



## COVID Protective Transit Curtains

A review of the National Highway Transportation Safety Administration (NHTSA) Chief Counsel Opinion of August 11, 2020.

The NHTSA Chief Counsel Opinion ("NHTSA Opinion") indicates that internal school bus barriers designed to minimize spread of disease on school buses: **"NHTSA's regulations would permit the installation of the barriers, subject to the requirements discussed in this letter"**

The NHTSA Opinion states that barriers must meet 5 portions of FMVSS 571: 111, 205, 217, 222, 302.

- FMVSS No. 205, "Glazing Materials"
- FMVSS No. 222, "School Bus Passenger Seating and Crash Protection"
- FMVSS No. 302, "Flammability of Interior Materials"
- FMVSS No. 217, "Bus Emergency Exits and Window Retention and Release"
- FMVSS No. 111, "Rear Visibility"

Transit Curtains, by **Bus Safety Solutions**, meet all five applicable FMVSS codes:

**FMVSS 571.111 - Rear Visibility** – Transit Curtains do not block visibility of the mirror at all down the center aisle, nor does it block visibility of any side mirrors. In a standard bus, there is approximately 3 feet of completely unobscured space between the curtains. In addition, the product is extremely clear and allows view through the curtains.

Transit Curtains installed to the right of the driver are designed to pull back during operation of the vehicle to allow maximum visibility and movement to the right side.

**FMVSS 571.217 - "Bus Emergency Exits and Window Retention and Release"** - Transit Curtains do not attach to the wall, the window, or exit doors. To ensure total operational ability we do not recommend that they be installed on rows where the curtain may overlap the emergency door or emergency window.

**FMVSS 571.205 - "Glazing Materials"** – Transit Curtains for the right side of the driver meet ANSI Item 6 classification: **Safety Glazing Material for Use Only in Trailers, Multipurpose Passenger Vehicles, Slide-In Campers, Pickup Covers Designed to Carry Persons While in Motion, Motor homes in the Rear Windows of Convertible Passenger Car Tops, In Windscreens for Motorcycles, in Flexible Curtains or Readily Removable Windows, or in Ventilators.**



This standard is only applicable to the curtain at the right of the driver. The driver side curtain (or the Transit Curtain) is flexible vinyl and not considered a "glazing material", it has no hard edge.

**FMVSS 571.222 - "School Bus Passenger Seating and Crash Protection"** - Transit Curtains are attached to the ceiling panels using a bracket made of Fire Resistant Polystyrene – the ½" wide bracket is attached to the ceiling using 5 sheet metal screws – similar to what is used to attach the ceiling panels themselves. The bottom of the panel is attached to the underside of the seat itself at the metal post holding up the seat and to the bar that supports the seat. There are no hard parts exposed along the back of the seat and the curtain is more flexible than the seat cushion itself. (Note that Ceiling Panels are not the roof of the school bus and that the screws used to attach the brackets do not penetrate the roof.)

The curtain itself has smooth metal grommets that are held to the ceiling bracket and under the seat by clear zip-ties. The ties can be cut with pliers or snip tool.

**FMVSS 571.302 - "Flammability of Interior Materials"** - Transit Curtains are fire retardant and quickly extinguish once lit on fire. They far exceed the burn rate minimum established by FMVSS 571.302 which allows burning for up to 1 minute. This product extinguishes itself in less than 2 seconds. The clear material is used in welding curtain applications and does not even ignite when hot metal sparks fly against it.