

July 21, 1982

U.S. Nuclear Regulatory Commission  
ATTN: Mr. John W.M. Hickey  
Section Leader  
Industrial Section  
Material Licensing Branch  
Division of Fuel Cycle and Material Safety  
Washington, D.C. 20555



Dear Mr. Hickey:

This is in response to your letter of June 3, 1982 regarding the application of Electric Distributors, Inc. We provide the following information as required:

1. Copies of State of New York License are enclosed for the Series 710 EXIT sign.
2. Design specification and test data are provided as per enclosed, as follows:

Section 1 - Design Specifications

1. Introduction
2. Description of Product - Series 710
3. Distribution of Series 710 Commercial EXIT sign
4. Replaceable T-Light Tubes
5. Description of Product - Series 710 T-Light Tubes
6. Use of T-Light Tubes
7. Distribution of T-Light Tubes

Section 2 - Prototype Tests

- A. Test Specifications - Series 710 Commercial Safety Sign
- B. Test Results - Series 710 Commercial Safety Sign
- C. Test Specifications - Series 710 T-LIGHT TUBES
- D. Test Results - Series 710 T-LIGHT TUBES

The above information is as submitted to NYS Dept. of Labor in the original license application, with omission of certain proprietary data as requested.

3. Samples of actual labels used on the product are attached.
4. A copy of instructions to customers per N.Y. State Industrial Code Rule 38 (the equivalent of 10 CFR 32.51) is attached.

Also enclosed is a copy of a portion of our sales brochure, which clearly advises customers to return old Tubes for disposal to SPL.

Required Frequency of replacement is given on the front face of the sign, by marking the label in the space shown with the required replacement date. This is readily visible to the user or to an inspector.

A sample, inactive, T-Light Tube assembly is being shipped under separate cover to Mr. Earl Wright, per your request.

We have advised Electric Distributors of the information you require from them, which you should be receiving shortly.

We trust these responses will be sufficient for you to complete and issue a license for stocking to Electric Distributors, Inc.

Very truly,yours,

SELF-POWERED LIGHTING, INC.

William Hegarty  
President

WH:lpb  
Encl. Documents listed above



Gentlemen:

In accordance with the regulations of the State of New York, this will advise you that the enclosed devices have been shipped under the following General License number(s):

☐ (GL) 1406-1611

☐ (GL) 1424-1611

☐ (GL) 1427-1611

The above license(s) permit Self-Powered Lighting, Inc. to manufacture and distribute products containing tritium gas T-LIGHTS, whereby the customer or end user is not required to apply for a specific license to receive and use a product containing byproduct material.

A copy of the pertinent sections of New York State Regulations, Code Rule No. 38, covering the products shipped to you are enclosed.

Please note that in some States, registration of receipt by the end user under (GL) 1424-1611 or (GL) 1427-1611 may be required. We attach a list of those States requiring registration at this time, with addresses of the office having jurisdiction, and blank registration.

Registration under (GL) 1406-1611 (Aircraft Product) is not required.

For General Licensees located in New York State, compliance with Industrial Code Rule 38 as shown above, is required. Registration is not required in New York State. General Licenses in other States are to comply with either the regulations of the U.S. Nuclear Regulatory Commission or the Agreement State having jurisdiction.

Very truly yours,

SELF-POWERED LIGHTING, INC.

*William Hegarty*

William Hegarty  
President  
Radiation Safety Officer

WH:lph  
Encl.

3/82



Applicable to:  
(GL) 1424-1611  
(GL) 1427-1611

Item (b) — Certain measuring, gaging or controlling devices.

(1) A general license is hereby issued to own, receive, acquire, possess and use radioactive material when contained in any device designed for use in detecting, measuring, gaging or controlling thickness, density, level interface location, radiation, leakage or qualitative or quantitative chemical composition, or designed for producing light or ionized atmosphere, when such devices are manufactured or imported in accordance with the specifications contained in a license or permit issued to the supplier by the commissioner, the State Department of Health, the New York City Department of Health, the United States Nuclear Regulatory Commission or any agreement State and authorizing distribution under the general license of this item or its equivalent, provided that:

(i) Such devices are labeled in accordance with the provisions of a license which authorizes the distribution of the devices.

