



# BALCO, INC. ILLUMITREAD™ DIRECTIONAL SIGNS, MODEL 1503

## Installation 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. Minimum light exposure level necessary to achieve photoluminescence of the signs is 1 Foot Candle.



Figure 1

### Tools required :

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

- A. Clean Rags
- B. Tape Measure
- C. Isopropyl Alcohol
- D. Clean Bucket (for alcohol/water mix)
- E. Anchorage

### Parts:

- 1. Directional Sign

### PROCEDURES:

These instructions are applicable to directional signs, model 1503. Install indoors only in a location not exposed to direct sunlight, liquid spray or temperatures outside the range of 50°F - 104°F (10°C - 40°C). Ensure temperature of both the directional sign and the surface to receive it is 60°F or higher at the time of installation. These signs are aluminum sheet to which photoluminescent coating is applied. The

installer shall select the installation means suited to the substrate.

**STEP 1.** Ensure that the surface to receive the directional sign is free of dust, oil and other contaminants. Wipe most aluminum, steel acrylic, polycarbonate, and painted/sealed substrates to receive the directional sign with a 50/50 solution of isopropyl alcohol and water. Routinely replace cleaning cloth

to insure proper cleaning. Some glossy surfaces (certain paints and expanded rigid PVC board) may benefit from slight scuffing with a mild abrasive pad prior to cleaning with the isopropyl alcohol/water mixture. Allow the alcohol/water solution used to clean the substrate to evaporate from the substrate prior to applying the directional sign. Where heavy oils or grease are present, a “degreasing” solvent such as 3M™ Prep Solvent 70, 3M™ Citrus Base Cleaner, mineral spirits, naphtha or similar solvents are suggested to cut the oil. This should always be followed with an isopropyl alcohol/water cleaning to help ensure that any residue or film is removed. Follow the applicable MSDS instructions for handling, storage and use of whichever primer or solvent is selected.

**STEP 2.** Select the means of attachment. For Balco, Inc. Photoluminescent Directional Signs, an adhesive that the installer has determined to be satisfactory for the sign installation may be used. As an alternative, VHB tape or a double-sided tape which the installer has determined to be suitable may be used to affix the signs to the substrate. In addition, mechanical fasteners may be used, if appropriate. The installer shall determine the anchorage to be used, based upon its suitability and the substrate to which the signs are affixed.

**STEP 3.** Select a directional sign. Place the selected directional sign into its installed position on the substrate. Ensure that the directional sign is straight and in the proper position on the substrate. The directional sign (top of sign) is located a maximum of 18" from the floor surface. The directional sign must be located so that it is visible when the door is open and when the door is closed.

NOTE: ENSURE THAT THE PROPER POSITION OF THE SIGN HAS BEEN DETERMINED. ONCE THE SIGN IS PRESSED ONTO THE SUBSTRATE, REPOSITIONING OF THE SIGN WILL BE EXTREMELY DIFFICULT.

**STEP 4.** Using the anchorage determined to be suitable, attach the sign to the substrate.

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

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

# 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 every 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 and should be repaired immediately.**