

## SPECIFICATION

### **Guardian Gawk/Glare Screen 24" Tall x 120" Long (6" Adjustable)**

**INTENT:** It is the intent of this specification to provide for an affordable, lightweight, and easy to install double walled barrier screen for the purpose of providing additional safety in a temporary or permanent traffic zone.

**SCOPE:** This specification recognizes the need for such a product to simplify traditional means of inhibiting headlight glare and curtailing the dangerous prospect of driver distraction in work zones such as, fiberglass blades and plywood gawk screen methods.

**TEMPORARY CONSTRUCTION:** The Guardian Gawk/Glare Screen shall consist of double walled individual units in lengths to fit properly on concrete barrier rail. These units shall be 120" in length by 24" in height by 6" in width at the base of the screen to accommodate multiples of 10' sections of barrier.

The Guardian Gawk/Glare Screen, made of linear low-density polyethylene, shall be double walled and manufactured in separate sections of 63" lengths (with adjustable 6" overlap) by 24" height by 6" width at the base of the screen and 2" width at the top of the screen, and factory assembled into 120" sections, (to compensate for vibration and to avoid warpage). The 120" factory assembly will be accomplished by the use of 4 each 2" washers and 4 each 3/8" steel bolts with nylon lock washers located in the molded recess provided on the screen. There shall be 12 physical pass-through points of 2" diameter molded into the screen to provide for dynamic wind shear.

The method of attaching the screen to the barrier shall be determined by the configuration of the concrete temporary barrier (CTB). When pre-drilled holes are present in the concrete barrier, a 1" schedule 40 steel pipe shall be used for attachment. Upon placing the screen on the barrier, this pipe passes through the pre-molded intrusion in each section of screen (two per 120" screen), and into the barrier, and is tapped down into place.

When no holes are present in the concrete barrier, an alternative method of attachment is available. The provided Guardian T-Style mounting bracket (1" diameter x 24" long schedule 40 steel post, on 10" x 4" steel plate) is placed in the appropriate position on the barrier in line with provided location on each section of screen. The Guardian mounting bracket is then bolted to the concrete barrier using two 3/8" x 4" Red Eye (3000 lbs. sheer strength, 5000 lbs. pull out strength) through the pre-drilled holes in the plate. After sliding the screen over the attached bracket a large cotter pin is inserted into a predrilled hole at the top of the pipe.

**MATERIAL:** The material used for the screen shall be linear low-density polyethylene with the following properties: melt index of 3.6, density of 0.9395, flexural modulus of 110,000 psi, tensile strength of 2600 psi, heat distortion temperature of 52 degrees Celsius, brittle chill factor of minus 40 degrees, all of which meet FDA requirements and are UV stabilized. The mounting hardware shall consist of schedule 40 steel pipes, and/or steel (mounting plate).

**COLORS:** The Guardian Gawk/Glare Screen shall be available in any color; however, most common colors shall be safety orange, environmental green, and black. The color of the screen shall be determined based on engineer recommendations for installation.

**WEIGHT:** Each 120" section of screen shall be 32 pounds in weight.

**PERMANENT CONSTRUCTION:** The Guardian GawK/Glare Screen shall consist of double walled individual units in lengths to fit properly on concrete barrier rail. These units shall be 120" in length by 24" in height by 6" in width at the base of the screen to accommodate multiples of 10' sections of barrier.

The Guardian GawK/Glare Screen, made of linear low-density polyethylene, shall be manufactured in separate sections of 63" length (6" of adjustable overlap) by 24" height x 6" width at the base of the screen (2" at top of screen), and factory assembled into 120" sections, in order to compensate for vibration and to avoid warpage. The factory assembly will be accomplished by the use of 4 each 2" washers and 4 each 3/8" bolts with nylon lock washers located in the molded recess provided on the screen. There shall be 12 physical pass-through points of 2" diameter molded into the screen to provide for dynamic wind shear.

The method for attaching the permanent screen to the barrier shall be determined by the configuration of the concrete temporary barrier (CTB). When pre-drilled holes are present in the concrete barrier, a powder coated 1" threaded schedule 40 steel pipe is used for attachment. Upon placing the screen on the barrier, this pipe passes through the pre-molded intrusion in each section of the screen (two per 120" screen), and into the barrier, and is tapped down into place.

When no holes are present in concrete barrier, an alternative method of attachment is available. The provided powder coated Guardian T-Style mounting bracket (1" diameter by 24" long threaded schedule 40 pipe, on 10" x 4" steel plate) is placed in the appropriate position on the barrier to line properly with each section of screen. The Guardian mounting bracket is then permanently attached to the concrete barrier using two 3/8" Red Eyes (3000 lbs. sheer strength, 5000 lbs. pull out strength) in the pre-drilled holes in the plate. After sliding the screen over the attached bracket a large cotter pin is inserted into a pre-drilled hole at the top of the pipe.

**PERMANENT MATERIAL:** The material used for the screen shall be linear low-density polyethylene with the following properties: melt index of 3.6, density of 0.9395, flexural modulus of 110,000 psi, tensile strength of 2600 psi, heat distortion temperature of 52 degrees Celsius, a brittle chill factor of minus 40 degrees, all of which meet FDA requirements and are UV stabilized. The mounting hardware shall consist of powder coated schedule 40 steel pipes, and/or powder coated steel (mounting plate), rubber washer, and steel washer.

**PERMANENT COLORS:** The Guardian GawK/Glare Screen shall be available in any color; however, most common colors shall be safety orange, environmental green, and black. The color of the screen shall be determined based on engineer recommendations for installation.

**WEIGHT:** Each 120" section of screen shall be 45 pounds in weight.