(ii) Such devices bear a durable label containing the following or a substantially similar statement which contains the information called for in the following statement:

"The receipt, possession, use and transfer of this device, Model \_\_\_\_\_  
Serial No. \_\_\_\_\_, are subject to a general license  
or equivalent and regulations of the United States Nuclear Regulatory  
Commission or of a State with which the Nuclear Regulatory Commission  
has entered into an agreement for the exercise of regulatory authority. This  
label shall be maintained on the device in a legible condition.

Removal of this label is prohibited.

Caution — Radioactive Material

(Name of Supplier)"

(The model, serial number and name of the supplier may be omitted from this label provided they are elsewhere specified in labeling affixed to the device. Devices licensed and distributed prior to the effective date of this Part (rule) may bear labels previously authorized.)

(iii) Such devices are installed when on the premises of the general licensee by a person authorized to install such devices under a license or permit issued to the installer by the commissioner, the State Department of Health, the New York City Department of Health, the United States Nuclear Regulatory Commission or any agreement State, if a label affixed to the device at the time of receipt states that installation by a licensee is required. The requirement of this item does not apply while devices are held in storage in the original shipping containers pending installation by a licensee.

(2) Terms and conditions. Every person under this general license shall comply with the following requirements:

(i) No such person shall dispose of by abandonment or otherwise, any such device except by transfer to a person who holds a license or permit to receive such device issued by the commissioner, the State Department of Health, the New York City Department of Health, the United States Nuclear Regulatory Commission or any agreement State, or in case the device remains in use at a particular location, the transferor shall give the transferee a copy of the requirements of this item and any safety documents identified in the label on the device and upon transfer notify the commissioner indicating the registration number, manufacturer's name, model and serial number of device transferred, the name and address of the transferee and name and qualifications of transferee's radiation safety officer.

(ii) Such person assures that all labels affixed to the devices bearing the statement "Removal of This Label is Prohibited" are maintained on the devices and shall comply with all instructions contained in such labels as a condition of his general license.

(vii) Such person shall comply with the requirements specified in section 38.36, subdivision (a), paragraphs (1) and (2) of this Part (rule) and such other requirements as the commissioner may determine to be applicable but otherwise such person shall be exempt from the requirements of sections 38.19 through 38.36 of this Part (rule).

# EVERGLO

SELF-POWERED LIFE SAFETY SIGNS

- ALWAYS ON
- USE NO ENERGY
- NO OPERATING COST
- TOTAL RELIABILITY
- TOTAL SAFETY
- SELF-LUMINOUS
- CHOICE OF WORDS OR SYMBOLS
- REPLACEABLE LIGHT ELEMENTS  
WITH 10 YEAR LIFE



# EXIT



Listed 222U

Complies with

NFPA Life Safety Code 101 (1981)

temporary reprint  
during production of our  
new full-color brochure  
available soon!

file



SELF-LUMINOUS EXIT SIGNS AND MARKERS OF LISTED  
RECOMMENDED MAXIMUM DISTANCE FOR LEGIBILITY: 100 FT.  
RECOMMENDED EFFECTIVE LIFE: 10 YEARS.  
REPLACE BEFORE: ☐ 1

