



BALCO, INC. ILLUMITREAD™ STAIR DEMARCATION STRIP

Installation & Maintenance Instructions Model # PLTS-100

SAVE THESE INSTRUCTIONS

The following installation instructions are very important. Read them carefully, and be sure you understand them completely before you begin any work. Store this product in the horizontal position in a clean, dry location. Store this product in a protected area. Do not store stair demarcation strips in direct sunlight. Minimum light exposure level necessary to achieve photoluminescence of the strips is in a range from 10 lux to 120 lux, depending upon desired duration of photoluminescence and type of lighting used. Contact the factory for more information regarding light exposure requirements.

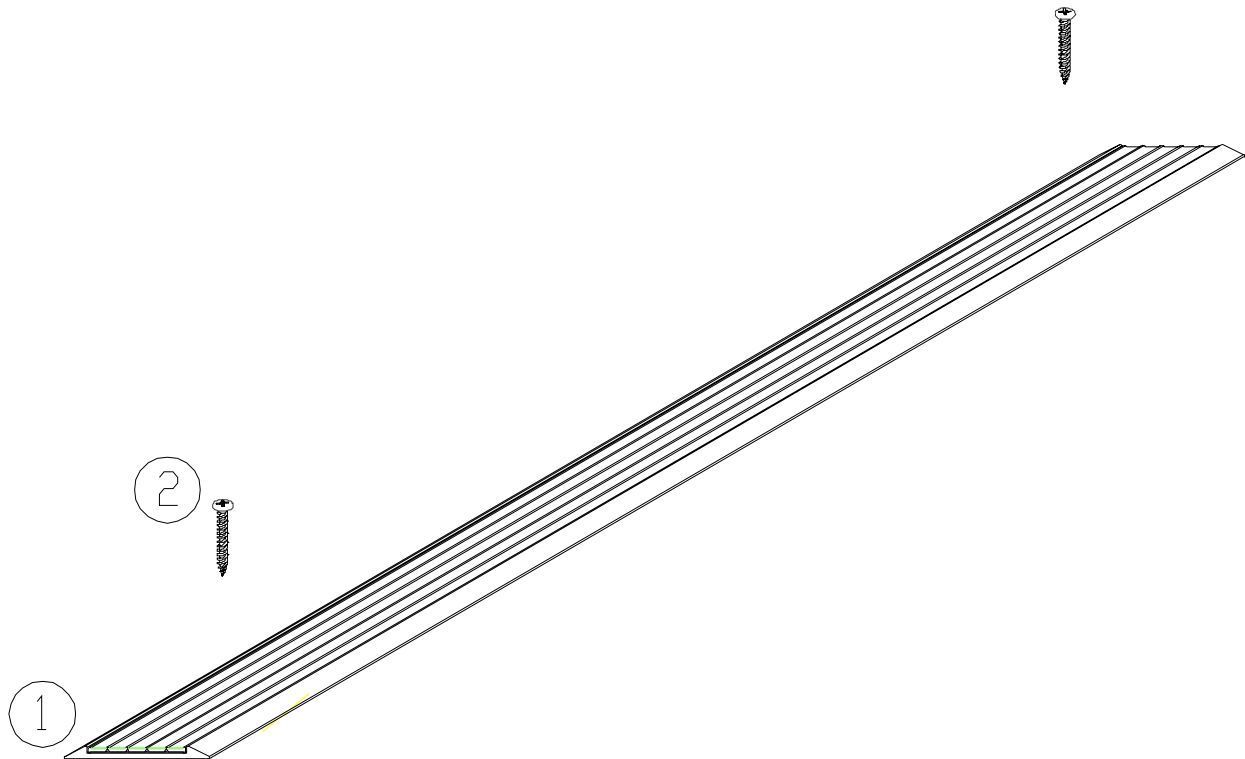


Figure 1

Parts:

1. Stair Demarcation Strip
2. Anchors¹

¹ Fasteners supplied may differ depending upon whether stairs are concrete or metal pan.

Tools required :

This is a list of tools and materials recommended for use in the installation of these stair nosings. These tools and materials are not provided by Balco, Inc.

- A. Drill Bits²
- B. Electric Drill
- C. Phillips and Slotted Screw Drivers
- D. Bostik 1100 FS (or equal)

² For concrete or for metal pan as appropriate.

