

## Single Component Photoluminescent Stair Nosings Cast in Place Single Component Illumitread™ Stair Nosings

### IMPORTANT

The following 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. This is a finished product. Store this product in a protected area. Do not stack anything on top of this product.

Review approved Balco shop drawings for types and locations prior to beginning work.

### RECOMMENDED TOOLS

TAPE MEASURE / LEVEL / RISER FORMS / CONCRETE TOOLS / CLEAN RAGS

### STEP ONE

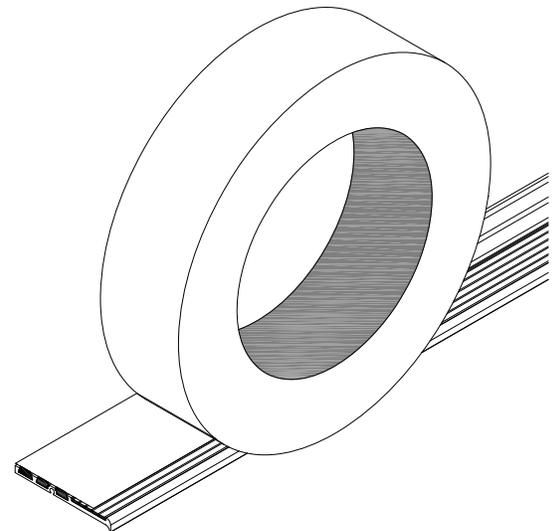
Prepare the riser forms for the stairs in accordance with best standard industry practice and all applicable code requirements. Ensure the riser forms are straight and true.

### STEP TWO

Select the nosings and the factory provided protective tape.

Apply a layer of protective tape across the entire exposed face of the nosing.

Repeat until all nosings are masked.



# Single Component Photoluminescent Stair Nosings

## STEP THREE

For stair nosings with integral anchors, proceed to **Step Four**.

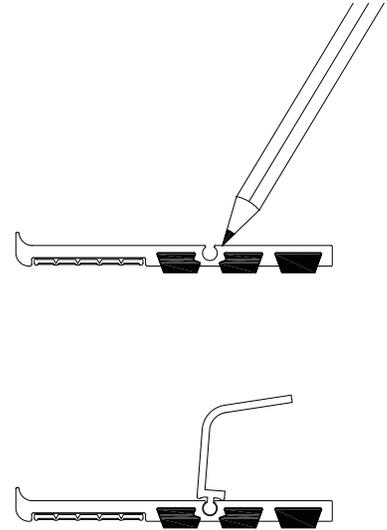
For stair nosings with ball-and-socket type anchors, select a stair nosing and the required anchors for the nosing.

Mark the locations for each anchor per approved Balco shop drawings or details on the bottom of the stair nosing.

Select the anchors.

Insert each anchor's ball into the socket in the bottom of the stair nosing. Slide each anchor along the stair nosing socket until each anchor is aligned with a mark.

Repeat until all nosings have anchors installed.



## STEP FOUR

Pour the concrete to form the stairs.

### NOTE:

Using very large aggregate or concrete with a very low slump will make stair nosing installation more difficult.

## STEP FIVE

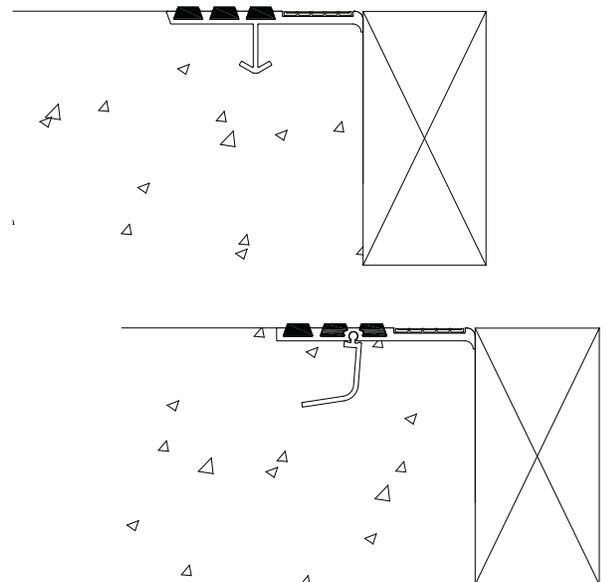
Ensuring that the stair nosing anchors are properly positioned, gently work the stair nosing into the concrete until the back edge of the stair nosing is level with the finished edge of the stair tread and the stair nosing is level, plumb, and at the proper elevation.

