



LIBERTY INFRA

Freedom of Structures

Our manufacturing facilities are equipped with sufficient machinery and fabrication equipment. Over 90% of our jobs are carried out in house with a team of skilled force and qualified engineers. Each stage of manufacture is closely inspected for quality and workmanship.

TECHNICAL DATA

PROPERTIES	WHITE: AS PER MORT & H	WHITE: ULTRASHINE	YELLOW: AS PER MORT & H	YELLOW: ULTRASHINE
Daylight Luminance (at 45°C)	65% Minimum	>75%	65% Minimum	>60%
Drying Time	Not more than 15 min	8 Min	Not more than 15 min	8 Min
Cracking Resistance at Low Temperature	Shall show no crack on application to concrete block	Pass	Shall show no crack on application to concrete block	Pass
Softening Point	Above 98°C	102°C	Above 98°C	102°C
Flow Resistance	Not more than 25%	10%	Not more than 25%	10%
Yellowness Index	Not more than 0.12	0.08	Not more than 0.12	N.A.
Skid Resistance	Greater than 45	55	Greater than 45	55



VISION

Liberty Infra will be the preferred global partner for innovative and professional line marking solutions.

MISSION

Liberty Infra's mission is to develop, supply, and service high-quality, state-of-the-art solutions for the line marking industry, enhancing traffic safety.

MARKING OUR **ROAD** FOR A BRIGHTER FUTURE



Liberty Infra has gained recognition among prominent manufacturers and importers of high-quality road marking materials. Our offered range includes thermoplastic paint, glass beads, hydraulic pre-heaters, pavement markers, and more. These products are developed using high-quality materials with the support of our experienced team. In addition, our road marking solutions are offered at highly competitive prices. We also provide road marking services to our customers.

We manufacture thermoplastic road marking materials with a production capacity of approximately five metric tons per day, which has steadily increased with growing demand. Liberty Infra provides reliable and comprehensive solutions for thermoplastic road marking requirements, offering products at competitive market prices.

Liberty Infra is consistently focused on enhancing road safety through the production of high-performance thermoplastic road marking materials. These materials serve as an effective alternative to conventional oil paints used for road markings such as lane dividers, edge lines, zebra crossings, speed breakers, and more. We collaborate closely with our clients to address the evolving challenges of modern road networks by delivering fully integrated and innovative solutions for a wide range of infrastructure projects, ultimately contributing to improved road safety.

Primarily, two colors are used for these applications: white, which is widely used for general road markings, and yellow, which is used for specific requirements. Based on market demand, we continuously develop new variants of thermoplastic materials that conform to specific standards and requirements, as outlined below.



SAVING LIVES ON OUR ROADS

Road marking safety i.e. preventing accidents and fatalities on our road network, is an absolute our priority .

WHY US

- **Superior and consistent quality**
- **On-time delivery**
- **Ready inventories**
- **Strong technical support**
- **Excellent customer service**

At Liberty Infra, our commitment to quality is demonstrated through our ISO 9001:2015 certification across all operations. Each batch of material is tested in our fully equipped laboratory to ensure consistent performance and reliability.

We understand that different regions have unique climatic conditions that can affect road marking performance. With strong technical expertise and a flexible production facility, Liberty Infra delivers materials that perform effectively in all environments.

Through dedicated research and development, we continuously enhance the durability and performance of our products, customizing solutions to meet the specific needs of contractors worldwide.

FEATURES

Rapid Drying

Matte paint with
strong adherence

High durability against
friction & color fading

Brightest in colour index

Anti-slip & Skid resistance

Impressive in day light
luminance factor

Long shelf life





REFLECTORIZED GLASS BEADS

- Glass beads are an essential part of traffic safety systems.
- Glass beads are used both as drop-on beads on top of road markings and as premix beads in some types of road marking.
- A reason behind application of glass bead is increase a driver's ability to see road markings at night and in bad weather conditions due to the retro-reflective properties of a glass bead.

WHY WE NEED RETRO REFLECTION ?