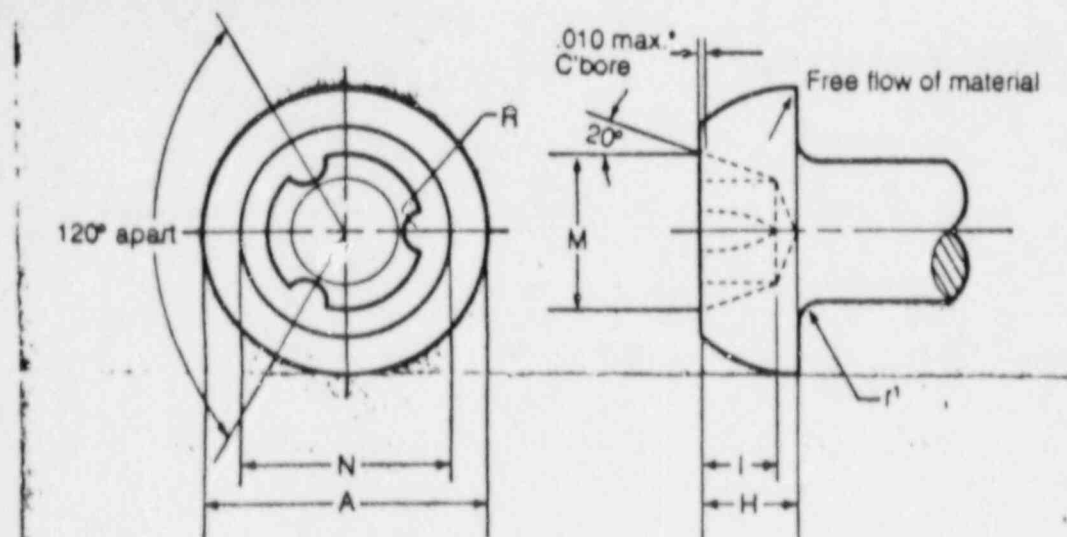
THIS DEVICE MEETS BRIGHTNESS REQUIREMENTS OF NFPA No. 101,  
WITH LETTERS OF A MINIMUM LUMINANCE OF 0.2M FT.<sup>2</sup>,  
(0.21 CD/M<sup>2</sup>, M.) OR WITH EXTERNAL ILLUMINATION OF 105-125  
THAN 3 FT CANDLES (CONTACT MARKS OF NOT LESS THAN 0.5).



# TRI-KONE Tamper-Resistant Recess-Head Screw

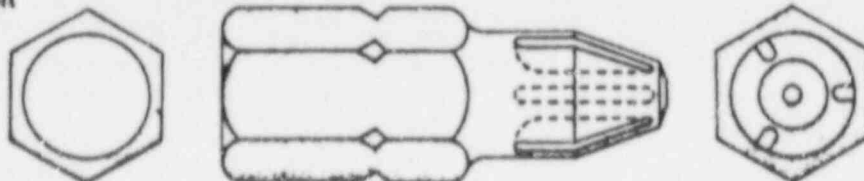
1693

## Flat Top Truss Head Style



Shown above is one of the many styles available.

## Driver Bit



## Tri-Kone Applications

- Protecting PC boards
- Securing back panels on radios
- Limiting access to medical supplies
- Preventing user adjustment of CB trimmer capacitors
- Protecting public property against theft and vandalism
- Preventing tampering with office machines

**Important Notice.** The values shown are for guidance only and they are not to be used for design criteria. Their use and reliance thereon for any purpose by anyone is entirely voluntary and at the sole risk of the user. Continental Screw is not responsible for any loss, claim or damage resulting from their use. Consult our Engineering Department for your specific application data.

Driver Size	Screw Size	FLAT TOP HEAD DIMENSIONS						RECESS DIMENSIONS		r1
		A		H		N	R	I	M	
		Max.	Min.	Max.	Min.	Ref.	.002	Min.	Ref.	
02	#2	.167	.155	.062	.053	.116	.023	.030	.083	.010
03	#3	.193	.180	.071	.062	.134	.026	.035	.096	.010
04	#4	.219	.209	.080	.070	.154	.028	.037	.110	.010
05	#5	.245	.231	.089	.079	.170	.031	.042	.122	.015
06	#6	.270	.256	.097	.087	.189	.034	.045	.135	.015
07	#7	.295	.281	.107	.097	.205	.037	.055	.147	.015
08	#8	.322	.306	.115	.105	.224	.040	.062	.160	.015
09	#9	.347	.331	.123	.113	.242	.043	.065	.173	.020
010	#10	.373	.357	.133	.122	.259	.046	.071	.185	.020
012	#12	.425	.407	.151	.139	.296	.053	.080	.212	.025
025	1/4	.492	.473	.175	.162	.344	.0615	.093	.246	.035

\* .005 maximum counterbore for #7 and smaller

## Continental Screw

A UNIT OF AMCA INTERNATIONAL CORPORATION

459 Mt. Pleasant Street, New Bedford, MA 02742

TEL (617) 993-2621, TWX 710-344-0556, TELEX 92-9417, TELECOPIER (617) 993-2132



## INSTRUCTIONS TO CUSTOMER OR INSTALLER

Some States require a record of Everglo sign and Series 700 sign installations. If signs are installed in the States listed below, please complete the lower part of this form and mail it to the address shown.  
(Serial number information is shown on the Packing Slip)

