



PAVEMENT MARKERS Adapting to todays demands for retroreflectivity.

PAVEMENT MARKERS

Proven studies show the most effective safety products in all adverse weather conditions is provided by reflective road studs.

US Reflective Road Studs offer optimum lane identification in all weather conditions. They are visible and can be heard and felt, due to the rumble when a vehicle crosses them. Installed on thousands of miles of roadways throughout the world. Tire action facilitates self cleaning keeping the reflective surface clean and brilliant. Road Studs offer a low cost alternative for enhancing roadways and turns. Retroreflection increases visibility, visibility increases safety.

PAVEMENT STUDS

STREET LEVEL MARKERS TCB-1



DIMENSIONS
Length 4" Width 4" Height 0.75"

TCB-1 pavement markers are designed with a high power reflective lens set into a non aggressive rounded shoulder incline for smooth roll over.

The TCB-1 is shatter proof, with a special hard coat protecting the prismatic lens from abrasion. Angled prisms provide optimum night visibility.

TCB-1 Pavement studs are available in single and double sided reflective lens.



Colored housing with matching lens for day time visibility.

Adhesion: Stick-fast instant pre-cut Buylite pads, Hot melt or adhesive can be used.



Colors: white, amber, blue, green and red.
Combinations: red-amber, red-white.

		Item #	
Color	Color	Double	Single
white	white	0312-VVV	0310-W
amber	amber	0312-AA	0310-A
red	red	0312-RR	0310-R
blue	blue	0312-BB	0310-B
green	green	0312-GG	0310-G
Combinations			
Color	Color	Double	
red	amber	0312-RA	
red	white	0312-RW	
Adhesive		Item #	
Stick fast butyl pads		0950-SF	
Adhesive		0950-AD	
Cost		Single sided	Double sided
		\$	\$

STREET LEVEL MARKERS TCB-5



DIMENSIONS
Length 3.94" Width 3.94" Height 0.7"

Highly reflective "Cats Eyes" road studs reflect light similar to "LED" type lighting.

The TCB-5 provides durability and longevity when installed in areas of severe traffic flow or in dry sandy climates.

Shatter proof, the TCB-5 outlasts most markers by its unique one piece design. Manufactured with 45 glass elements on each face for optimum visibility.

TCB-5 has recessed "grabbers" for easy installation. Colors: white, amber, blue green, red and fluorescent yellow.



TCB-5 pavement studs are available in single or double sided lens.



45 Glass elements per side

Color	Color	Item #	
		Double	Single
white	white	355-WW	3551-W
amber	amber	3552-AA	3551-A
red	red	355-RR	3551-R
blue	blue	355-BB	3551-B
green	green	355-GG	3551-G
Combinations			
Flourescent yellow		3552 + Color	
Any combination			
all	all		
Adhesive		Item #	
Stick fast butyl pads		0950-SF	
Adhesive		0950-AD	
Cost		Single sided \$	Double sided \$

STREET LEVEL MARKERS TCB-10



DIMENSIONS
Length 8.6" Width 3.94" Height 1.57

City Studs are designed for both permanent and temporary applications such as curbs, tunnels, bridges and rotaries Divide bus and taxi lanes from free-flow traffic.

Highly visible oversize markers define road sides by its 179 glass element count.

Single or double sided, with or without metal supports.



Bonds perfectly to asphalt and concrete surfaces.



TCB-10 City Studs are available with metal supports for additional strength when installed in sensitive areas.

179 Glass elements per side

		Item #	
Color	Color	Double	Single
white	white	5002-VVV	5001-W
amber	amber	5002-YY	5001-Y
With Stem			
white	white	5002-VVV	5001-W
amber	amber	5002-YY	5001-Y
Cost		No stem	With stem
		Single sided \$15.65	Double sided \$19.45
Cost		Single sided	Double sided
		\$	\$

STREET LEVEL MARKERS TCB-15



DIMENSIONS
Length 8.6" Width 5.9" Height 11.2"

Lane Dividers are temporary delineators that provide excellent day/night time warning guidance to road users.

Equipped with a flexible rubber shaft adding a reliable means to stop dangerous lane changing.

Absolutely traversable even in heavy circulated areas.

