



Hersan USA™

Raised Pavement Marker

Series H-05

Product Bulletin Series H-05
January 2022

1 Description

Hersan USA™ Series H-05 of Raised Pavement Markers (RPM's) have been designed to provide highly effective, long-term nighttime visibility in regions where snowplows are not available. The marker bodies are made of an engineering grade thermoplastic that provides high impact and weather resistance. The markers include retroreflective elements that provide wet retroreflectivity, dry retroreflectivity, long-term nighttime visibility and are available in white, yellow, red, blue or green.

Series H-05 markers are designed to be compatible with commercially available epoxy and bitumen adhesives. The use of any other type of adhesive should be thoroughly evaluated prior to any large-scale application. The markers are designed for application on asphalt and Portland cement surfaces.

Markers are available in the colors in Table 1.

Table 1. Product types and colors by product code.

Color	Product Code
One-Way Red Lens, Yellow Body	RPM-H05-1Yellow R
One-Way Yellow Lens, Yellow Body	RPM-H05-1Yellow Y
One-Way White Lens, Yellow Body	RPM-H05-1Yellow W
One-Way Red Lens, White Body	RPM-H05-1White R
One-Way Yellow Lens, White Body	RPM-H05-1White Y
One-Way White Lens, White Body	RPM-H05-1White W
One-Way Red Lens, Red Body	RPM-H05-1Red R
One-Way Blue Lens, Blue Body	RPM-H05-1Blue B
One-Way Green Lens, Green Body	RPM-H05-1Green G
Two-Way Red Lenses, Yellow Body	RPM-H05-2Yellow R/R
Two-Way Yellow Lenses, Yellow Body	RPM-H05-2Yellow Y/Y
Two-Way White Lenses, Yellow Body	RPM-H05-2Yellow W/W
Two-Way Red/Yellow Lenses, Yellow Body	RPM-H05-2Yellow R/Y
Two-Way Red Lenses, White Body	RPM-H05-2White R/R
Two-Way Yellow Lenses, White Body	RPM-H05-2White Y/Y
Two-Way White Lenses, White Body	RPM-H05-2White W/W
Two-Way Red/White Lenses, White Body	RPM-H05-2White R/W
Two-Way Red Lens, Red Body	RPM-H05-2Red R/R
Two-Way Blue Lens, Blue Body	RPM-H05-2Blue B/B
Two-Way Green Lens, Green Body	RPM-H05-2Green G/G

For applications not covered by the above documents, it is the installer's responsibility to contact the appropriate Hersan USA™ representative or application engineer for guidance by emailing sales@hersan.us.

2 Product Features

- Superior resistance and performance
- Exclusive base with jackets for superior subjection
- Polycarbonate Lenses
- Wet and dry retroreflective
- Impact resistant
- Abrasion resistant
- Flexural strength resistant
- Longitudinal flexural strength resistant
- Ultrasonic plastic welding
- Molded-in body colors
- Application finger grips
- Compatible with standard bitumen and epoxy adhesives

3 Specifications

3.1 Product Dimensions

The dimensions of the marker body conform to the values presented in Table 2.

Table 2. Marker dimensions.

Dimension	Value
Height	0.767 ± 0.050 in (19.49 ± 1.55 mm)
Width	4.25 ± 0.53 in (108.00 ± 13.5 mm)
Length	3.55 ± 0.50 in (90.15 ± 12.8 mm)

3.2 Retroreflectivity

Retro reflectance refers to RPM's luminance measured using simplified viewing conditions. Retroreflectivity is used for quality control purposes when specifying a single RPM's type. RPM's with white, yellow, red, green or blue reflective lenses have minimum initial retroreflectivity values as specified in