Division of Radiological Health  
Environmental Health Adminis.  
Room 314, State Office Building  
Montgomery, ALABAMA 36130

Arizona Atomic Energy Commission  
2929 W. Indian School Road  
Phoenix, ARIZONA 85017

Div. of Radiological Health  
Arkansas Department of Health  
4815 West Markham  
Little Rock, ARKANSAS 72701

Radiological Health Section  
Department of Health  
714 F Street, Rm. 498  
Sacramento, CALIFORNIA 95814

Occupational and Radiological  
Health Division  
Department of Public Health  
4210 East 11th Avenue  
Denver, COLORADO 80220

Radiological Health Services  
Department of Health &  
Rehabilitative Service  
1317 Winewood Blvd.  
Tallahassee, FLORIDA 32301

Radiological Health Unit  
Department of Human Resources  
47 Trinity Avenue  
Atlanta, GEORGIA 30334

Radiation Control Section  
Idaho Department of Health  
and Welfare  
Statehouse  
Boise, IDAHO 83720

Bureau of Radiation Control  
Division of Environment  
Dept. of Health & Environment  
Building 740  
Forbes Field  
Topeka, KANSAS 66640

Radiation Control Board  
Bureau of Health Services  
Dept. of Human Resources  
275 East Main Street  
Frankfort, KENTUCKY 40621

Division of Radiation Control  
Natural Resources and Energy  
Dept. of Conservation  
P.O. Box 14690  
Baton Rouge, LOUISIANA 70808

Division of Radiation Control  
Dept. of Health & Mental Hygiene  
201 W. Preston Street  
Baltimore, MARYLAND 21201

Radiological Health Unit  
State Board of Health  
Jackson, MISSISSIPPI 39205

Division of Radiological Health  
State Department of Health  
301 Centennial Mall South  
P.O. Box 95007  
Lincoln, NEBRASKA 68599

Consumer Health Protection Services  
Room 103 Kinkead Bldg.,  
Capital Complex  
Carson City, NEVADA 89710

Radiation Control Agency  
Division of Public Health Services  
State Dept. of Health & Welfare  
State Laboratory Building  
hazen Drive  
Concord, NEW HAMPSHIRE 03301

Occupational Health & Radiation  
Protection Division  
Environmental Improvement Agency  
State of New Mexico  
P.O. Box 2348  
Sante Fe, NEW MEXICO 87503

Radiation Protection Section  
Division of Facility Service  
Box 12200  
Raleigh, NORTH CAROLINA 27605

Division of Environmental  
Engineering  
Radiological Health Program  
State Department of Health  
1200 Missouri Avenue  
Bismarck, NORTH DAKOTA

Radiation Control Service  
Division of Health  
Department of Human Resources  
1400 South West Fifty Avenue  
Portland, OREGON 97201

Division of Occupational  
Health & Radiation Control  
Rhode Island Department  
of Health  
Cannon Building  
75 Davis Street  
Providence, RHODE ISLAND 02908

Bureau of Environmental Health  
Department of Public Health  
727 Cordell Hall State  
Office Building  
Nashville, TENNESSEE 37219

Division of Occupational Health  
and Radiation Control  
Texas Department of Health  
Resources  
Austin, TEXAS 78756

Radiation Control Unit  
DSHS MS LD-11  
Olympia, WASHINGTON 98504

Registration of Everglo and Series 700 Signs  
distributed under N.Y. State License No. GL 1424-1611 by  
SELF-POWERED LIGHTING, INC., 8 Westchester Plaza, Elmsford, N.Y. 10523

Serial No(s) \_\_\_\_\_ Date Installed \_\_\_\_\_  
Installed at: Co. Name \_\_\_\_\_  
Address \_\_\_\_\_  
City, State \_\_\_\_\_

STATE OF NEW YORK  
RADIOACTIVE MATERIALS LICENSE

Page 2 of 4 Pages  
1699

(GL) 1424-1611

3. License Number \_\_\_\_\_

5a. Rel. No. 2 b. Amend. No. 16

CONDITIONS

9. Authorized use (As itemized): In accordance with Conditions 9., 12.N., 16. and 17. Radioactive Materials License No. (GL) 1424-1611, Reference No. 2, is hereby amended as follows:

\*\*Condition 7.A. Chemical and/or physical form changed.