Single or double sided. With or without rubber shaft. Shaft equipped with stud reflector for enhanced visibility.

TCB- 15 Delineators are available with metal supports for additional anchoring strength in sensitive areas.



Divider stud without rubber shaft.



128 Glass elements per side

		Item #	
Marker Color	Shaft Color	Double	Single
white	red	5058-VVWR	5058-WR
yellow	red	5020-VVYR	5020-YR
yellow	yellow	5018-VVYY	5017-VY
Yellow stud		5006-VV	5005-Y
White stud		5006-VW	5005-W
With Stem			
Add "S" to item numbers			
Adhesive		Item #	
Stick fast butyl pads		0950-SF	
Adhesive		0950-AD	
Cost	No stem	Single sided	Double sided
		\$28.50	\$29.50
Cost	With stem	Single sided	Double sided
		\$	\$

Prices reflect single units only, please contact your sales representative for quantity pricing





ALUMINUM MARKERS

Aluminum pavement markers provide extreme durability for sensitive areas.

PAVEMENT MARKERS

Aluminum Road Studs are designed to resist extreme impacts providing a long lasting durable road stud for all applications. Road studs are the most effective safety device for night time guidance even under the most adverse weather conditions. Studs are visible and can be heard and felt due to the rumble generated when a vehicle crosses them. Reflective road studs provide optimum lane indication when visibility is dramatically reduced. Aluminum studs are available in two sizes. Reinforcement stem assures the studs precise anchoring position.

ALUMINUM STUD TCB-A1



DIMENSIONS
Length 3.94" Width 3.94 Height 0.78

Aluminum body stud with shank. Available in single or double sided reflective faces.

Aluminum body stud with shank. Available in single or double sided reflective faces.

43 Glass elements per side

Color	Color	Item #	
		Double	Single
white	white	3544-WW	3543-W
amber	amber	3544-AA	3543-A
red	red	3544-RR	3543-R
blue	blue	3544-BB	3543-B
Cost		\$	\$
Adhesive		Item #	0950-AD

ALUMINUM STUD TCB-A2



DIMENSIONS
Length 3.94" Width 3.94 Height 0.78

Aluminum body stud with shank. Available in single or double sided reflective faces.

Aluminum body stud with shank. Available in single or double sided reflective faces.

21 Glass elements per side

Color	Color	Item #	
		Double	Single
white	white	3534-WW	3533-W
amber	amber	3534-AA	3533-A
red	red	3534-RR	3533-R
blue	blue	3534-BB	3533-B
Cost		\$	\$
Adhesive		Item #	0950-AD

ALUMINUM STUD TCB-A3



DIMENSIONS
Length 5.88" Width 5.88 Height 1.06

Aluminum body stud with shank. Available in single or double sided reflective faces.

Aluminum body stud with shank. Available in single or double sided reflective faces.

28 Glass elements per side

Color	Color	Item #	
		Double	Single
white	white	5034-WW	5033-W
amber	amber	5034-AA	5033-A
red	red	5034-RR	5033-R
blue	blue	5034-BB	5033-B
Cost		\$	\$
Adhesive		Item #	0950-AD

ALUMINUM STUD TCB-A4



DIMENSIONS
Length 5.88" Width 5.88 Height 1.06

Aluminum body stud with shank. Available in single or double sided reflective faces.

Aluminum body stud with shank. Available in single or double sided reflective faces.

39 Glass elements per side

Color	Color	Item #	
		Double	Single
white	white	5032-WW	5031-W
amber	amber	5032-AA	5031-A
red	red	5032-RR	5031-R
blue	blue	5032-BB	5031-B
Cost		\$	\$
Adhesive		Item #	0950-AD

PARKING GARAGE MARKERS

Plastic markers have 2 cats eyes reflectors back to back for maximum visibility. Designed specifically for parking garages with a 360 degree rollover capability that resists tire twists when subjected to top dead center tire movements. Illuminate and mark passageways and parking places. Identify areas where striping is non-existent or worn out. Create driver attention in sensitive areas with a "Rumble".

PGM Markers can be installed using "Quick Stick" butyle adhesive pads or adhesive.



