Various Standard Products

BlueEarth offers a rich lineup of quick-to-install standard products. Other types are also available.
Please contact us for more information.

High Brightness Photoluminescent Signs for Wall Mounting

Patented
Outdoor Photoluminescent Paint (Patent Pending)

Signboards for safety evacuation areas, tsunami evacuation areas, and guide signs must quickly guide people to destinations even in the dark during the blackout caused by fire. BlueEarth helps quickly directing people to evacuation areas by its simple design in which only the pictogram and arrows glow.

High Brightness Guide Signs and Evacuation Guide Marker for Roads

Patented
Outdoor Photoluminescent Paint (Patent Pending)

Stainless steel is used for the main body. Convex design like a pinholder securely guards the photoluminescent layer and prevents frictions and impact by direct contact. Furthermore, the surface of phosphorescent paint is glass-coated to keep it clean. In the evacuation guide marker, △ indicates directions, ○ stands for go, and □ means stops.

Non-slip step, stair nosing, handrails

Patented
Outdoor Photoluminescent Paint (Patent Pending)

The aluminum strips can accurately indicate the stair steps in the dark for safe evacuation.
It can be installed to existing or new buildings.

BlueEarth series can provide necessary information in various places including parks, public spaces and outdoor space.

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Znet Co.,Ltd

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BlueEarth®

Outdoor Use High Brightness Photoluminescent Signs

津波避難
Tsunami evacuation
鵠南小学校
約100m
藤沢市 危機管理課
鵠16003

Bright, Clear
and for Safe Living

Tokai Inc

Compared to LED products, photoluminescent products are superior in overall.

BlueEarth uses photoluminescent material. Photoluminescent material is a material which absorbs light energy (ultraviolet light) such as sun light and florescent light and slowly re-emits in the dark.
It does not require power source, is eco-friendly and easy to install.
Luminance and afterglow time have been improved, and the performance has been drastically advanced in recent years. BlueEarth is the state-of-art product.
When it is compared to solar LED products which require power source, the differences are clear.

Comparison of photoluminescent products and LED products

Product	Brightness	Easiness to Purchase&Install	Maintainability	Low Failure Risk	Security in Disasters	Consideration to Environment	Consideration to Landscape
Photoluminescent Products (BlueEarth)	No power source is used. Absorbs light energy (sunshine, fluorescent) and emits about 30 hours. Highest brightness level (S-rank)	Not require power source nor wiring. Quick installation	Simple structure, and basically maintenance-free	No wiring troubles because there is no wiring.	Not require power source. Soft material and less likely to cause hazard.	No CO2 emission	Not as bright as lights so not affecting landscape.
Solar LED Products	Charges light energy (sunlight) to the battery. Generates power and emits light.	May required large-scale construction work and take long time to install. Relatively high cost.	Most battery life is 3 to 5 years, and replacement cost may become high in some cases.	Risk of failure including wiring error in the product	Power source is not required, but possible to be affected by damage.	By the advancement of LED and battery technologies, the influence is reduced but the possibility is not zero.	Since it also lights up the surrounding area, it has effect to prevent crimes, but on the other hand, it may disturb the living.

Compared to resin-based photoluminescent products, BlueEarth has high weatherability, brightness, and afterglow capability.

There are various types of photoluminescent products, and each has characteristics. As for examples of materials, there are resin, PVC, films and more. BlueEarth is made of silicone. The difference mainly appears in the weatherability. That is, whether they are easy to be deformed, discolored, or deteriorated when polymeric materials such as paint are used outside. BlueEarth is superior in this point also.
BlueEarth keeps emitting light about 30 hours whereas others only emit about 12 hours. It has the highest luminance class (S rank) certified by the Fire Protection Equipment and Safety Center of Japan.

Comparison with Other Photoluminescent Products

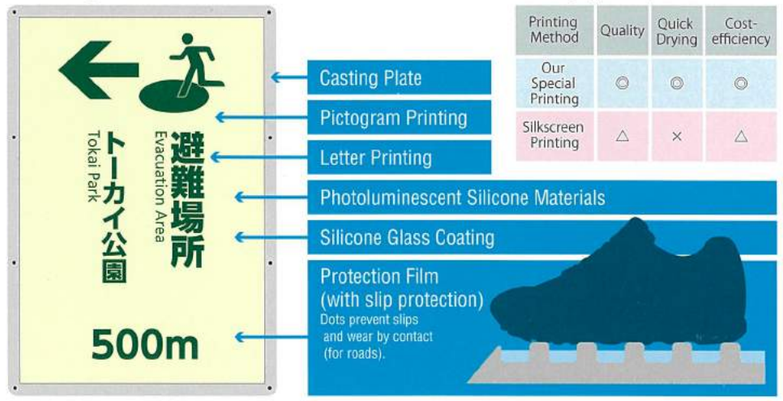
Product	Material	Resistant to Deformation, Discolor, Deterioration	Water Resistant	Calming Luminescent Color	Brightness 60分	Brightness 120分	Brightness 720分	Support for Large Order	備考
BlueEarth	Silicone	◎	◎	○ Blue green	100*1 (265) *2	100*1 (125) *2	100*1 (14) *2	Small Lot Only	
A社	Resin	△	△	× 黄緑色	64*1 (168) *2	64*1 (80) *2	71*1 (10) *2	Small Lot Only	Light emitting capability drops in two years unless it is protected from ultraviolet.
B社	PVC	△	△	× 黄緑色	49*1 (129) *2	47*1 (59) *2	71*1 (10) *2	Small Lot Only	Vinyl is rippled by heat. Plasticizer added in molding process deteriorates surrounding materials.
C社	Film	×	×	× 黄緑色	29*1 (78) *2	26*1 (33) *2	24*1 (3.4) *2	Small Lot Only	Water can easily enter from the side when it is cut, and film section tends to peel off.

＊1 BlueEarth is defined as 100. ＊2 After irradiated 60 minutes at 400μW/m² (by xenon lamps)

Using unique printing technique, TOKAI offers the products with high utility values.

Silicone materials have weak points, too. Since they repel water and oil, they are not suitable for printing. Generally silkscreen is used to print on silicon materials, but it is not suitable for small lot in terms of cost, including drying time. TOKAI's unique printing technique solves those problems. It can not only reduce cost and time on production but also offer high utility values (e.g. providing various information suitable for installation environment, full color for high appeal power).

Printing to Silicone Materials



Printing Applicability to Silicone Material

Printing Method	Quality	Quick Drying	Cost-efficiency
Our Special Printing	◎	◎	◎
Silkscreen Printing	△	×	△

Easy installation. Applicable to various places without any construction work.

Since BlueEarth is only 3-mm thick, it can be mounted at various places without installation work. At some places, it may be installed by double-sided tape and applying pressure. BlueEarth can be installed with less cost and time.

Comparison of Installation Methods