### Section 10 45 00

#### Ecoglo Photoluminescent Emergency Evacuation Plans

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It is offered as a guide to experienced and knowledgeable construction professionals who assume full responsibility for its interpretation and use.

Square brackets [] containing text indicate an option to be considered/inserted by the specifier. Remove brackets and unused options before printing.

# Section 10 45 00

# Photoluminescent Emergency Evacuation Plans

# Part 1 General

- 1.1 Summary
  - A Work Included: Supply and installation of photoluminescent emergency evacuation plans.
- 1.2 References
  - A [Fire Code of the Philippines]
  - B Underwriters Laboratories, Inc. (UL) UL 1994 Standard for Safety, Luminous Egress Path Marking Systems.
  - C NFPA 170, Standard for Signs and Symbols
- 1.3 Design Requirements
  - A Emergency Evacuation Plans shall be posted on strategic and conspicuous locations in the building.
  - B Elements

All Emergency Evacuation Plans shall display the following information:

- a. "You Are Here" / room number/ building marking;
- b. Fire exits;
- c. Primary Route to Exit (Nearest to the viewer);
- d. Secondary Route to Exit (Second nearest to the viewer);
- e. Fire alarm pull stations and annunciators;
- f. Fire extinguishers/ hose cabinets;
- g. Emergency Light;
- h. First Aid Kits locations (if applicable);
- i. Emergency Call stations (if applicable);
- j. Areas of safe refuge (for high-rise building);
- k. Assembly areas instructions;
- I. "In Case of Emergency" instructions.
- C Dimensions
  - a. 215.9mm high by 330.2mm wide if mounted in every rooms/spaces with a floor area of 50m<sup>2</sup> or less;
  - b. 457.2mm high by 609.6mm wide if mounted in rooms/spaces with a floor area from 51m<sup>2</sup> to 150m<sup>2</sup> including building lobbies upon entry, elevator lobbies at every floor, hallways and corridors on every bend/corner or at 15m interval in the case of long hallways; or
  - c. 609.6mm high by 914.4mm wide if mounted in rooms/spaces with a floor area of 151m<sup>2</sup> and above provided that it shall be mounted at multiple locations within the open space such as upon entry to the building, areas of assembly, or at every 25m interval in the case of auditoriums and gymnasiums.
- D Symbols

Symbols/icons/logos to be used for the marking shall be in accordance with NFPA 170, Standard for Signs and Symbols.

- V23.1
- 1.4 . Quality Assurance
  - A Manufacturer Qualifications: to have minimum of 20 years' experience with similar work.
- 1.5 Submittals
  - A Submit the following [in accordance with Section 01 33 00 Submittal Procedures]:
    - 1 Product Data: Manufacturer's product data sheets for evacuation map/s used in project.
    - 2 Manufacturer's Instructions: Pre-printed material describing installation of product, system or material, including special notices, safety data sheets outlining hazards and safety precautions and maintenance and cleaning instructions.
    - 3 Test Reports: Showing compliance with required standards, ordinances and codes.
    - 4 Substitutions: Substitutions must be submitted and approved prior to bid date. All requests shall include test results, product descriptions, confirmation of piece design and engineering calculations meeting design criteria.
- 1.6 Delivery, Storage and Handling
  - A Handle and store products in a manner to prevent damage, deterioration and soiling to products, other building components, assemblies, other products, the structure, the Site and surrounding property and in accordance with manufacturer's instructions.
  - B Store packaged or bundled products in original and undamaged containers and packaging with manufacturer's seals and labels intact.
    Do not remove from packaging or containers until ready to be installed.
  - C Store products subject to damage from weather in weatherproof enclosures.
- 1.7 Warranty
  - A Provide manufacturer's limited warranty. Warranty to cover defects in materials and workmanship.

### Part 2 Products

- 2.1 Manufacturers
  - A Contract Documents are based on products by Ecoglo International Ltd. (www.ecoglo.com)
  - B Substitutions: [Under provisions of Division 01.] [Not permitted.]
- 2.2 Materials
  - A High visibility flat panel manufactured from rigid photoluminescent PVC sheet with clear acrylic overlay.
  - B Signs to meet luminance specifications of UL 1994 Standard for Luminous Egress Path Marking Systems.
- 2.3 Components
  - A Basis of design: Ecoglo Emergency Evacuation Plans

- V23.1
- 1 Description:
  - a. Requires not less than 100 lux of illumination continuously during building occupancy
  - b. Stores energy from ambient daylight, fluorescent, metal halide, mercury vapor or LED light
  - c. No electricity or batteries required

# Click here to view Ecoglo Evacuation Maps

Product Code	Product Name	Sign Definition	Sign Size
G20-EVAC216330	Evacuation Map	Emergency Evacuation Plan	216mm x 330mm
G20-EVAC457610	Evacuation Map	Emergency Evacuation Plan	457mm x 610mm
G20-EVAC610914	Evacuation Map	Emergency Evacuation Plan	610mm x 914mm

Part 3 Execution

- 3.1 Examination
  - A Before installation, examine surfaces on which the work of this section depends. Notify [Contractor] if substrates do not comply with requirements of this section.
  - B Do not proceed with work of this Section until all unsatisfactory conditions have been corrected, if any.
  - C Commencement of Work will imply acceptance of surfaces.
- 3.2 Preparation
  - A Clean surfaces to remove dirt, dust, grease, oil, loose material, frost, paint, coatings, or other matter that may affect bonding or installation of photoluminescent products.
  - B Test substrates for fit with products before using adhesives or mechanical fastening.
- 3.3 Installation
  - A Unless otherwise indicated in the specifications, install products in accordance with manufacturer's instructions. Obtain written instructions directly from manufacturer.
- 3.4 Cleaning
  - A At completion of installation, clean soiled product surfaces in accordance with manufacturer's instructions.
- 3.5 Waste Management and Disposal
  - A Separate waste materials for [reuse] [and] [recycling] at nearest used building materials facility.
- 3.6 Protection
  - A Do not allow heavy objects to come into contact with installed products.

End of Section