

# What is The Difference Between Engineer Grade, High Intensity Grade and Diamond Grade Reflective sheeting

**Retroreflectivity** simply refers to the property of a traffic sign or device to reflect light back to the driver to increase nighttime visibility. Retroreflectivity degrades over time, necessitating the need for systematic replacement of signs and work zone devices to maintain the retroreflectivity standards established and required by FHWA.

**Engineer Grade Reflective Sheeting (EG)** is the most basic type of retroreflective sheeting, also referred to as Type I. Typically specified for use on non-critical street and road signs such as parking signs or way-finding signs and daytime work zones.

It has less reflectivity than its counterparts. Engineer grade reflective sheeting is also used often for reflective stickers and decals and generally lasts approximately 5 years.

**High Intensity Prismatic Grade Sheeting (HIP)** sheeting is made up of prismatic cells. When a light beam lands on a sign with HIP sheeting, the light hits the sides of the prismatic cells and reflects back at a wider angle than it came. This means more light is reflected back towards the source of the light.

HIP is used mainly for reflective traffic and road signs, barricades or other road construction zone devices, and traffic delineators such as cones or barrels. This material has mid to long-range durability, and typically will last about 10 years and returns approximately 32% of light back to its source. Visibility of signs with HIP sheeting is from 800 to 1,200 feet away.

**Diamond Grade Retroreflective Sheeting (DG)** is the most efficient type of retroreflective sheeting. Fluorescent colors help make the sign more visible in any light condition. All school zone signs must use DG sheeting. It returns approximately 60% of the light sent its way and is designed to be used on traffic control signs and work zone devices. DG retroreflective sheeting is visible from between 1,300 and 1,600 feet away and can last for 12 years or longer

**PLEASE MAKE SURE YOU KNOW THE SPECIFICATIONS FOR YOUR LOCAL, STATE OR FEDERAL PROJECT.**