

# ROAD SAFETY BROCHURE



## PAK GERMAN ENGINEERS

CREATING A SMOOTH & SECURE TRAFFIC FLOW IN PAKISTAN

ROAD REPAIR | ROAD MARKING | TRAFFIC MANAGEMENT | STREET LIGHT & ROAD SIGNAGE





## Metal Guard Rail

Galvanized Guardrails are constructed from the high-strength gauge, galvanized steel for effective impact absorption. The most common highway guardrail is the galvanized W-Section, a longitudinal highway barrier designed to reduce the severity of run-off-road (ROR) collisions. Roll-formed into a "W" shape to catch car bumpers, W-section guardrails have proven an effective and economical solution to roadside safety. We also provide these products in customized options to cater to the customers' varied demands.

### Technical Data

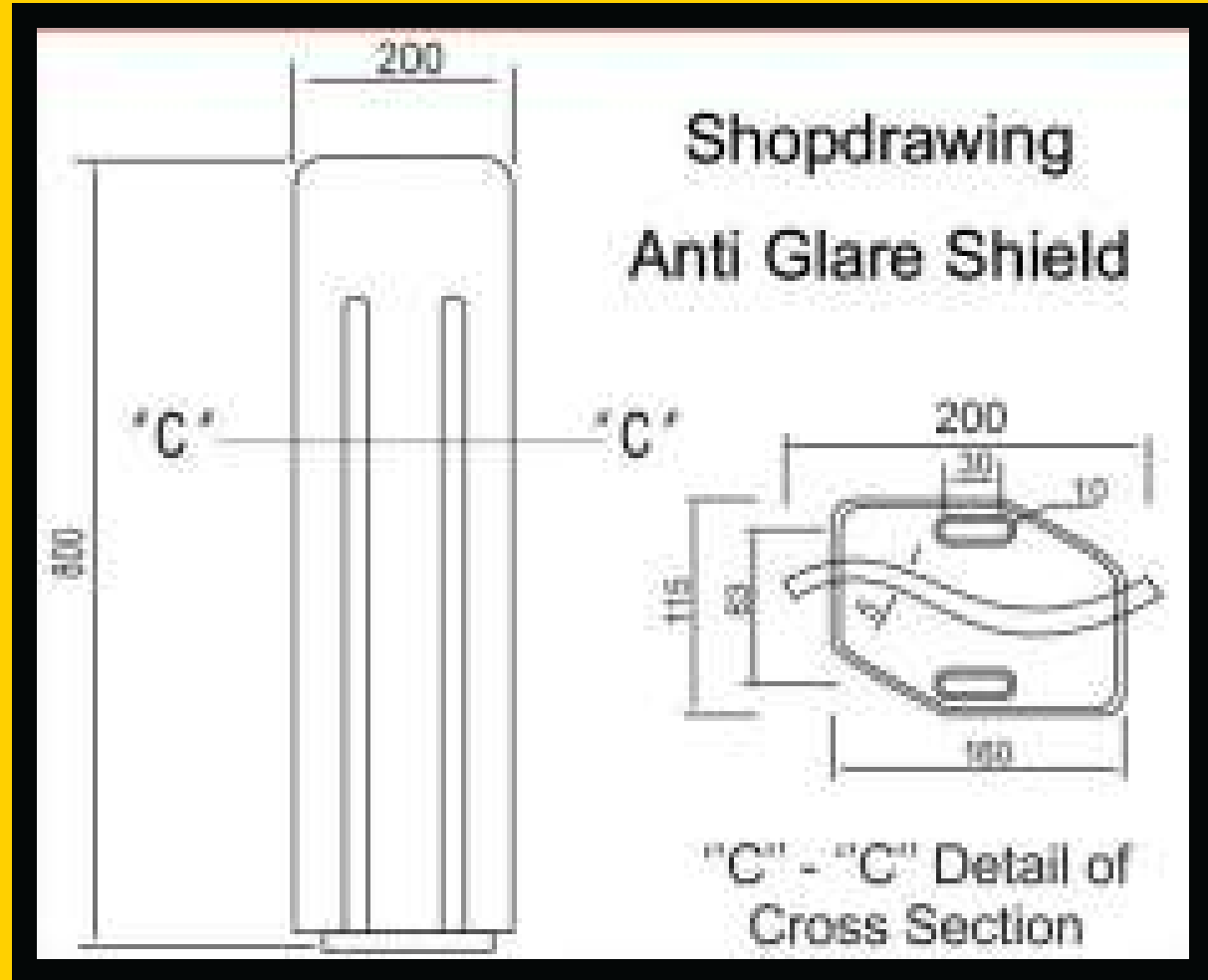
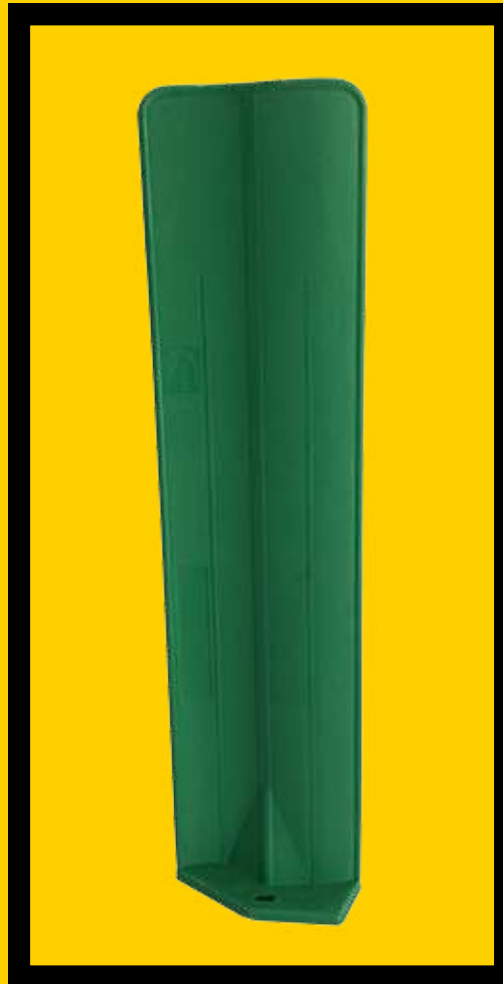
- Thickness W-Section 2.72mm.
- Post Size 1830x150x75mm.
- Post Thickness 5mm.
- Galvanization Hot Dip 550-639 g/m.<sup>2</sup>
- Post to Post distance 3.81 or 1.905 c/c.
- W-Section Yield Point 3450 Kg/Sq.cm.
- W-Section Tensile Strength 4830 Kg/Sq. Cm.
- Post Yield point 3500 Kg/Sq. Cm.
- Post Tensile Strength 4900 Kg/Sq. Cm.







