Product Technical Statement

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Product: **Ecoglo Photoluminescent Exit Signs**

Description: The Ecoglo Photoluminescent Exit Signs range provides pictogram and text signage to identify exits from buildings. The photoluminescent signs do not require an emergency power supply.

Scope of Use: This product technical statement covers the Ecoglo range of photoluminescent exit signs listed below which are an acceptable solution for Risk Group C buildings (as defined in Acceptable Solution F6/AS1) when the installed lighting to charge the photo luminescent material provides at least 100 lux on the sign.

The product technical statement also covers their use as an alternative solution when:

- The installed lighting for charging the photoluminescent material is LED;
- The visible distance is up to 36 m and 48 m respectively for signs identified as -36m and -48m respectively;
- The illuminance on the sign by installed lighting for charging is less than 100 lux but greater than 55 lux;
- Installed in Risk Group A or B buildings.

The product technical statement covers the following products:

- Exit: S20-EX2313-16m; S20-EX2916-24m; S20-TREX2916-16m Te Reo Exit "Putanga"
- Pictogram (Exit Straight): S20-RM1616UN-16m; S20-RM2323UN-24m; S20-RM2916-16m; S20-RM4223-24m; S20-RM6334-36m; S20-RM8445-48m
- Pictogram (Exit Left): S20-RML2916-16m; S20-RML4223-24m; S20-RML6334-36m; S20-RML8445-48m
- Pictogram (Exit Right): S20-RMR2916-16m; S20-RMR4223-24m; S20-RMR6334-36m; S20-RMR8445-48m
- Pictogram (Exit Left/Right): S20-RMRL2916-16m; S20-RMRL2916HV-16m Hi Vis; S20-RMRL4223-24m; S20-RMRL4223HV-24m Hi Vis
- Emergency Exit: S20-EE6128-16m; S20-EE7835-24m
- Arrow: S20-AR1313; S20-AR1616; S20-AR2323
- Accessible Route: S20-AC1616
- No Exit: S20-NE4113-16m

Conditions: To be installed/used as described in Product literature "Emergency Signs and Escape Routes New Zealand Catalogue v16.1" (available from www.ecoglo.co.nz).
Signs must be charged by exposure to electric lighting, or daylight (supplemented by electric lighting if necssary). Daylight through window glass, whether

direct or reflected off room surfaces, provides effective charging for Ecoglo signs.
Fluorescent, metal halide, or LED lighting with a colour temperature of 4000K or greater are suitable charging sources for Ecoglo exit signage.
When installed in Risk Group A buildings an emergency power system must restore normal lighting levels within 30 minutes of the power failure.

Limitations: If the installed lighting used to charge Ecoglo in a building has a colour temperature of less than 4000K, a specific design of the lighting by Ecoglo is required.

Related Technical Literature: Technical Justification for Ecoglo Markings v16.2 (available from www.ecoglo.co.nz).
Technical Justification for Ecoglo Photoluminescent Exit Signs v16.2" (available from www.ecoglo.co.nz).

Relevant Code Clause:		Basis of Compliance:	Related documents:	
Durability	B2.3.1	Building Code performance		The luminance from the photoluminescent material in Ecoglo signs does not significantly degrade over time. Indoors, where UV is usually negligible, Ecoglo markings can be expected to remain suitably visible for at least 30 years, and outdoors for at least 15 years.
Hazardous building materials	F2.3.1	Building Code performance		The photoluminescent compounds used in Ecoglo products are not hazardous and do not emit any harmful radiation.
Signs	F8.3.1	Acceptable Solution	F8/AS1	Ecoglo emergency exit signs installed as specified comply.
Signs	F8.3.3	Acceptable Solution	F8/AS1	Ecoglo emergency exit signs located to identify escape routes and installed in accordance with Ecoglo specifications comply with F8.

Guidance for Consenting: Verification of ongoing luminance is not required. Ecoglo Inspection and Maintenance Procedures for Compliance Schedules check that the signs as installed have not been damaged or removed, and that any electrical lighting to charge the signs continues to function as intended.