PROCEDURES:

To ensure proper installation of the stair nosings, re-level all worn or dished stair treads using a quick setting, Portland cement based, self-leveling compound. In addition, fill any gap between the front lip or the stair nosing and the stair tread. Balco, Inc. recommends the following repair mortars: Thoroc 1060, Emaco T-415, Sika 123 or an equivalent. The PLTS-100 is illustrated in Figure 1.

STEP 1. If the anchor holes have not been predrilled into the stair demarcation strips at the factory, select a stair demarcation strip, and mark the locations for the anchors on the stair demarcation strip (see Figure 2). Standard anchor spacing is 24" o.c. with an anchor at 3" from each end of the stair demarcation strip. Drill the anchor holes into the stair demarcation strip at the marked locations. Repeat this procedure for each stair demarcation strip.

STEP 2. Select a stair demarcation strip, and place the stair demarcation strip into its installed position on the stair tread. Ensure that the nosing is level, plumb, and properly aligned (1/4" from the stair tread edge). Use the stair demarcation strip as a template, mark the locations for the anchors on the stair treads (Figure 3).

STEP 3. Remove the stair demarcation strip from its installed position. Drill the anchor holes into the tread. Remove all dirt and debris from the stair tread. Ensure that the treads are clean.

STEP 4. Apply a minimum 1/8" bead of construction adhesive (by others, Balco, Inc. recommends Bostik 1100 FS or equal) to the underside of the stair demarcation strip (Figure 4). Apply the adhesive to the full length of the nosing in a nominal 6" wide (crest to crest) zigzag pattern from front to back of the nosing.

STEP 5. Place the nosing back into its installed position, aligning the anchor holes in the nosing with the anchor holes in the stair tread. Using the fasteners provided by the factory, attach the nosing to the stair tread (Figure 5).

NOTE: LIMIT CONTROL OF AMBIENT ILLUMINATION LEVEL FOR CHARGING BALCO, INC. STAIR DEMARCATON STRIPS TO AUTHORIZED PERSONNEL ONLY. EXTERNAL UNFILTERED FLOURESCENT (OR EQUIVALENT) ILLUMINATION MUST BE PRESENT ON THE STAIR DEMARCATON STRIPS AT ALL TIMES OF BUILDING OCCUPANCY.