## Anti Glare Shield



## Parking Products (Rubber)

### Column Guard (Round Type) with Reflective Strips

Size  
Length: 35"  
Width: 4.5"x4.5"



### Column Guard (L Type) with Reflective Strips

Size  
Length: 30"  
Width: 4"x4"



### Wall Guard with Reflective Strips

Size  
Length: 39"  
Width: 6"  
Thickness: 2"



### Wheel Stopper with Reflective Strips

Size  
Length: 35"  
Height: 4"  
Width: 4.5"





## Traffic Lane Dividers

### Middle Piece:

Length: 1000mm

Height: 85mm

Width: 240mm

Color: Black/Yellow

### Start/End Piece:

Length: 500mm

Height: 85mm

Width: 240mm

Color: Black/Yellow



## Crash Cushion Barrier

Crash Cushions prevent uncontrolled vehicles from impacting a barrier or fixed object hazard by either decelerating the vehicle or redirecting the car away from the danger. This product is suitable for Toll Plazas, V Junctions, Merging Lanes, and Exit and Entry of Main Highways and Motorways. Crash Cushions are an excellent method to avoid fatal accidents and minimize damage.







## Cable Fencing System

The Cable Barrier System consists of a 3-strand high tension median Cable Barrier designed to deter errant vehicles from hazards. Cable Barrier Systems are a cost-effective solution suited for installation and avoiding fatal damages.

### Technical Data

- Galvanized Wire Rope Hemcore 3/4".
- Anchor Post 6"x6" x 3/16 x 5' tube welded
- Terminal Post C-Section 3-1/4" x 2- 1/2" x 3/16" length 4' hot dip galvanized
- Line Post C-Section 3-1/4" x 2- 1/2" x 3/16" length 5' hot dip galvanized.
- Post spacing for Terminal Post I & II 6'-3" Post III & IV 7'-3".
- Post Spacing: 20' for Line Post.
- Terminal fitting with D shackles and Tum Buckles







**PAK GERMAN ENGINEERS**

## **Traffic Control Spike System**

**The Model 280 Traffic Controller is a heavy-duty surface mount "Directional Enforces." It allows traffic on one direction only and can be used as a free entrance or exit to your parking facility.**

### **Size**

Depth 9"

Width 14"

Length 12',10',8',6' (or as per client requirement)



## **Hydraulic Road Blocker**







## Road Closed Barrier

Road Barriers are an ideal solution for controlling traffic. Accessible Auto gates offer this facility in Electro-Mechanical and Hydraulic Operational Mechanisms controlled either by remote control or manual switch button. It is designed according to the client's requirements and the local environment. Many features have been incorporated to provide a safe, reliable, and easily operated system for outdoor and indoor usage.

### Technical Data

- Operating voltage 220 AC single phase (3 phase optional)
- Operating temperature -20c to 70c
- Final paint mat finish with anti rust paint/ reflective stripes.
- Drive mechanism: electro-mechanical up to 16 feet boom.
- Hydraulic for up to 20 feet boom.
- Barrier arm rotation: 0 to 75 degrees
- Manually operatable in case of power failure.