PGM
DIMENSIONS
Ø 4.7" Height 0.75"

Color	Item #
Yellow	3004-YY
Adhesive	
Stick fast butyl pads Adhesive	0950-SF 0950-AD
Cost	\$

MINI CURB MARKERS



MCM

Dimensions:
Length 2.07"
Width 1.3
Height 0.38

Plastic curb markers are equipped with 8 cats eyes reflectors on each side for increased night visibility. With a height of only 0.39 inches, MCM marker projects a brilliant light reflex enhancing curbs and medians in all weather conditions. Extremely resistant to all outside aggressions, mini markers install in seconds utilizing adhesive or Quick stick butyl pads. Illuminate and mark passageways for vehicles and pedestrians. Available in white and yellow single or double sided.

Color	WITHOUT ADHESIVE		WITH ADHESIVE	
	Single	Double	Single	Double
White	3091-W	3533-W	3091-W	3533-W
Yellow	3092-WW	3533-A	3092-WW	3533-A
Cost		\$	\$	\$
Adhesive		11oz tube	0950-AD	\$

Prices reflect single units only, please contact your sales representative for quantity pricing



Optical 360 Degree reflective pavement markers for all roadways.

PAVEMENT MARKERS

Optical reflective road markers are constructed from high quality hardened glass, a material that is harder than steel offering enhanced mechanical properties exceeding 38 tons. Optical Toughened glass technology preserves the reflective core and provides unmatched abrasion and wear characteristics when compared to plastic pavement markers.

Two models available, 360-RM1 for unidirectional 360° visibility, and the 180-RM2 for monodirectional 180° visibility. Both markers contain optical reflex technology setting a new standard for the pavement marking industry. Developed for the essential needs of tomorrows growing roadway systems.

360° OPTICAL

ARMORSTUD 360-RM1



Dimensions: 3.93 x 1.69 inches

360° UNI-DIRECTIONAL MARKER

Armourstud's 360° unidirectional optical reflex technology reflects light back to its projected source from any area of its 360 degree radius.

Armourstud's optical reflex characteristics provide a precise and distinctive light signal to oncoming vehicles without projecting light in an opposite direction.

ARMORSTUD 180-RM2



Dimensions: 3.93 x 1.69 inches

180° MONO DIRECTIONAL MARKER

Armourstud's 180° monodirectional optical reflex technology enables the stud to perform from half of its exposed surface.

The opposite side of the marker absorbs entering light beams with no return.

Armourstud monodirectional properties act as a single sided pavement marker providing additional entrance angles up to 180 degrees from face front.

ARMORSTUD 360-FT1

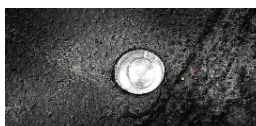


Dimensions: 3.93 x 1.50 inches

"FLAT TOP" MARKER

Armourstud flat top markers are available in two models: Unidirectional and Monodirectional. Armourstud's low profile marker carries the same characteristics as 360-RM1 and 180-RM2 models. Its protruding optical center is only 1/2 inch in height. Flat top markers are designed for reduced noise impact and can be used in both rural and highway applications.

APPLICATIONS



BENEFITS

- Sleek compact design
- Approaching 360° visibility
- Optical toughened glass
- Compact design
- Self cleaning lens
- Precise light reflex.
- Guaranteed 5 years

CHARACTERISTICS

- Optical tempered glass
- Mechanical strength >38 tons
- Unidirectional visibility
- Monodirectional visibility
- Optical reflection : 1268 cd/fc at 0.3 degrees
- 360-RM1 dimensions: 3.93 x 1.69 inches
- 180-RM2 dimensions: 3.93 x 1.50 inches

INSTALLATION



Drill



Adhesive



Insert



Complete

Available colors: White, Yellow, Orange, Green, Red and Blue.



