

## Recommended Amendment

### § 95602. Definitions.

(a) In addition to the definitions found in title 13, California Code of Regulations, Section 1900, which are incorporated by reference herein, the following definitions also apply to this subarticle:

(#) “Alternative Glazing Material” means a transparent or translucent material, other than glass, that is used for glazing and provides equivalent green house gas reduction through reduced total solar transmittance and/or other means, such as reduced weight. Polycarbonate plastic, a synthetic thermoplastic resin, is an example of an “Alternative Glazing Material” where, when the effect of lower weight material is considered, the data demonstrate equivalent green house gas reduction.

(5) “Glazing” means all transparent or translucent portions of the vehicle body designed to allow occupants to see outside of the vehicle or others to see in, whether made of glass or some other material.

(6) “Infrared Reflectance” means the ratio of infrared solar energy which is reflected outward by the glazing system to the amount of infrared solar energy impacting the glazing system, usually expressed as a percent. The infrared wavelengths are considered to be those falling between 780-2500 nanometers.

### § 95603. Automotive Glazing Standards.

(a) Except as allowed in paragraph (c), the following glazing areas for new passenger cars, light-duty trucks, and medium duty vehicles less than or equal to 10,000 pounds GVW must not exceed the specified transmission of total solar energy (Tts) into the vehicle when the vehicle is parked:

(1) For 2012 model year vehicles, at least seventy-five percent of each manufacturer's total vehicle sales must use a windshield with a Tts less than or equal to fifty percent (50%). For 2012 model year vehicles, Alternative Glazing Material windshields composed of polycarbonate must have a Tts less than or equal to seventy percent (70%). Alternative Glazing Material windshields composed of polycarbonate meeting this requirement, if employed, shall be included as part of each manufacturer's total vehicle sales for purposes of the seventy-five percent requirement.

(2) For 2013 model year vehicles, the windshield must have a Tts less than or equal to fifty percent (50%). For 2013 model year vehicles, Alternative Glazing Material windshields composed of polycarbonate must have a Tts less than or equal to seventy percent (70%).

(3) For 2014 and subsequent model year vehicles, the windshield must have a Tts less than or equal to forty percent (40%). For 2014 model year vehicles, Alternative Glazing Material windshields composed of polycarbonate must have a Tts less than or equal to sixty percent (60%).

(4) For 2012 and subsequent model year vehicles, the rooflite(s), if any, must have a Tts less than or equal to thirty percent (30%), referenced to a glazing of 4 millimeter thickness. For 2012 and subsequent model year vehicles, the Alternative Glazing Material rooflite(s), if any, composed of polycarbonate must have a Tts less than or equal to fifty percent (50%), referenced to a glazing of 4 millimeter thickness.

(5) For 2012 and subsequent model year vehicles, sidelites and backlite(s) meeting 70 percent visible light transmittance requirements must have a Tts less than or equal to sixty percent (60%), referenced to a glazing of 4 millimeter thickness. For 2012 and subsequent model year vehicles, Alternative Glazing Material sidelites and backlite(s) composed of polycarbonate meeting seventy percent visible light transmittance requirements must have a Tts less than or equal to eighty-five percent (85%), referenced to a glazing of 4 millimeter thickness.

(6) For 2012 and subsequent model year vehicles, sidelites and backlite(s) not meeting 70 percent visible light transmittance requirements must have a Tts less than or equal to forty percent (40%), referenced to a glazing of 4 millimeter thickness. For 2012 subsequent model year vehicles, Alternative Glazing Material sidelites and backlite(s) composed of polycarbonate not meeting 70 percent visible light transmittance requirements must have a Tts less than or equal to sixty-five percent (65%), referenced to a glazing of 4 millimeter thickness.

(b) Total solar transmittance shall be measured using International Standards Organization Standard 13837 Road Vehicles – Safety Glazing Materials – Method for the Determination of Solar Transmittance at 4 m/s, Convention A, dated April 15, 2008, which is incorporated by reference herein, or using an alternate test methodology that results in equivalent solar control, approved in advance by the Executive Officer.

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**§ 95604. Manufacturer Compliance Options.** The vehicle manufacturer may choose to pursue alternative compliance options. Manufacturers doing so must notify the Executive Officer of the alternative being utilized for the specified vehicle model in the initial certification application. Improved performance of glazing in one position may offset lesser performance in another. When pursuing these options, glazing performance (Tts) shall be individually averaged on an area basis for the windshield, backlite(s), sidelites forward of the B-pillar, sidelites rear of the B-pillar, and rooflite(s), if any. Where appropriate, and with approval in advance by the Executive Officer, these options may be combined.

- (a) Improved solar management for the windshield. For each two (2) percentage points that the Tts of the windshield for a specified model is reduced beyond the Tts requirement for glass or Alternative Glazing Material respectively, one of the following options may be elected:
- (1) The maximum Tts for the sidelites and backlite(s) for vision glass is increased by three percentage points; or
  - (2) The maximum Tts for sidelites and backlite(s) not meeting 70 percent visible light is increased by three percentage points; or
  - (3) The maximum Tts for the roof lite(s) is increased by two percentage points
- (b) Improved solar performance for the backlite(s) or sidelites.
- (1) For passenger cars, if the Tts of the backlite is reduced from sixty percent (60%) to fifty percent (50%) or in the case of a polycarbonate Alternative Glazing Material if the backlite is reduced from eighty five percent (85%) to seventy five percent (75%), the Tts for the windshield may be increased by up to four (4) percentage points; or
  - (2) If the average Tts of the sidelites forward of the B-pillar is reduced from 60% to 50% or in the case of polycarbonate Alternative Glazing Material if the sidelites is reduced from eighty five percent (85%) to seventy five percent (75%), the Tts for the windshield may be increased up to two (2) percentage points.
  - (3) If the Tts of the sidelites and backlite(s) of passenger cars averages no more than 50%, the Tts for the windshield may be less than or equal to fifty percent (50%) or if the Tts of the sidelites and backlite(s) of passenger cars made of polycarbonate Alternative Glazing Material averages no more than 75%, the Tts for the windshield may be increased by up to ten (10) percentage points relative to the applicable requirement in Section 95603.