## Hydraulic or Manual Road Close Blocker







## Lights / Warning Lights & Traffic Signal Lights



Warning Light Reflector:  
Solar Power:5.5V/150mA  
Color: Red

Warning Light Reflector:  
Solar Power:5.5V/150mA  
Color: Red

Warning Light Reflector:  
Solar Power:5.5V/150mA  
Color: Red

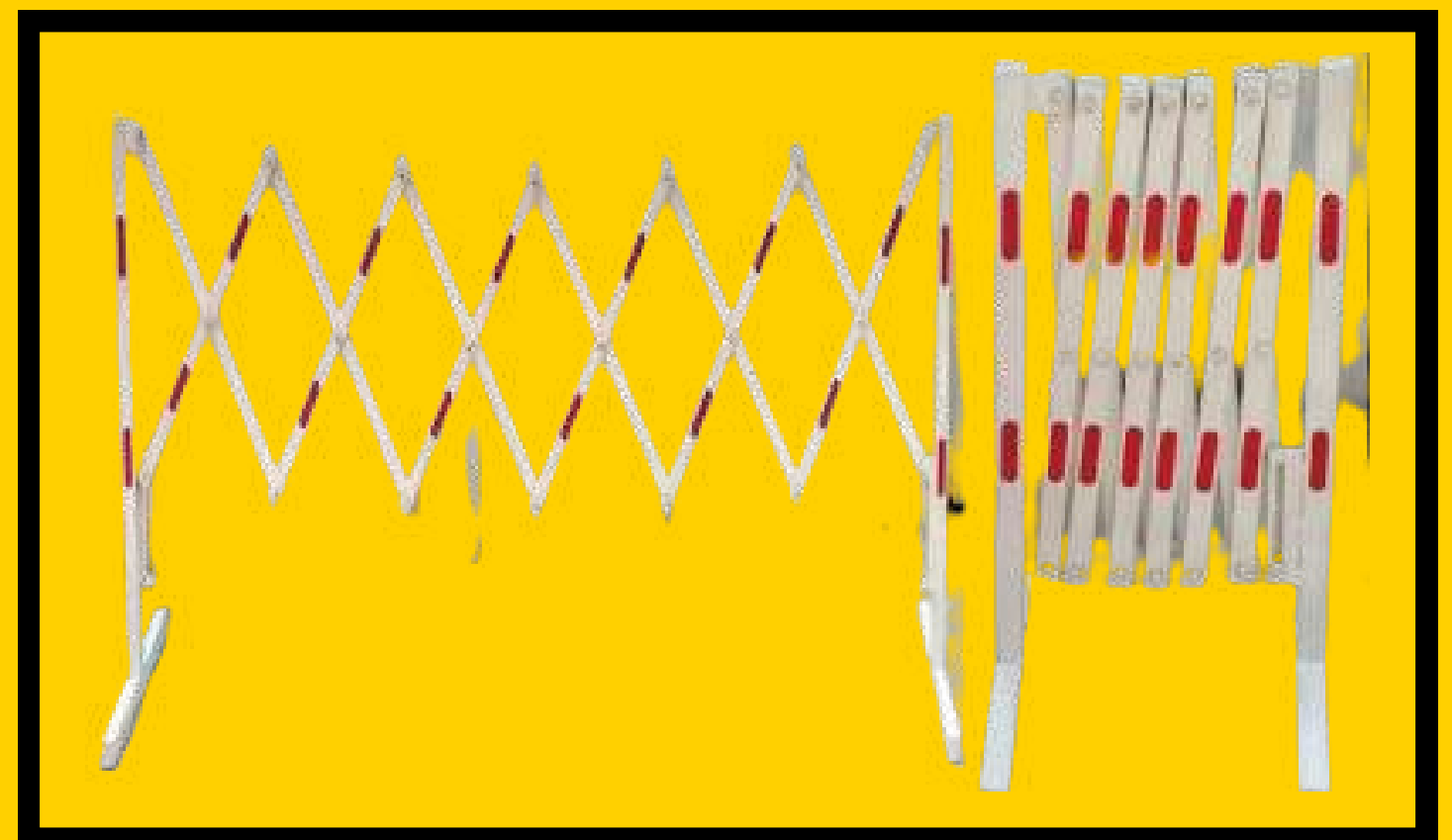


Warning Light Reflector:  
Solar Power:5.5V/150mA  
Color: Red

Warning Light Reflector:  
Solar Power:3.5V/78mA  
Color: Red

Highway Angle Reflector:  
Color: Yellow, Red

## Warning Tape (Cutomized) and Extendable Barricade







## Chain Link Fence



## Chain Post



## Linear Delineator System



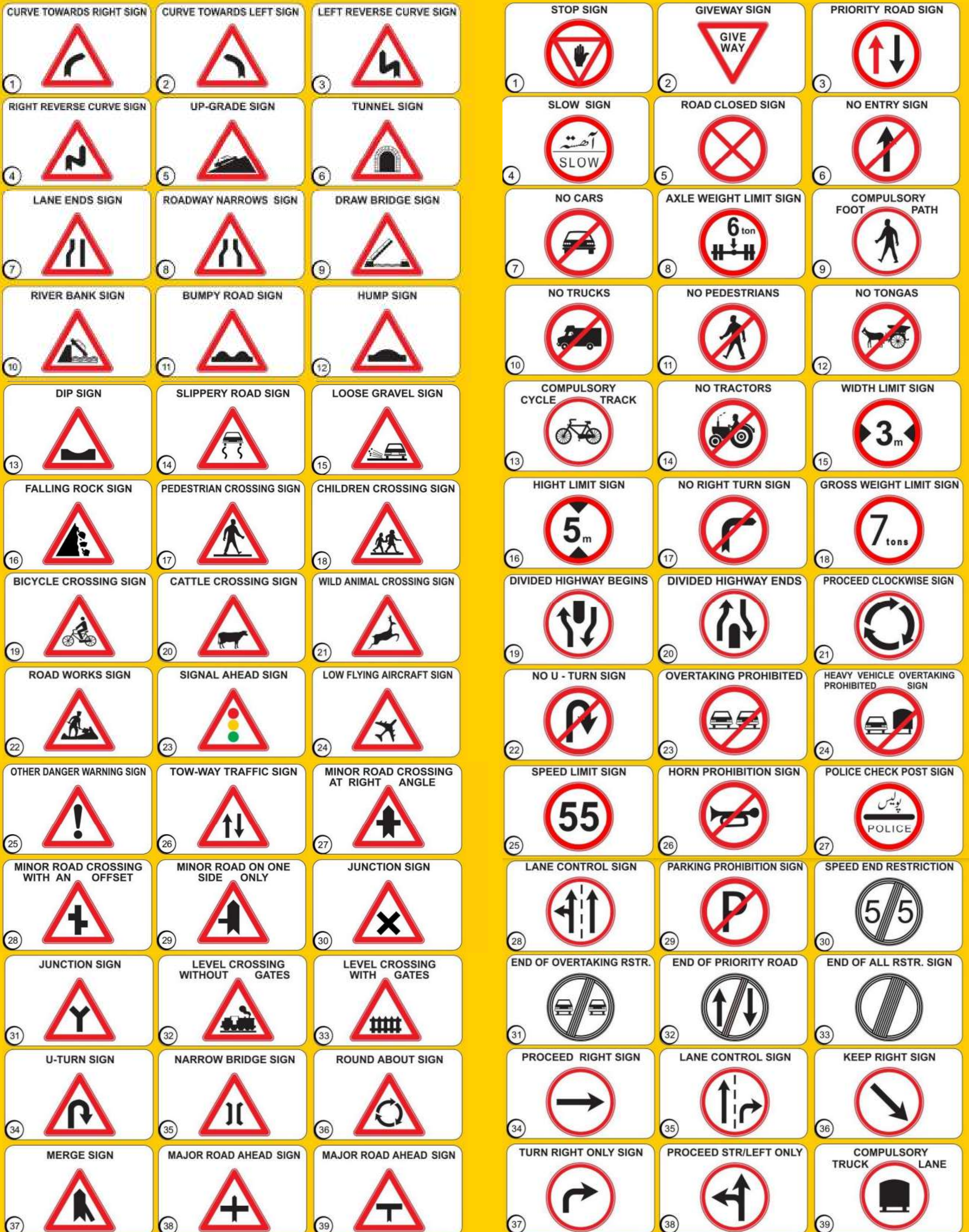
## Kerbstone Painting

PGE kerbstone paint has specifically been formulated for concrete surfaces and has proven excellent exterior paint. The Alkyd resin binder with high solid contents gives excellent adhesion to concrete surfaces, while the UV stable pigment gives it extra life. It is thinnable with oil and mineral therpentine; once dried, the film shows excellent resistance to water abrasion and weather.





## Warning Signs/Regulatory Signs







## Road Marking Chlorinated (CR) Paint

PGE maintains a fleet of self-propelled and hand-pushed machines equipped with a high pressure spray system. These machines can undertake large-scale projects such as motor ways and national highways in given time with strict quality assurance system.

### Technical Data

The Machine has a capacity of 80 liters of paint which can apply lines of width 10cm-45cm with the coverage capacity of 2.5Sqm/Ltr.

Pigments & Extenders	55 ± 4% by weight
Vehicle, Solvent and Additives	45 ± 5% by weight
Viscosity (Ford cup 4 at 25 C )	100 sec
Flash Point	>25 °C
Colour	White, Yellow, Black, Red, Blue
Adhesion	Asphalt and Concrete
Touch Dry	10 to 15 minutes
Traffic Dry	2 to 3 hours
Mixing Ratio	Thinner (Roadex)
Coverage	2.5 to 3 sq M/Ltr (100-75 Microns DFT)
Application Methods	Spray, Brush or Roller
Shelf Life	6 Months when Properly Stored
Packaging	20 litter







## Traffic Sign Boards



Pak German Engineers manufacture different types of traffic signs. The company is an authorized converter of 3M (USA). We have a state-of-the-art design, pasting, fabricating, and installation. We have sign boards, unipole, gantry signs, directional signs, welcome signs, warning signs regulatory signs, etc. The company applies design tools and methods based on the latest information technology. In order to carry out the fabrication of such scale, a state-of-the-art factory has been established in Islamabad industrial area.