360°	180°	360° Flat Top	180° Flat Top	<100	>1000
360-RM1-W	180-RM2-W	360-FT1-W	180-FT2-W	\$	\$
360-RM1-Y	180-RM2-Y	360-FT1-Y	180-FT2-Y	\$	\$
360-RM1-O	180-RM2-O	360-FT1-O	180-FT2-O	\$	\$
360-RM1-R	180-RM2-R	360-FT1-R	180-FT2-R	\$	\$
360-RM1-G	180-RM2-G	360-FT1-G	180-FT2-G	\$	\$
360-RM1-B	180-RM2-B	360-FT1-B	180-FT2-B	\$	\$

Prices reflect single units only, please contact your sales representative for quantity pricing



L.E.D. SOLAR MARKERS

MK5-S



SYNCHRONISED BLINKING L.E.D. MARKER

Armorstud MK6-SB solar powered markers have been designed to illuminate and outline roadways without the need for electrical components. MK5-S markers provide night visibility beyond a vehicles light zone of over 650 yards.

Armorstud's construction and form protects the L.E.D. diodes while enhancing visibility through its scratch resistant optical hardened glass protective housing.

Micro-Prism technology

MK6-S markers are equipped with a reflective micro prism L.E.D. support panel. This panel reflects light back to a

CONTINUOUS BURN L.E.D. MARKER



Both Armorstud MK6-SC and MK6-SB markers are available in single and double sided faces in all standard colors.



Armorstud MK6-S markers resist snow plows equipped with rubber blades.

Solar powered L.E.D. active pavement markers for enhanced visibility.

PAVEMENT MARKERS

L.E.D. active solar pavement markers offer outstanding clarity and visibility. Crystal clear toughened glass optic shell provides un-parallel visual appearance and performance. With a strength resistance exceeding 18 tons, and shock resistance of over 14.75 ft. lbs, the Solar Armor Stud is durable, long lasting and self cleaning. Utilizing the latest in solar and reflective technology, Armor Stud has the ability to function with a impulse flash effect or a constant burn while its built in passive micro prism technology responds to all road situations day or night even if the diodes are in a passive mode.

CHARACTERISTICS

- Optic tempered glass delivers perfect visible light reflex.
- Automatic light detection triggers L.E.D. components.
- 5 nights operation needs only 8 hours of charge.
- Sleek compact design
- Dimensions: 4.09 x 1.89 x 0.74 inches
- Quick easy installation with bituminous or other compatible adhesive.

BENEFITS

- Visible from 430 to 1094 yards
- Compact design
- Automatic L.E.D. trigger
- Guaranteed 5 years
- Optical Toughened glass shell
- Self cleaning



TECHNICAL CHARACTERISTICS

Solar panel	Monocrystalline
Accumulator type	110 mA / 5 day charge
Diodes	0.1969 in. / 5mm
Luminosity	>4000 mcd
Flash Frequency	1.6 hz
Minimum current	0.15 mA
Impulse flash current	20 mA
Flash duration	3.7 ms

INSTALLATION



Drill



Adhesive



Insert



Complete

In case of an accident provoking the destruction of the marker, the Armorstud with its Toughened glass optic shell will break into little pieces comparable to a lateral window on a vehicle.

This type of material should not be a threat on tire deflation or cutting a person who has fallen on the broken elements.

ITEM #	DESCRIPTION	Light	Cost
MK6-SB-1	Single sided Solar power pavement stud	Blinking	\$ Call
MK6-SB-2	Double sided Solar activated pavement stud	Constant	\$ Call
MK6-SC-1	Single sided Solar power pavement stud	Blinking	\$ Call
MK6-SC-2	Double sided Solar activated pavement stud	Constant	\$ Call



Radio Frequency Controlled Real time modular, interactive marking systems.

PAVEMENT MARKERS

RFC intelligent solar L.E.D. pavement marking systems are the latest innovation in wireless pavement marking systems. RFC markers are controlled and synchronized by an independent pilot beacon that can be linked with several different sensitivity detectors. These devices detect vehicles traveling in wrong directions, high speeds, hazard zones, light, fog and frost.

Armorstud MK6-S high performance marking systems define road hazards while intelligently detecting climate changes providing an extra margin of safety for all road users. Self cleansing and maintenance free.

SOLAR MARKERS

MK6-S



Armorstud MK6-S active solar powered markers have been designed to illuminate and outline roadways through an intelligent real-time interactive radio frequency traffic system that is cost effective. MK6-S markers perform under the most extreme conditions while providing night visibility beyond a vehicles light zone of over 650 yards.

Armorstud's construction and form protects the L.E.D. diodes while enhancing visibility through its scratch resistant optical hardened glass protective housing.

