

# TSL (self luminous)

TRITIUM



Job/Location: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_

Job Type: \_\_\_\_\_  
 Date: \_\_\_\_\_



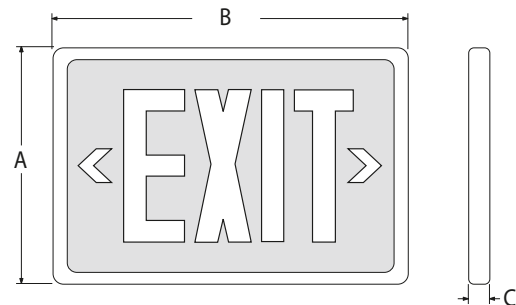
## ■ specifications: internal

The TSL standard self-luminous versions are internally illuminated by maintenance free sealed tritium filled tubes. Tritium source illumination provides constant emergency illumination as specified for either ten (10) or twenty (20) years. Minimum brightness at the time of manufacture of 0.15 foot lamberts.

## ■ specifications: external

The TSL series housing is constructed from durable, corrosion resistant ABS thermoplastic. The TSL housing is supplied standard with a red on white stencil and white frame (other color options available). Single or double face versions must be specified. Removable field adjustable universal chevrons are standard on each unit.

## ■ dimensions



TSL Series	A	B	C
Single Face	215.9mm 8 1/2"	355.6mm 14"	25.4mm 1"
Double Face	215.9mm 8 1/2"	355.6mm 14"	57.15mm 2 1/4"

## ■ ordering logic

EXAMPLE: TSL-1-R-10-GRY-U

Series	Face No.	Face plate	Duration	Frame	Mounting	Options
TSL	1 (single)	R (red)	10 (ten years)	B (black)	U (universal)	SW (special wording)
	2 (double)	G (green)	20 (twenty years)	GRY (gray)	SPK_12 (12" swivel pendant)	
		B (black)		W (white)	SPK_24 (24" swivel pendant)	
					SPK_36 (36" swivel pendant)	
					SPK_48 (48" swivel pendant)	

NOTE: TSL requires a mandatory form with each order.  
<https://beghelliusa.com/forms-beghelli-usa/>

## ■ specifications: electrical

The **TSL** series is a completely self-powered, illuminated exit sign requiring no external power source of any kind. The **TSL** series self-luminous sign is extremely reliable during its predicted life. The **TSL** series exit sign is always "ON" requiring no wiring or electrical installation, and as a practical and environmental matter, consumes no power of any kind. Operating temperature is between -76°F to +212°F.

## ■ specifications: mechanical

The **TSL** series is manufactured under stringent quality control procedures and meet all requirements of the Atomic Energy Control Board (AECB) and the Federal Nuclear Regulatory Commission. Illumination is achieved by using a permanent internal light source. The sign complies with ISO 9001. Tritium emits relatively low energy beta particles that bombard the phosphorus coated glass tubes, this action generates light. Light emitting phosphors are designed and selected according to their color and light production efficiency. The **TSL** series features several glass envelopes (tubes) that are encased behind plastic housing light diffusers. To reduce chances of breakage, the **TSL** series features tritium tube shockproof mountings made of PVC. At the end of life, TSL signs must be responsibly disposed or recycled.

**TSL** series also complies with the following: NFPA 101, UL 924, City of Los Angeles, State of California, Council of American Building Officials (ICBO, SBCCI), OSHA and USNRC.

## ■ light specifications

The **TSL** series uses self-luminous tritium as a light source. Although this source emits light, it cannot be considered or measured in the same sense as incandescent (point) sources, where light is emitted evenly from an area rather than a point surface. The conventional unit of measurement is the microlambert. For convenience, the following definitions are provided:

A lambert equals  $1/\pi$  candela per square centimeter (0.3183 cd/cm<sup>2</sup>) or  $10^4/\pi$  cd/m<sup>2</sup>

A foot Lambert equals  $1/\pi$  candela per square foot, or 3.426 candelas per square meter.

A microlambert is one millionth of a lambert.

## ■ practical design

The **TSL** series has been designed to perform in just about any environment. Requiring no external power source, installation is effortless and efficient. The practical design of the **TSL** series allows installation and maintenance to be at a minimum. Since an external power source is not required, the installation of the **TSL** series is not restricted by location or the lack of an easily accessible power source.

## ■ model guide

The **TSL** series requires that the manufacturer register the actual installation location of every self-luminous tritium exit sold. When ordering the **TSL** series, Beghelli USA will require all purchase orders to include the end users address, phone number and contact name. Beghelli USA will then register the installation with the Federal Nuclear Regulatory Commission as per required by law.

## ■ custom wording

The **TSL** offers full custom signage and graphics. We will work with your design or requirements. Contact factory for more information.

## ■ warranty

The **TSL** Series comes with a 10 or 20 year factory warranty. Deliberate damage, misuse, improper installation effectively cancel the warranty.