw cut edges on two ends. Saw cutting causes micro chips on the saw cut ends of the cubes. The saw cut edges are NOT polished. Please allow a length tolerance of +/- 1/32" (1 mm) on all pieces.

4. The outer edge must be supported as well, and customers should work with their installers to ensure appropriate support for the selected countertop.

5. Tresco® has created prototypes of a backlit countertop with a mitered edge as well as a 1-9/16" (40 mm) profile. When lighting a mitered edge, Tresco® recommends a 4" (102 mm) mitered drop. This provides enough distance to place a strip of LED lights in a vertical presentation to properly light the edge. Using super glue, adhere a 1"x 1"x 2" (25 x 25 x 51 mm) acrylic square rod to the back of an LED strip and place it onto the LEDs that have already been laid.

Depending on the style of cabinet, additional buildup will need to be added to the top of the cabinet to provide a minimum of 1/8" (3 mm) from the bottom of the miter to the top of the cabinet drawer. Additional buildup and/or thicker substrate can be used to achieve this. The illustrations below show the cross section view of the assembly for backlighting.

Example 1:
Shows no additional buildup needed to achieve the 1/8" (3 mm) minimum distance from top of cabinet drawer to bottom of miter edge.

25/32" (20 mm) Top

1" (25 mm) Acrylic

1/8" (3 mm) LED Panel

4" (102 mm) Miter

1/8" (3 mm) Substrate

1/8" (3 mm) LED Panel

2-1/2" (64 mm) Buildup

1" (25 mm) Space

1/2" (13 mm) [1/8" (3 mm) Min.]

Top of Cabinet

Example 2:
Shows an additional 2-1/2" (64 mm) of buildup needed to achieve the 1/8" (3 mm) minimum distance from top of the cabinet drawer to bottom of miter edge.

A mitered edge will result in a "wire frame" type dark line at the joints. In an effort to minimize this appearance and remove the dark lines, thin the edges at the joints by performing a back bevel. The back bevel starts 1/2" (13 mm) from the miter and has a 60-degree bevel. This creates the effect of a bright and then dark line. <

DISCLAIMER

TRESCO® LIGHTING HAS DILIGENTLY TRIED TO ILLUSTRATE AND DESCRIBE THE INSTALLATION OF THE PRODUCTS IN THIS LITERATURE CLEARLY AND ACCURATELY; HOWEVER, SUCH ILLUSTRATIONS AND DESCRIPTIONS DO NOT EXPRESS OR IMPLY A WARRANTY OF ANY KIND, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE PURCHASER WILL BE ABLE TO OBTAIN A PARTICULAR RESULT, OR THAT THE PRODUCTS OR INSTRUCTIONS ARE MERCHANTABLE, OR FIT FOR A PARTICULAR PURPOSE, OR THAT THE INSTALLED PRODUCTS WILL NECESSARILY CONFORM TO THE ILLUSTRATIONS OR DESCRIPTIONS OR DIMENSIONS. THESE INSTRUCTIONS DO NOT ENLARGE OR OTHERWISE MODIFY THE LIMITED WARRANTY RECEIVED WHEN YOU PURCHASED YOUR STANDOFFS, IF ANY. TRESCO® LIGHTING HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES AND ALL LIABILITY FOR ANY CLAIMS FOR INJURY OR DEATH RELATED TO OR BASED UPON THE USE OF THESE INSTALLATION INSTRUCTIONS AND ANY INSTALLATION INSTRUCTIONS OTHERWISE PROVIDED BY TRESCO® LIGHTING. TRESCO® LIGHTING IS NOT RESPONSIBLE FOR ANY INACCURACIES, OMISSIONS OR TYPOS IN THIS GUIDE.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: To reduce the risk of fire, electric shock, or injury to persons:

- NOT intended for outdoor use or where exposed to excessive moisture.
- Do NOT solder your own wires to input/outputs of SNAP/SNIP Panel Lights. Must use Tresco® FlexConnect connectors.
- Only bend SNAP/SNIP Panels in between the LED diodes. If the panel is kinked or creased on the diodes, the internal contacts may break.
- Use only insulated staples or plastic ties to secure ALL cords.
- Route and secure cords so that they will not be pinched or damaged when the sign or other structure is pushed to the wall.
- Do not run line voltage power supply cord through holes in walls, ceilings, floors or similar permanent structure.
- If required, a licensed electrician should be consulted for wiring through permanent structures. When mounting and wiring light system, follow all local electric codes and the National Electrical Code (NEC).
- Disconnect electrical power before modifying system.
- Individual LEDs cannot be replaced. Instead replace entire SNIP Panel Light section.

This light is intended to be used as a fixture on wood, particle board or other structurally sound, heat-resistant, non-conductive surface. Also intended for use with indoor signage. Care should be taken during and after installation to avoid contact of light with wiring, cord, or any combustible material.

Save these instructions for future reference.
For technical assistance, call 1-800-227-1171