

**The following is a summary sheet of the compliance standards that make a vehicle a "school bus" according to the NHTSA:**

**FMVSS No. 105** - Hydraulic and Electric Braking Systems - Specifies requirements for vehicles equipped with hydraulic and electric service brake systems and associated parking brake systems to ensure safe braking performance. The standard requires school buses utilizing hydraulic braking systems to stop in shorter distances.

**FMVSS No. 108** - Lamps, Reflective Devices, and Associated Equipment -The purpose of this standard is to reduce traffic crashes and deaths and injuries resulting from traffic crashes, by providing adequate illumination of the roadway, and by enhancing the conspicuity of motor vehicles on the public roads so that their presence is perceived and their signals understood. The standard requires school buses to be equipped with red and amber signal lamps that indicate the bus is loading/unloading passengers.

**FMVSS No. 111** - Rearview Mirrors - This standard specifies requirements for the performance and location of inside and outside rearview mirrors. Its purpose is to reduce the number of deaths and injuries that occur when the driver of a motor vehicle does not have a clear and reasonably unobstructed view to the rear. The standard was revised to require the driver be able to see either directly or through a system of mirrors certain areas in front of and along both sides of a school bus to reduce loading or unloading fatalities.

**FMVSS No. 131** - School Bus Pedestrian Safety Devices - This standard requires stop arms on all school buses, effective for all new school buses manufactured after September 1992. The standard was modified in 1994 to allow the use of strobe lights on the stop arms and again modified in 1998 to allow additional light sources in the legend that flash the word "STOP." This safety standard was implemented to inform motorists to stop for a school bus while loading or unloading school children help reduce the number of children killed by illegally passing motorists.

**FMVSS No. 217** - Bus Emergency Exits and Window Retention and Release - This standard establishes minimum requirements for bus window retention and release to reduce the likelihood of passenger ejection in crashes; and for emergency exits to facilitate passenger exit in emergencies. It also requires that each school bus have an interlock system which will prevent the engine from starting if an emergency door is unlocked and an audible warning system which will sound an alarm if an emergency door release mechanism is not closed while the engine is running.

**FMVSS No. 220** - School Bus Rollover Protection - This standard establishes performance requirements for school bus rollover protection. The standard is intended to reduce fatalities and the severe of injuries resulting from failure of the bus body structure in rollover crashes.

**FMVSS No. 221**- School Bus Body Joint Strength - This standard establishes requirements for the strength of the body panel joints in school bus bodies. The purpose of this standard is to reduce deaths and injuries resulting from the structural collapse of school bus

bodies during crashes. Applicable to all school buses with a gross vehicle weight rating (GVWR) in excess of 10,000 pounds.

**FMVSS No. 222** - School Bus Passenger Seating and Crash Protection - The standard provides increased protection to passengers through interior changes known as "compartmentalization" - meaning high-backed, well-padded and well-constructed seats. The purpose of this standard is to reduce the number of deaths and the severity of injuries that result from the impact of school bus occupants against structures within the vehicle during crashes and sudden driving maneuvers.

**FMVSS No. 301** - Fuel System Integrity - This standard specifies requirements for the integrity of motor vehicle fuel systems. Its purpose is to reduce deaths and injuries occurring from fires that result from fuel spillage during and after motor vehicle crashes. Effective 4/1/77, it applies to school buses with a Gross Vehicle Weight Rating greater than 10,000 lbs.

**FMVSS No. 303** - Fuel System Integrity of Compressed Natural Gas Vehicle (CNG) - This standard specifies requirements for the integrity of motor vehicle fuel systems using CNG, including the CNG fuel systems of bifuel, dedicated, and dual fuel CNG vehicles. The standard applies to school buses, regardless of weight, that use compressed natural gas as a motor fuel to reduce fires that result from fuel leakage during crashes.

The material contained in this publication has been developed from sources believed to be reliable. It is presented for informational purposes only and should not be construed or relied upon as legal or technical advice. Utica National accepts no responsibility for its correctness or application to any specific facts or circumstances.