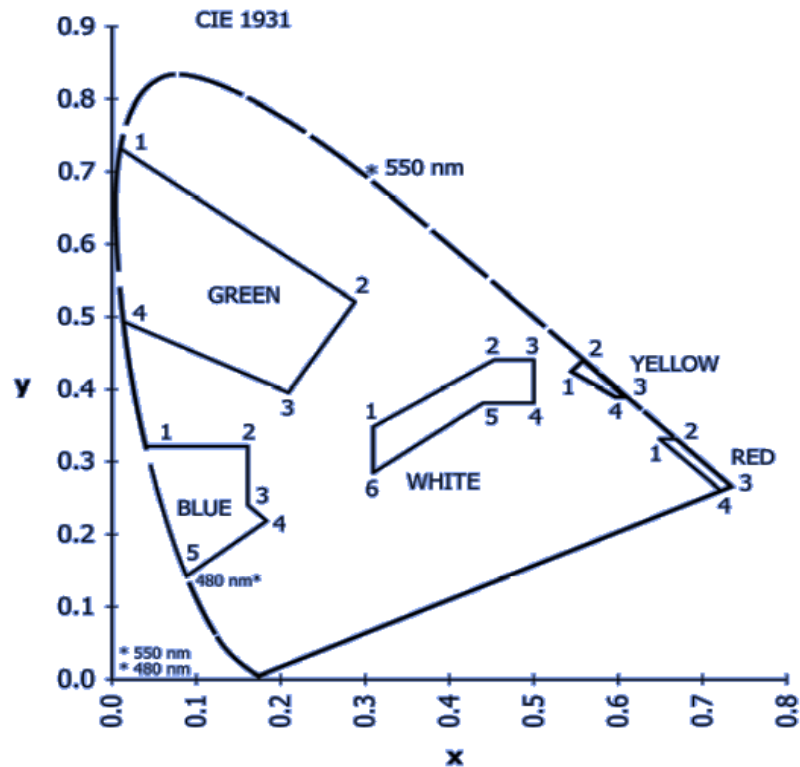


Figure 1. RPM's colors plotted on CIE 1931 Chromaticity Chart. If two points lie on the spectrum locus line, they are not connected by a straight line but, rather, by the boundary of the spectrum locus.

3.4 Impact Resistance

According to the procedure mentioned in ASTM D4280, to verify the impact resistance of reflective lenses, a dart with a hemispherical head shall be impacted approximately at the center of the lens face. The lens shall be inspected for cracks and delamination.

The polycarbonate lens of the RPM's provides greater resistance for this test.

3.5 Abrasion Resistance

The coefficient of retroreflected luminous intensity of the Markers shall be measured after subjecting the entire lens surface to the test described in ASTM D4280, section using a sand drop apparatus. After the exposure described above, retroreflection values shall not be less than 0.5 times the values listed in Table 3.

3.6 Temperature Resistance

Test RPM's shall comply with the initial minimum brightness requirements specified in Table 3 and the product of the values in Tables 4 and 5 after being conditioned for 12 hours at 145 ± 5 °F (62.7 ± 2.5 °C).

3.7 Resistance to Water Penetration

RPM's shall be conditioned for 10 minutes at 145 ± 5 °F (62.7 ± 2.5 °C) and then immediately submerged in a 70 ± 5 °F (21 ± 2.5 °C) water bath for 10 minutes. The Markers shall then be removed from the water bath and wiped dry with a soft cloth, visually inspected for water penetration behind the lenses, and measured for retroreflectance according to ASTM E809.

RPM's shall meet the initial minimum retroreflectance values specified in Table 3.

4 Durability

Maximum RPM's durability is achieved when RPM's are properly applied according to all applicable recommendations provided in product bulletins. Because reflective performance is reduced by wear, the lens of the RPM's is coated with an abrasion-resistant material which helps maintain retroreflective performance under normal traffic wear conditions. Minimal marker loss may occur under normal traffic conditions when applied according to Hersan USA™ recommendations using standard bitumen or epoxy adhesives designed for use with raised pavement markers.

5 Storage

Store indoors in a cool dry area.

6 Health & Safety Information

Read all health hazard, precautionary, and first aid statements found in the Safety Data Sheets (SDS), Article Information Sheets, and products labels of any materials for important health, safety, and environmental information prior to handling or use. To obtain SDS's and Article Information Sheets for Hersan USA™ products, go to hersan.us/SDS, contact Hersan USA™ by emailing sales@hersan.us.

7 Warranty Information

7.1 Hersan USA™ Standard Warranty

RPM's are warranted ("Hersan USA™ Standard Warranty") to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this product bulletin. If RPM's are proven not to have met the Hersan USA™ Standard Warranty on their shipment date, then a buyer's exclusive remedy, and Hersan USA™'s sole obligation, at Hersan USA™'s option, will be refund or replacement of the RPM's.

7.2 Disclaimer

THE HERSAN USA™ WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING OR OF PERFORMANCE, CUSTOM, OR USAGE OF TRADE.

7.3 Exclusive Limited Remedy

If RPM's are proven not to have met the Hersan USA™ Standard Warranty or Hersan USA™ Warranty, then a user's exclusive remedy, and Hersan USA™'s sole obligation, at Hersan USA™'s option, will be refund or replacement of the non-conforming RPM's.

7.4 Limitation of Liability

Except for the limited remedy stated above, and except where prohibited by law, Hersan USA™ will not be liable for any loss or damage arising from the RPM's or any Hersan USA™ product, whether direct, indirect, special, incidental, or consequential damages (including but not limited to lost profits, business, or revenue in any way), regardless of the legal theory asserted including warranty, contract, negligence, or strict liability.

8 Other Product Information

Always confirm that you have the most current version of the applicable product bulletin, information folder, or other product information from Hersan USA™'s Website at <http://www.hersan.us>.