Use a level to ensure that the stair nosing is level.

To provide a stable installation, ensure that the stair nosing anchors are securely set in the concrete and that the concrete is fully surrounding them.

### NOTE:

For steel pan stairs, ensure that the stair nosing is set level, plumb, and flush on the tread area. The bottom form of the stair nosing must set tightly on the steel pan return.

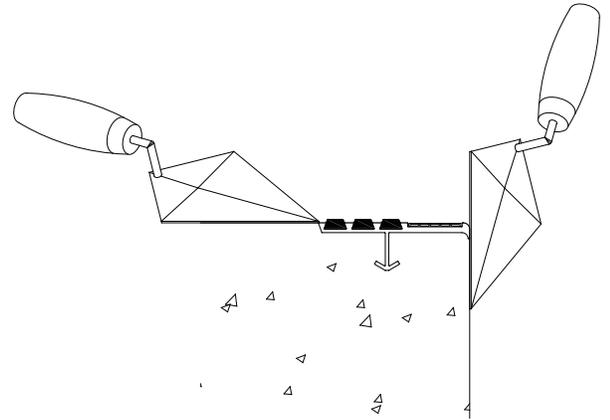


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## STEP SIX

After the concrete has taken its initial set, remove the riser forms and finish the concrete riser flush to the stair nosing front or as otherwise specified.

This is important to ensure that the riser has a clean finish.

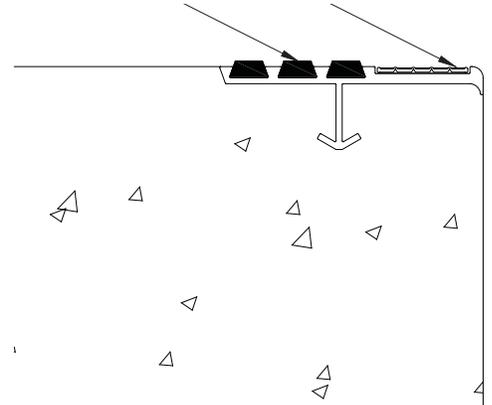


## STEP SEVEN

To avoid unsightly glue residue on the stair nosings, remove the protective tape from the nosings immediately after the concrete has set and tooling operations are complete.

Repeat **Steps Three through Seven** until all nosings are installed.

### REMOVE MASKING



## CLEANING

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

## IMPORTANT

Minimum illumination to charge the nosings' strips shall be not less than 11 lux (1 footcandle) for one (1) hour. Insufficient ambient illumination will result in failure of the photoluminescent strip to charge and to photoluminesce.

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

**IBC 1025.5** requires not less than 1 footcandle (11 lux) of illumination for not less than 60 minutes prior to periods when the building is occupied and continuously during occupancy.



A CSW Industrials Company

# Photoluminescent Egress Systems Operation, Cleaning and Maintenance

## 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 dependent 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 or LED Illumination.

**B. MINIMUM ILLUMINATION AT TARGET:** 1 footcandle (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.

**IBC 1025.5** requires not less than 1 footcandle (11 lux) of illumination for not less than 60 minutes prior to periods when the building is occupied and continuously during occupancy.

## 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 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 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 and tighten any loose anchors. Hand tightening is sufficient. Contact the factory for repair recommendations.