\*\*Condition 9.6.A.(1) Changed to read:

Manufacture luminous devices specified in Condition 9.6.A. (3) of this License for use in industrial, commercial and institutional buildings, subject to the conditions and limitations contained herein, and to distribute such devices to persons exempt from specific licensing (general licensees) pursuant to the State of New York Industrial Code Rule No.38. Section 41, Table 3, Item(b), or equivalent provisions of the regulations of the U.S. Nuclear Regulatory Commission (US.NRC) or other Agreement State.

\*\*Condition 9.6.A.(3) Addition:

a. Luminous Device: Series 710 /  
Legend : Any  
Source : Specified in Condition 7.A.  
Source Type : C (Bulletin No.77-102)  
Maximum Activity: 25 Curies

\*\*Condition 12.N. Documents added:

His letters dated December 4, 1979, May 12, 1980 and May 15, 1980, signed by Ronald G. Harper, with enclosures

\*\*Condition 14. Changed to read:

The licensee shall furnish to each general licensee to whom a generally licensed device is transferred a copy of Code Rule No.33, (12 NYCRR38) Section 38.41, Table 3, Item(b).

\*\*Condition 15.A. and B. Addition:

Series 710,

FOR THE NEW YORK STATE DEPARTMENT OF LABOR

Date \_\_\_\_\_

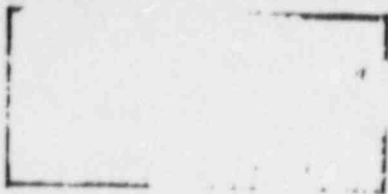
by \_\_\_\_\_

STATE OF NEW YORK  
RADIOACTIVE MATERIALS LICENSE  
AMENDMENT

Page 1 of 4 Pages

Pursuant to the Labor Law and Industrial Code Rule No. 38, and in reliance on statements and representations heretofore made by the licensee designated below, a license is hereby issued authorizing such licensee to transfer, receive, possess and use the radioactive material(s) designated below; and to use such radioactive materials for the purpose(s) and at the place(s) designated below. This license is subject to all applicable rules, regulations, and orders now or hereafter in effect of all appropriate regulatory agencies and to any conditions specified below.

Licensee		3. License Number
<p>1. Name    Self-Powered Lighting Limited</p>		<p>*Amend. No. 16 supersedes Amend. No. 1 (GL) 1424-1611</p>
<p>2. Address    8 Westchester Plaza                  Elmsford, New York 10523</p>		<p>4. Expiration Date    October 31, 1968</p>
		<p>5a. Reference No.    1      b. Amendment No.    *16</p>
<p>6. Radioactive materials     (element and mass number)</p> <p>A.    Hydrogen 3</p>	<p>7. Chemical and/or physical form</p> <p>A.    Sealed source         ("Betelight" or         "T-Light" Type M or         C as specified in SPL         Bulletin No. 77-102         and/or devices         manufactured by Self-         Powered Lighting Ltd.         (SPL), Canrad Precision         Ind. (CPI), Saunders-         Roe &amp; Nuclear         Enterprises Ltd.         (SRNE), Merz &amp; Benteli         Nuclear AG (M &amp; BN)         and Brandhurst         Company Ltd.</p>	<p>8. Maximum quantity licensee     may possess at any one time</p> <p>A.    4000 Curies</p>



1. INTRODUCTION

The Series 700 EXIT sign currently licensed for distribution under GL 1424-1611 incorporates gaseous tritium light sources installed in such a way as to provide direct back illumination of the word "EXIT." The fixed design of the reflector precludes the use of any other legend.

Users of Series 700 EXIT signs have repeatedly requested Self-Powered signs with different safety legends such as, "Fire Extinguisher" and "Not An Exit." To provide this legend flexibility requires the design of a new sign. It is requested that the new sign, designated Series 710 Commercial Safety Sign, be added to our license No. GL 1424-1611.



## 2. DESCRIPTION OF THE PRODUCT - SERIES 710 COMMERCIAL SAFETY SIGN

Our market research has shown the need for various face dimensions to accommodate a variety of safety legends such as the Handicapped symbol recommended by the U.S. Department of Health, Education and Welfare; the Public Buildings Service of the U.S. General Services Administration; the Office of the Chief of Engineers of the U.S. Army; and Specifications of the American National Standards Institute.