## Digital Printed Sign Boards







## Informatory Sign Boards



## Cantilever and Gantry Sign Boards



## Airfield Mandatory and Guidance Signs



Informatory Signs



Mandatory Signs



Airfield Wind Cone Sock Sign





## Road Studs/ Cateyes



Plastic Stud (RPM-290)  
Size: 90x100x15mm  
Double Side White Yellow Red Green



Plastic Stud (RPM-290)  
Size: 90x100x15mm  
Single Side Yellow Red White Green



Plastic Stud (RPM-290)  
Size: 90x100x15mm  
Double Side Yellow Red White Green



Aluminum Stud  
Size: 100x100x22mm  
Single Side White Yellow Red



Aluminum Stud  
Size: 100x100x22mm  
Double Side Y/R,W/W,R/R,Y/Y



Aluminum Stud  
Size: 100x100x22mm  
Double Side Y/R,W/W,R/R,Y/Y



E-Lite Aluminum Stud  
Size: 100x100x22mm  
Single Side White Yellow Red



E-Lite Aluminum Stud  
Size: 100x100x22mm  
Double Side Y/R,W/W,R/R,Y/Y



E-Lite Aluminum Stud  
Size: 100x100x22mm  
Double Side Y/R,W/W,R/R,Y/Y



E-Lite Aluminum Stud  
Size: 110x110x22mm  
S/sided Yellow Red. D/Sided  
Y/R,R/R,Y/Y



E-Lite Aluminum Stud  
Size: 110x110x22mm  
S/sided Yellow Red. D/Sided  
W/W,R/R,Y/Y



E-Lite Aluminum Stud  
Size: 110x110x22mm  
S/sided Yellow Red. D/Sided  
R/Y,R/R,Y/Y





E-Lite Aluminum Stud  
Size: 150x90x30mm  
S/sided Yellow Red. D/Sided  
Y/R,R/R,Y/Y



E-lite Aluminum Stud  
Size: 150x90x45mm  
S/sided Yellow Red. D/Sided  
W/W,R/R,Y/Y



E-Lite Aluminum Stud  
Size: 200x100x45mm  
S/sided Yellow Red. D/Sided  
R/Y,R/R,Y/Y



Aluminum Road Stud/ Divider  
Size: 200x100x65mm (customizable)



Aluminum Road Stud  
Size: 150x150x28mm with glass element  
reflector & Triangular Aluminum Stud  
with 3 reflector Size: 110x110x30mm  
Color: Y+Y/R, W+W/R (Customized)



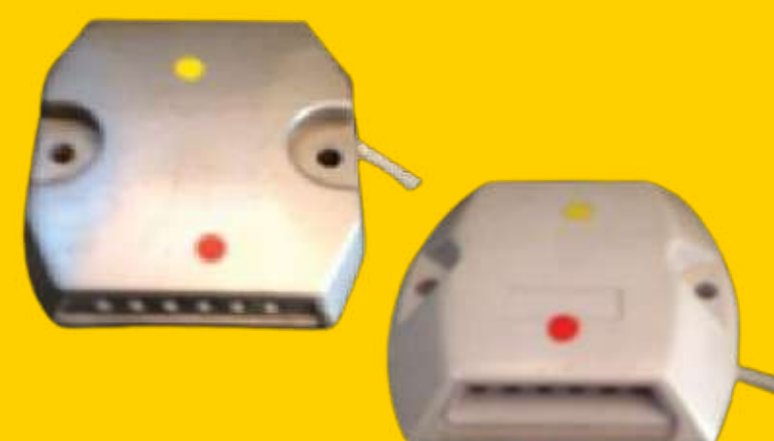
Aluminum Road Stud with Bead Lens  
Size: 150x90x30mm & 45mm  
(Customizable)



