

GLASFORMS PRODUCT SPECIFICATION FOR ENHANCEMARK

1 SCOPE

This specification covers the minimum material, mechanical and performance requirements of Glasforms ENHANCEMARK. This product may be used to provide daytime and nighttime delineation for utilities or other marking applications requiring assured long-term outdoor durability, vandal resistance, and impact resistance.

2 GENERAL REQUIREMENTS

DESIGN & MATERIAL

The ENHANCEMARK shall be capable of simple, permanent installation by one person using a manual post hole digger or auger. The ENHANCEMARK, upon proper installation, shall resist displacement from wind and vehicle impact forces. The ENHANCEMARK shall be a round, 3.5" O.D. white post with colored enhancer.

The ENHANCEMARK will be constructed of a durable, UV resistant, thermoplastic polymer material which is resistant to impact, ozone, and hydrocarbons.

3 PHYSICAL AND MECHANICAL REQUIREMENTS

3.1 **DIMENSIONS**

The ENHANCEMARK shall conform to the shape and overall dimensions shown in the approved drawing. The nominal ENHANCEMARK shall have a 3.5" O.D. post in order to accommodate a 3.5" I.D. enhancer with two, 2.875" decals. The ENHANCEMARK shall be of such length to provide the required height above the road surface with a minimum embedment depth of 18 inches.

3.2 **MECHANICAL PROPERTIES**

The ENHANCEMARK shall have the minimum mechanical properties as follows:

| <u>PROPERTY</u> | <u>ASTM TEST METHOD</u> | <u>MINIMUM VALUE</u> |
|------------------|-------------------------|----------------------|
| Tensile Strength | D-638 | 4,200 psi |
| Specific Gravity | D-792 | 0.955 |
| Tensile Modulus | D-790 | 136,000 psi |
| Flexural Modulus | D-790 | 155,000 psi |

3.3 COLOR FASTNESS

The ENHANCEMARK shall be pigmented throughout the entire cross-section so as to produce a uniform color, which is an integral part of the material. UV resistant materials shall be incorporated in the construction to inhibit fading or cracking of the marker upon field exposure.

3.4 PERFORMANCE

3.4.1 Any portion of the post shall be capable of withstanding a 70 ft/lb impact force at 0 degrees Celsius per ASTM D-2444 before and after ultraviolet conditioning for 2000 hours per ASTM G53-88. A control sample of any material employed must also maintain at least 70% of its original tensile strength per ASTM D-638

3.4.2 The ENHANCEMARK must be capable of withstanding a 12 guage shotgun blast without penetration by any pellets when fired from a distance of 50 ft.

3.5 VEHICLE IMPACT RESISTANCE

The Glasforms ENHANCEMARK shall be capable of self-erecting and remain functional after being subjected to an impact by a typical passenger sedan at 45 m.p.h.