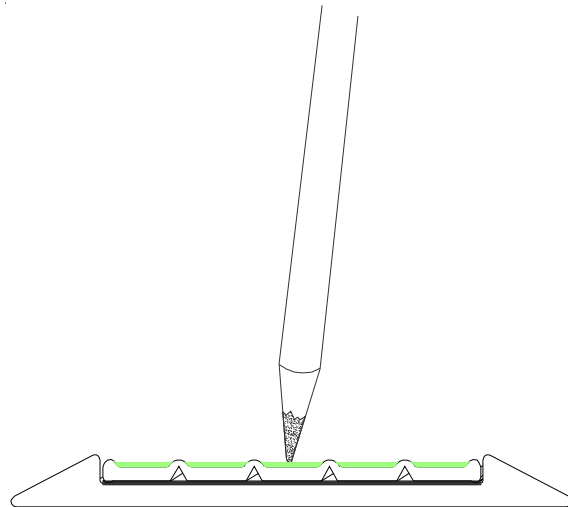


Figure 2

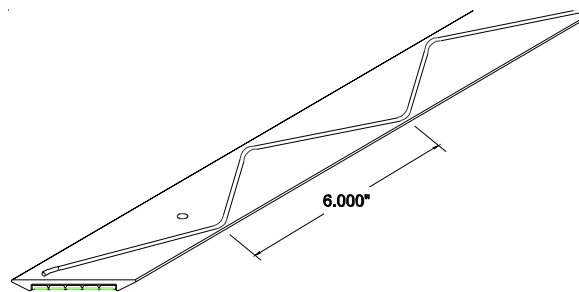


Figure 3

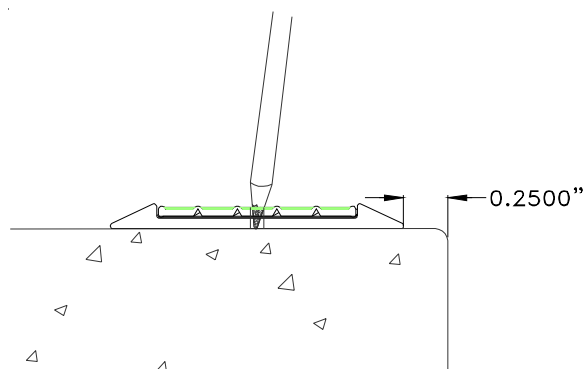


Figure 4

WARNING: MINIMUM ILLUMINATION TO CHARGE THE STAIR DEMARCATION STRIPS SHALL BE NOT LESS THAN 11 LUX (1 FOOTCANDLE) FOR ONE (1) HOUR. INSUFFICIENT AMBIENT ILLUMINATION WILL RESULT IN FAILURE OF THE STAIR DEMARCATION STRIPS TO CHARGE AND TO PHOTOLUMINESCE.

CLEANING AND MAINTENANCE:

To ensure optimum performance, Balco, Inc. recommends cleaning Illumitread Stair Demarcation Strips with a non-alkaline cleaner and a soft cloth or sponge and drying as needed. Recommend cleaning a minimum of once a year or more often, depending on use and environment.

WARNING: MINIMUM ILLUMINATION TO CHARGE THE DEMARCATIONS STRIPS SHALL BE NOT LESS THAN 11 LUX (1 FOOTCANDLE) FOR ONE (1) HOUR. INSUFFICIENT AMBIENT ILLUMINATION WILL RESULT IN FAILURE OF THE STAIR NOSINGS TO CHARGE AND TO PHOTOLUMINESCE

WARNING: Insufficient ambient illumination will result in failure of the photoluminescent strip to charge and to photoluminesce.

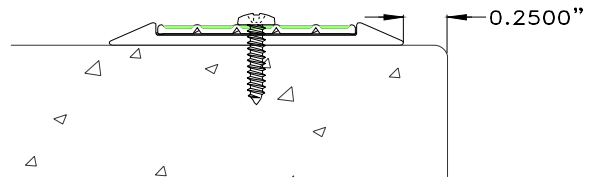


Figure 5

Balco, Inc. Photoluminescent Egress Systems Operation, Cleaning and Maintenance

Facility Name:

Facility Location:

Operations/Maintenance Manager:

1. Introduction

Balco, Inc. photoluminescent exit path marking systems are illuminated using either natural or artificial light sources. The performance of the photoluminescent components is dependant upon the light exposure, both intensity and duration. The type of lighting in a facility and its brightness will determine the required duration of exposure to adequately charge the photoluminescent components to achieve desired performance.

2. Operation

A. MINIMUM ACTIVATION SOURCE TYPE: Fluorescent Illumination.

B. MINIMUM ILLUMINANCE AT TARGET: 1 foot candle (11 lux).

C. MINIMUM ACTIVATION DURATION: 60 minutes.

Ensure that the source lighting is controlled by authorized personnel only. Maintain adequate light level and duration to properly activate photoluminescent components.

3. Cleaning

Establish a regular inspection schedule for the photoluminescent components and clean them as needed to prevent dirt, etc. from inhibiting the performance of the components. Balco, Inc. recommends inspection at least once a year or after any particularly heavy use. Perform inspections in accordance with applicable local and national code requirements.

Photoluminescent components attached to floor assemblies may be cleaned by mopping, using high-pressure water (but not steam cleaning) or wiping with a clean damp cotton cloth. Use mild detergents to clean the photoluminescent components, if necessary. Mild dish washing detergents or laundry detergents are recommended. Do not use highly alkaline detergents, those having a ph >8, or acidic cleaners, those having a ph <5. Do not use abrasive cleaners. Photoluminescent components on walls or other assemblies or components may be cleaned using clean water and a clean sponge or a clean cotton cloth. Rinse after applying detergent solution. Wipe with a clean cotton cloth to dry.

4. Maintenance

Inspect exit path markings, obstacle markings and photoluminescent stair nosings for damaged components and to ensure that photoluminescent components remain properly attached to their substrate and that no loosening of anchors or delamination of photoluminescent components has occurred.

Replace damaged components. Tighten any loose anchors. Hand tightening is sufficient. Repair delaminated photoluminescent components. Contact the factory for repair recommendations. Delaminated photoluminescent components in stair nosings can result in a trip hazard.