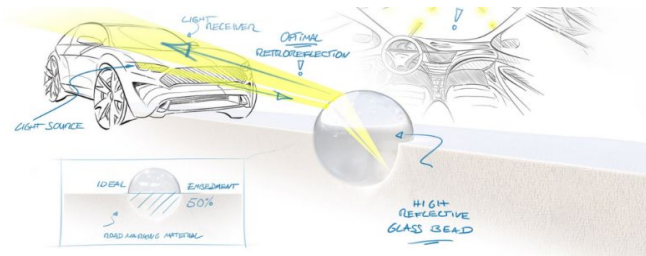
Retro reflection refers to the light reflected back to the light receiver from the light source at that time the intensity of the light reflected back to the receiver is a key measure of how effective a road marking is.

- On the field the light of vehicle is refracted in the beads, allowing it to be reflected by the road marking back towards the driver.
- Glass bead ability to bend light when they enters in bead it is measured by its index of refraction
- In optics refractive index is a dimensionless number that describe how light, or any other radiation propagates through medium, the higher the refractive index of bead it better to reflects. Most beads use on highways and interstate have a refractive index is around 1.50 and in special case refractive index of glass bead which is used on airport marking must be 1.90.

RETRO REFLECTIONS - WHAT HAS AN INFLUENCE ?

Typically, these factors affect retro-reflectivity:

- Bead size distribution
- Ratio between glass beads and friction material
- Roundness of the beads
- Defects/Clarity/Colour of the beads
- Refractive index of the glass
- Quality and composition of the road marking
- Bead embedment
- Miscellaneous, e.g. dirt, weather, wear, condition of the road surface etc
- So mainly Glass beads are added in order to improve the identification of lines at night, to improve the brightness and durability of the marking. Glass beads are physically colorless and transparent ball, has physical function of light refraction, and directional reflection.



Reduction of Mortality during Dark Hours

Raised Pavement Marker

We also provide large range of plastic body pavement marker for the clients according to their demands and expectations. The plastic glow pavement marker's reflectors are extremely durable devices providing day and night visibility in adverse weather condition. These are reflectorized, i.e., reflect light from vehicle's headlights back to driver's eye. These provide a definitive and clear outline of pavement markings during poor visibility condition like fog, rains and darkness.

Road Studs



- Lightweight thermoplastic raised pavement marker road stud has tough, impact-resistant bodies and abrasion-resistant lenses ensure long-lasting performance and durability that provide highly effective long-life visibility, particularly at night and in wet weather.
- Markers can be applied to asphalt and concrete road surfaces. The markers increase awareness with an added rumble effect. Raised Pavement Markers are made with Diamond Grade™ prismatic optics for maximum reflectivity that meets & exceeds ASTM and MORT&H standards.
- Twin shanks model road stud that prevents displacement/disorientation post installation.

KEY BENEFITS

- Highly durable with low life cycle cost
- High compressive strength leading to less failures
- Scratch and Abrasion resistant
- Temperature resistant polycarbonate body and lens
- Rumble effect

Median Marker, 2 Sided, Yellow



- Rigid Median Marker with Fluores as per IRC:79. Median marker has injection molded thermoplastic body which can withstand all natural impacts and has very good outdoor weathering characteristics meets ASTM D256 standard

KEY BENEFITS

- Reflective Fluorescent yellow sheeting used in order to maximize day, dawn, dusk & night time visibility
- Superior Design that lasts longer, easier to clean and has robust installation capability Fluorescent
- Type XI reflective sheeting Tough, high impact resistant, cent
- Provides highest visibility to the median during hence contributes to reduced accidents and enhanced safety of motorists and vehicles
- Good chemical properties

SUGGESTED APPLICATION

- To be installed on road median for delineation and night time hazard visibility

Flexible Median Marker



- Flexible Median Markers are provided with fluorescent yellow colour retro reflective sheeting Type XI as per IRC: 67 on both face with shank Flexible Median Marker has tough, high impact resistant, injection-molded, thermoplastic body with property of flexibility to provide high durability and U shape structure having rebound/bounce back property which meets & exceeds IRC 79-2019 and MORT&H standards

KEY BENEFITS

- Marker provides safety against collision happening with medians during night time or in severe weather.
- Improving median visibility during dark hours.
- Vandal resistance against sheeting peel-off.
- Tensile strength exceeds specification

SUGGESTED APPLICATION

- Road edge line
- Road center line
- Pedestrian Crossing
- Construction work zone areas