Solar Road Studs 3 x LED Red both sides  
Diameter 120mm Height 25mm



Aluminum Solar Road Studs 2 x LED  
each side  
Size: 104x103x22mm



Wire Road Studs LED (Aluminum/ Plastic)  
LED color Red/Yellow/White (Customized)  
12V 108x100x19mm



Solar or Wire Flush Surface Road Studs  
Size: 130x50mm



Tempered Glass Road Studs  
Size: 100x25mm

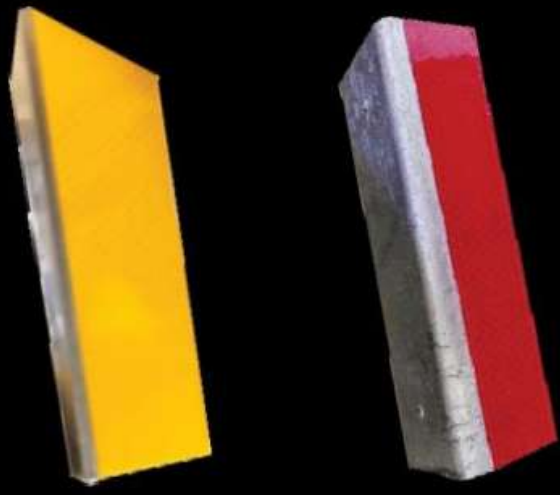


Ceramic Road Studs  
Size: Diameter 100mm Height 20mm  
Yellow/White

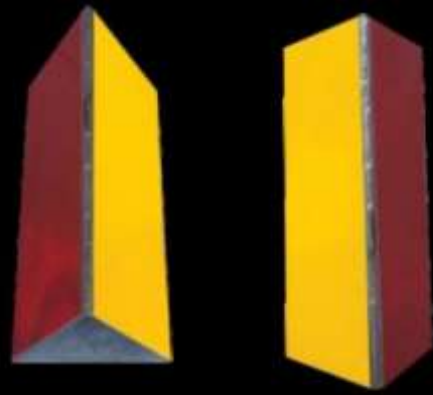




## Angle Reflector/Delinators/Median Markers



Barrier Reflector Type 1  
Size 155x75mm or 150x50mm Colour: Yellow, Red



Barrier Reflector Type 2 (Double Sided)  
Size 168x77mm Colour: Yellow / Red



Guardrail Reflector: (Single & Double Sided)  
Size 120x70mm Colour: Yellow / Red



Delineator Type 1 (PVC Flexible)  
Size 105x800mm with Red Reflector 250x40mm



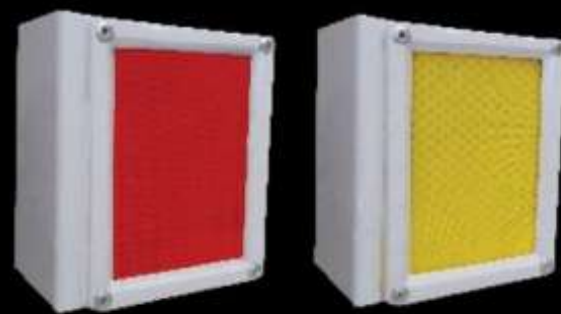
Delineator Type 2 (Double Sided)  
Size 75x300x3mm Colour: Yellow / Black



Delineator Type 3  
Size 75x300x3mm Colour: Yellow / Black



Plastic Road Reflector:  
Colour: Yellow, Red



Barrier Reflector with Frame (Powder Coated)  
Size 100x70mm Colour: Yellow / Red



Median Marker:  
Colour: Yellow, Red



Work Zone Safety Post  
Height: 45" Rubber Base: 17"  
with reflective Strips



Delineator Safety Post  
Height: 30" Plastic Base: 8"  
with reflective Strips



Delineator Safety Post  
Height: 18" Plastic Base: 8"  
with reflective Strips



Delineator Reflector  
Height: 9" Base: 8" x 3"  
with reflective Strips (3M USA)





