

### SEIH-YING CO., LTD.

## Best choice for road construction

class and

from 1.5



#### Safe, Economical, Conserving Energy, Protecting Environment, Ni-Tech

Why do highways need high strength of 360 degree tempered glass road marking reflectors?

- Safe: The deficiency of thermoplastic road marking lines giving no reflection during rainy nights is remedied. The 360 degree reflection of Siglite eliminates blind spots at any dangerous curves and reduces accidents.
- Economical: Long service life of Siglite reduced the cost of marker replacements significantly. Dust does not accumulate easily on the product surface and no washing maintenance is required.



The deficiency of thermoplastic road marking lines giving no reflection during rainy nights is remedied



# SIGLITE – Lighten your way home

Why are Seih-Ying's Siglite 360 degree tempered glass road marking reflectors the best choice for traffic safety on highways?

- The Siglite is fully tempered (i.e. the glass shatters into small particles if broken, which causes no human injuries or vehicle damages).
  - The Siglite has the highest compressive strength in the world (more than 40 tons for A more than 60 tons for AA class).
  - The Siglite has the highest impact strength (when using 1.04 kg of steel ball to free fam of height and impact the marker's surface, no damage is shown).

Safe product with legal certification

Test Standard	Year	Region
CE certificate	2008	Eur
DIN EN 1463-2	2006	Eur
ISO 9001	2006	Tai
JT/T 390-1999	2005	Chi
DIN EN1463-1	2004	Eur
CNS13762	1997	Tai

- Quality guarantee on freeways (less than 5% of breakage rate over 5 years)
- Professional manufacturing with 20 years of experience (established since 1990).
- Supply of complete product range with largest capacity in the world.

## SEIH-YING CO., LTD.



## GLASS: Guide, Luminosity, Alert, Safety, Strength

History	
Established in 1990	First professional manufacturer in Asia that produces the 360 degree tempered glass road marking reflectors applied with patents in USA, Japan, Germany, China, South Korea and Taiwan
1997	First manufacturer in Taiwan that passed the CNS 13762
1998	Development of first solar tempered glass warning marker in the world and started batch production with patents in USA, China and Taiwan
2004	Approval of EU's EN1463-1 Development of the all-position tempered glass warning reflector (D50)
2005	Approval of A2 category of road studs under China's standard for transportation industry (JT/T390-1999)
2004 & 2005	More than 85% of market share in Taiwan with export to other countries around the world
2006	Approval of ISO9001 Approval of EU's EN1463-2 certification and acquisition of highest class of R1 (test Illuminance greater than 99% of original Illuminance after 1 year of installation) and S1 (no breakage after 1 year of installation)
2008	Approval of EU's CE certification (by BSI in UK)
2009	The compressive strength of 360 degree tempered glass road marking reflectors produced was increased to 60 tons



### Comparison between Seih-Ying and other brands

	Seih-Ying	Class B	Class C	
Tempered level	Fully tempered	Semi tempered	Non-tempered	
Compressive strength (as per CNS 13762)	Over 40 tons for A class and over 60 tons for AA class	15-25 tons	Less than 4 tons	
Impact strength (1.04 kg of steel ball free falling from 1.5 m of height)	No damage	Crack on glass surface	Broken into sharp glass particles	
Reflection illuminance (as per CNS 13762)	1** class product	2 <sup>nd</sup> class or inferior product	Inferior product	
Service Life	5-10 years	1-2 years	Dangerous and not applicable	



Non-tempered glass road stud



Semi-tempered glass road stud



Fully-tempered glass road stud



Compressive resistance test machine



### SEIH-YING CO., LTD.

### Quality policy: Satisfaction of client's demands, establishment of trust, stable quality and sincere service

#### Siglite 360 degree tempered glass road marking reflector series

Item	Model no.	Color	Application	
Siglite 360 degree tempered glass road marking reflectors	SIG-25	Yellow, white	Lane lines and center lines of general highways	
	SIG-19	Yellow, white	Lane lines, side lines and center lines of highways, expressways and urban roads	
	SIC+19sp Recommend	Yellow, white, blue, green		
	SIG-14sp	White	Lane lines and side lines of freeways and expressways	
		Dual-color	Yellow/red, red/white	
	Production on request	180 degrees	White/black, red/black, green/black	
Siglite all-position tempered glass warning reflector	SIG-D50	Yellow, white	Urban roads, traffic islands, barriers, parking lots, bikeways, pedestrian walks, bridge abutments and tunnel walls	

#### Product features:

- Highest strength: The product is highly resistant to impact and compression
- Driving safety: The fully tempered glass shatters into small particles if broken, which cause no human injuries or vehicle damages.
- Maintenance-free: The surface is smooth and does not accumulate dust easily, thus no cleaning maintenance is required.
- Durable reflection: The reflection surface at bottom is processed with thermal spray processing for durable reflection Illuminance.









### Solar Siglite tempered glass warning marker series

Item	Model no.	Color	Application
Solar Siglite tempered glass warning marker	A-666	Production on request	Urban roads, traffic islands, parking lots, Motor ways,
	A-63 Recommend	Production on request	bikeways, barriers, bridge abutments

#### Product features:

- Initiatively illuminant: The conventional marking reflectors are passively illuminant (i.e. reflection only occurs under projection of vehicle's head lights), but Solar Siglite tempered glass warning marker can be initiatively illuminant for warning purpose.
- Applicable on driveways: The body is produced with Seih-Ying's tempered glass technology cooperating with sophisticated solar parts for requirement of safety and durability.
- All-in-one format: The part protruding out of road surface is jointless and therefore provides excellent water tightness.





A-666

A-68