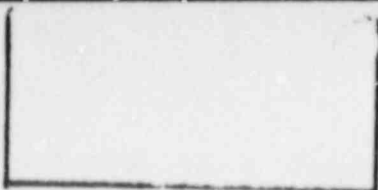
To provide the required flexibility of legend, various portions of, or the entire viewing surface of the Safety Sign must be illuminated. To accomplish this goal, the Series 710 Commercial Safety Sign utilizes several vertically oriented reflectors,

each incorporating a T-LIGHT TUBE Assembly, the combined effect of which is to illuminate the desired legend. The translucent front cover of the sign will be silk screen printed with different safety legends as required by the intended use.

To illuminate the variety of desired legends, various combinations of the basic T-LIGHT/reflector subassemblies,

will be installed in the signs at the factory. The only manufacturing variation in physical size of either of the two basic T-LIGHTS will be a reduction in some instances in their length, so as to minimize tritium content.

The maximum number of T-LIGHT/reflector subassemblies contained in any sign will be six. The maximum tritium content of a complete sign will be 25 curies.



3. DISTRIBUTION OF SERIES 710 COMMERCIAL SAFETY SIGN

The Series 710 Safety Sign will be distributed in the same manner as currently approved in GL 1424-1611, that is, as a generally licensed device subject to all of the appropriate distribution restrictions which currently apply to the Series 700 Sign.

4. REPLACEABLE T-LIGHT TUBES

It is requested that the license amendment allow distribution of T-LIGHT TUBES consisting of gaseous tritium light sources hermetically sealed in impact-resistant sealed plastic sleeves, to registered owners of Series 710 Safety Signs.

Over a period of time, the liminous output of EXIT or similar Safety Signs illuminated by gaseous tritium light sources, declines due to radioactive decay of the tritium gas. Thus, at approximately 7 years after manufacture, the signs or the gaseous tritium light sources contained therein, will require replacement in order to maintain a satisfactory level of sign illumination. The cost of a new replacement sign may be an economic burden sufficient to postpone this important replacement decision.

We propose that replacement T-LIGHT TUBES will be available at a significantly lower cost than a new complete sign, thereby, increasing the probability that replacement will occur at the appropriate time.



5. DESCRIPTION OF THE PRODUCT - SERIES 710 T-LIGHT TUBES

T-LIGHT TUBES consist of a gaseous tritium light source, encapsulated in an impact-resistant plastic sleeve. The light source is internally shock mounted and prototype tests have shown that it will withstand excessive impact stress without failure. The ends of the outer sleeve are closed with plastic caps permanently cemented to the inside wall of the sleeve to preclude disassembly of the T-LIGHT TUBE. Thus, each is in itself, a completely sealed, self-contained product.

6. USE OF T-LIGHT TUBES

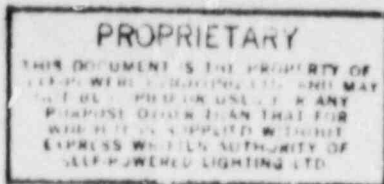
The T-LIGHT TUBES are designed to be installed by the owner into existing Series 710 Signs which have reached their scheduled replacement date. Installation instructions, which will be shipped with the T-LIGHT TUBE, are attached as Exhibit 1.

Each T-LIGHT TUBE will have a permanent label with the following or similar wording:

USE OF THIS PRODUCT RESTRICTED TO SPL SERIES 710 SIGNS.  
DO NOT USE FOR ANY OTHER PURPOSE.

7. DISTRIBUTION OF T-LIGHT TUBES

Since T-LIGHT TUBES are restricted to use in Series 710 Industrial Safety Signs, shipment of T-LIGHT TUBES will be made only to owners of record of Series 710 Signs.



SECTION 2 - Prototype Tests

	<u>Document Number</u>	<u>Date of Issue</u>	<u>Number of Pages</u>
A. Test Specifications - Series 710 Commercial Safety Sign	101 Rev. 0	4/17/80	6
B. Test Results - Series 710 Commercial Safety Sign	102 Rev 0	4/17/80	8
C. Test Specifications - Series 710 T-LIGHT TUBES	103 Rev. 0	4/17/80	6
D. Test Results - Series 710 T-LIGHT TUBES	104 Rev. 0	4/17/80	8