

# **ARTICLE PROVIDED BY PROFIRE SAFETY SERVICES**

## THE RUNNING GREEN MAN: EMERGENCY EXIT SIGNAGE

### THE NEW ENVIRONMENTALLY & COST EFFECTIVE STANDARD

Already implemented in Union Station in Toronto, the "Green Running Man" is an internationally recognized exit signage with a Photoluminescent option that is environmentally friendly, can provide large cost savings and transcends language barriers.

As Canada moves closer to adopting the International Fire Code (IFC) – slated to come into effect from 2015; changes are slowly being implemented in the existing National & Ontario Building Codes (NBC & OBC).



The Code comes into effect as of 2013 in Ontario and will be applicable to *new* construction or large renovations. While the existing red EXIT signs will still be permitted, eventually there will be a time period to adapt to new code changes.

The National Building Code 2010

#### 3.4.5.1. Exit Signs

2 b) except as permitted in Sentence (3), <u>consist of a green pictogram and a white or lightly tinted graphical symbol meeting the colour specifications referred to in ISO</u> 3864-1, "Graphical symbols – Safety colours and safety signs –

Part 1: Design principles for safety signs in workplaces and public areas," and c) conform to the dimensions indicated in ISO 7010, "Graphical symbols – Safety colours and safety signs – Safety signs used in workplaces and public areas," for the following symbols (see Appendix A): i) E001 emergency exit left, ii) E002 emergency exit right, ii) E005 90-degree directional arrow, and iv) E006 45-degree directional arrow.

To minimize the expense of changing existing red EXIT signs in your building, a cost effective solution is to replace them with the **Green Running Man** on a floor by floor upgrade.

The Photoluminescent Green Running Man is Environmentally Friendly Signage That Can Reduce your Energy Costs

These signs are made of photo-luminescent material and require NO electricity or electrician to install them. The ROI is estimated to be under 1 year. Photo-luminescent exit signs are ULC 572 compliant for 50, 75 foot and 100 foot visibility and provide a

green environmental substitution for electrically-powered signs. Their signs are charged with available ambient light so there is no electrical wiring required and no direct electricity expense.

Since these exit signs do not require replacement bulbs or batteries, the maintenance costs associated with these items are eliminated. These signs have a minimum 30-year life cycle and only require the occasional cleaning to perform according to specifications. Compared to electrically-powered exit signs, photo-luminescent signs reduce 30-year operating costs by over 90%!

ROI Analysis: A 22 Story Tower

## **Cost to Maintain 66 Electrical Exit Signs over 30 years: (LED)**

•	Electricity:	\$13,919
•	Maintenance (replacing batteries, bulbs & signs):	\$31,185
•	Cost of 2 signs (15 year life)	\$10,560
•	Total Life Cycle Cost:	\$55,664

### Cost to Replace and Maintain 66 Ecoglo ULC572 Green Running Man (Exit) Signs:

Purchase & Installation (66 x \$140 per sign): \$9,240
Maintenance: \$0
Electricity: \$0
Total Life Cycle Cost: \$9,240

✓ Total Savings: \$46,424✓ ROI: 502%

Type of Exit Sign (Cost Per Unit)	Est. Cost to Power Per Year*	Est. Cost to Maintain Per Year**	Total Est. Costs Per Year	Est. 30 Year Life Cycle Cost
Incandescent (\$80)	\$52.95	\$60.00	\$112.96	\$3,628.38 (3 replacements)
Fluorescent (\$120)	\$34.05	\$30.75	\$67.80	\$2,378.48 (4 replacements)
LED (\$80)	\$7.03	\$15.75	\$22.78	\$957.84 (4 replacements)
Photo-luminescent (\$135)	\$0	\$0	\$0	\$135.00 (No replacements)
* 0.115 Cost per KWH ** Replacement bulb & battery cost + labor				

To learn more about the *Green Running Men* signage and for more information on fire safety services, please contact Arnel Ramdath, ProFire Safety Services at 416.410.7221 x 9. You can also visit the website at: <a href="https://www.profire.ca">www.profire.ca</a>