Micro-Prism technology

MK6-S markers are equipped with a reflective micro prism L.E.D. support panel. This panel reflects light back to a vehicle regardless if the diodes are in a working mode.



Armorstud MK6-S markers are available in single and double sided faces in all standard colors.



Armorstud MK6-S markers resist snow plows equipped with rubber blades.

ACTIVATING PRINCIPLES OF ILLUMINATION

DETECTORS

Detect vehicles traveling in wrong directions, high speeds as well as danger zones. Sensitivity detectors detect fog and frost sending information directly to the Pilot Beacon

MK6-S

Solar pavement markers are activated by the radio controlled Pilot Beacon that directly designates the markers illumination effect. Such effects include sequential illumination, blinking or constant burn.

PILOT BEACON

The Pilot beacon is a radio frequency controlled independent command post powered by a five year interchangeable battery. Command post activates the MK6-S markers while simultaneously sending information to the road control operations center for evaluation or change.



BENIFITS



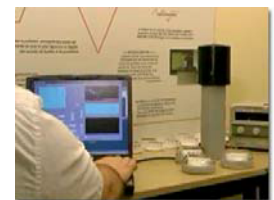
- Multiple illumination effects.
- Illuminate open and closed lanes
- Illuminate high risk zones such as areas of fog.
- Signal and alert changing and merging lanes
- Channalize traffic flow in all areas.
- Control the signal distances between vehicles
- Illuminate shadow zones
- Illuminate rotaries where electricity is non existent.

ADVANTAGES

Real time intelligent signalization for improved traffic circulation. Establish different safety modes that adapt to specific traffic conditions. Example, if there were fog, the MK6-S would stay on continuous mode to outline the roadway ahead. If there was an accident ahead, the studs would "Flash" indicating danger.

Radio frequency controlled activation systems replace traditional cables hookups. The studs are powered by an accumulator and solar panel. The pilot beacon is equipped with a long duration battery allowing the RFC system to be quickly and easily installed.

Real time signalization features allows the RFC system limitless interventions when necessary.



ITEM #	AVAILABLE COLORS	Cost
MK6-S-2	Two sided Solar activated pavement stud	\$ Call
MK6-S-1	Single sided Solar activated pavement stud	\$ Call
MK6-PB-1	Radio Frequency controlled Pilot Beacon	\$ Call
MK6-DECT-1	Detectors: -1 Fog, -2 Speed, -3 Light, -4 Frost, -5 Traffic flow	\$ Call



360 degree curb markers illuminate and define roadways with opticle reflex vision.

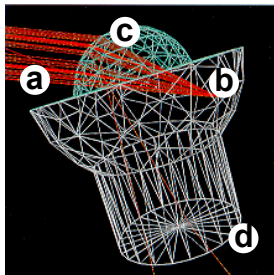
CURB MARKERS

Opti-CURB toughened glass Curb Markers have been exclusively developed to illuminate and outline all types of concrete and stone curbing. Designed for 360 degrees of omni reactional reflectivity enables the stud markers to be visible from any incoming direction. Opti-CURB markers reinforce the presence of curbs and straightaways for approaching motorists regardless of there direction of entrance.

Made from toughened glass adding a strength of 15 tons, preserves the reflective core of its nonconductive self cleaning lens.

Optical 360° Visibility

Optical Reflex Function



Omni-Reactional reflex is based on four main elements:

- A. Entrance Angle
- B. Mirror
- C. Optical Lens
- D. Foot

The Incidence Surface, protruding over the curb receives the light beams from approaching vehicles.



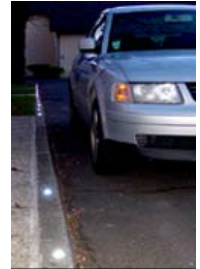
The entrance angle of light entering the Omni-reactional lens (a), is redirected to a specific area of the metalized support acting as a MIRROR (b). The beam of light is then reflected off the optical lens (c) returning light back to its source. The FOOT (d) supports the mirror projection lens acting as a support and adding longevity to its optical lens. This new reflex technology provides the driver with a precise and efficient light signal even under wet conditions.