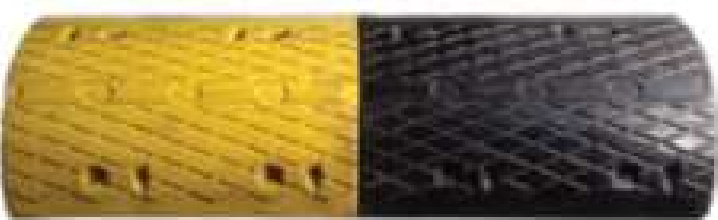
## Speed Breaker (Ramps)

Speed breakers reduce traffic speed to secure roads from road accidents. Pak German Engineers' speed breakers are greatly admired for their durability, rigid construction, chemical resistance, and high tensile strength.

### Rubber Speed Ramps

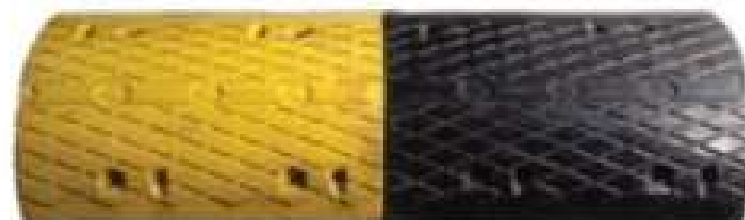
1

500 x 345 x 40mm



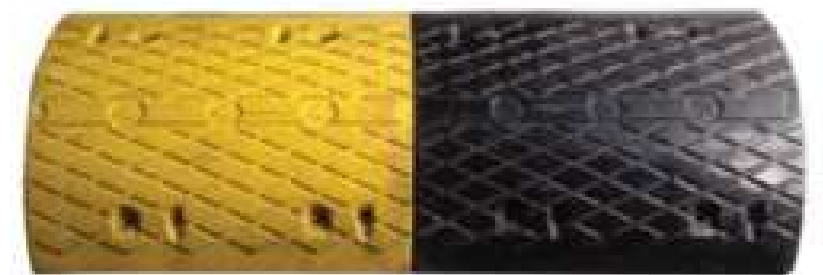
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500 x 370 x 50mm



3

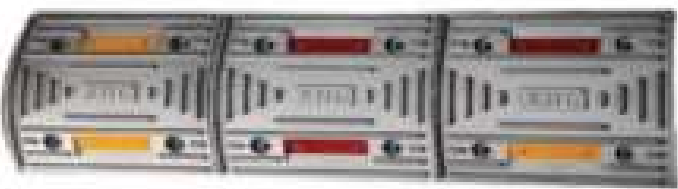
500 x 500 x 75mm



### Aluminium Speed Ramps

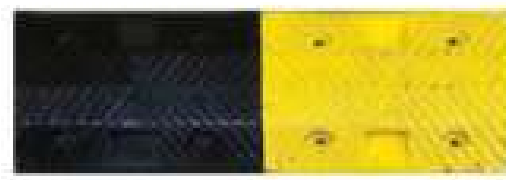
4

330 x 300 x 40mm



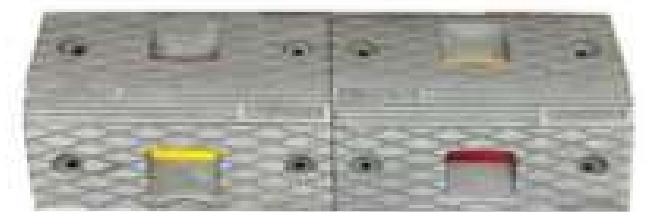
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With Yellow / Black Epoxy Coating  
300 x 330 x 40mm



6

330 x 380 x 60mm



### Plastic Speed Bumps / End Cap / Rumble Strips

7

500 x 350 x 40mm



8



9

Colour Yellow & Black  
1000 x 100 x 20mm