CHARACTERISTICS	
Weight	6.2 oz
Height	1.196
Material	Tempered optical glass
Mechanical Strength	15 Tons
Removal force	110 lbs
Installation	Mechanical
Optical principle	Reflector
Reflection type	Omni-Reactional

DESCRIPTION		COST	
Item #	COLORS	<100	>1000
300-GC-W	White	\$	\$
300-GC-A	Amber	\$	\$
300-GC-R	Red	\$	\$
300-GC-B	Blue	\$	\$

Benefits

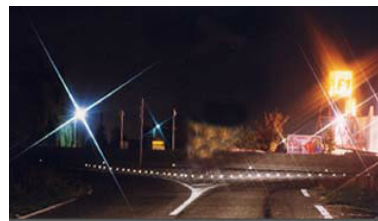
Harder than steel surface with optical characteristics projects a powerful light reflex enhancing any curb for maximum visibility. Visible to the driver from virtually any direction without projecting light to oncoming vehicles. Available in white, yellow, red and blue.



Opti-curb's Smooth surface allows self cleansing. Mechanical properties provide outstanding strength, durability and wear resistance when compared to plastic markers systems.

Compact, 2 square inches

Opti-curb's compact size allows installations under 2 minutes when utilizing Holotool. Fitted with a special rubber locking joint eliminates the need for adhesives.



Distinct Reflex

Opti-CURB Provides exceptional visual outlining of all raised curbing. Maintenance free.





ISLAND BEACONS

IB1-W

White Reflectors



Island beacons can be installed onto any type of raised surface for enhanced identification. Use Island Beacons to identify entrance and exit points or to designate specific maintenance areas.

Island beacons are constructed with A.B.S. for strength and durability. Built to resist trucks and vehicle impact rollovers without destruction of the beacon or reflective lenses.

Island Beacon is equipped with 8 High Power prismatic reflectors for maximum visibility.

Reflectors are available in White, Yellow, Orange, Green, Blue and Red



Illuminate raised curbing and medians with high profile Island Beacons.

Island beacon functions as a highly reflective oversized pavement marker. Designed to withstand vehicle roll overs, Island Beacons provide day/night visibility for all approaching vehicles. Beacons may be placed in front of "KEEP RIGHT" signs reducing vehicle / curb impacts. Designate entrance points quickly and effectively. Installation requires lags and or adhesive. Beacon is equipped with 8 cat's eye reflectors. All standard colors available.

PAVEMENT MARKERS

IB1-OG

Orange and Green Reflectors



MULTIPLE COLOR CONFIGURATIONS AVAILABLE

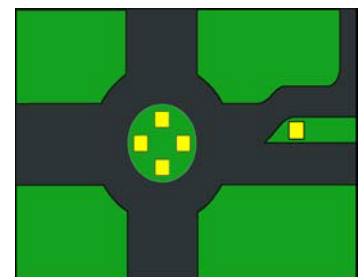
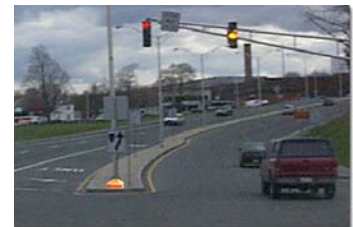
Island Beacons can be color configured for specific safety applications. Easily replace reflectors with rivets or screws.



ISLAND BEACON

SAFETY & PREVENTION

Island Beacons do not require an electrical connection. They are visible from afar due to their High Reflecting Power and assure maximum nighttime safety. As one approaches islands or intersections, their presence permits drivers to navigate safely.



Specifications

Length: 7.8"
Width: 7.8"
Height: 4"
Weight: 3.13 lbs
Reflectors: 4, 1.5 x 7 in.
4 Trapezoids

White Reflectors 2600 cd /fc/ft²
Yellow Reflectors 2400 cd /fc/ft²
Orange Reflectors 1770 cd /fc/ft²
Green Reflectors 945 cd /fc/ft²
Red Reflectors 850 cd /fc/ft²

ITEM #	DESCRIPTION	Cost
0300-IB1-W	White reflective island beacon	\$
0300-IB1-O	Orange reflective island beacon	\$
0300-IB1-R	Red reflective island beacon	\$
0300-IB1-OG	Orange and green reflective island beacon	\$