

§ 571.211

49 CFR Ch. V (10–1–13 Edition)

§ 571.211 [Reserved]

§ 571.212 Standard No. 212; Windshield mounting.

S1. *Scope.* This standard establishes windshield retention requirements for motor vehicles during crashes.

S2. *Purpose.* The purpose of this standard is to reduce crash injuries and fatalities by providing for retention of the vehicle windshield during a crash, thereby utilizing fully the penetration-resistance and injury-avoidance properties of the windshield glazing material and preventing the ejection of occupants from the vehicle.

S3. *Application.* This standard applies to passenger cars, and to multipurpose passenger vehicles, trucks, and buses having a gross vehicle weight rating of 4536 kilograms or less. However, it does not apply to forward control vehicles, walk-in van-type vehicles, or to open-body type vehicles with fold-down or removable windshields.

S4. *Definition. Passive restraint system* means a system meeting the occupant crash protection requirements of S5. of Standard No. 208 by means that require no action by vehicle occupants.

S5. *Requirements.* When the vehicle travelling longitudinally forward at any speed up to and including 48 kilometers per hour impacts a fixed collision barrier that is perpendicular to the line of travel of the vehicle, under the conditions of S6, the windshield mounting of the vehicle shall retain not less than the minimum portion of the windshield periphery specified in S5.1 and S5.2.

S5.1 *Vehicles equipped with passive restraints.* Vehicles equipped with passive restraint systems shall retain not less than 50 percent of the portion of the windshield periphery on each side of the vehicle longitudinal centerline.

S5.2 *Vehicles not equipped with passive restraints.* Vehicles not equipped with passive restraint systems shall retain not less than 75 percent of the windshield periphery.

S6. *Test conditions.* The requirements of S5. shall be met under the following conditions:

S6.1 The vehicle, including test devices and instrumentation, is loaded as follows:

(a) Except as specified in S6.2, a passenger car is loaded to its unloaded vehicle weight plus its cargo and luggage capacity weight, secured in the luggage area, plus a 50th-percentile test dummy as specified in part 572 of this chapter at each front outboard designated seating position and at any other position whose protection system is required to be tested by a dummy under the provisions of Standard No. 208. Each dummy is restrained only by means that are installed for protection at its seating position.

(b) Except as specified in S6.2, a multipurpose passenger vehicle, truck or bus is loaded to its unloaded vehicle weight, plus 136 kilograms or its rated cargo and luggage capacity, whichever is less, secured to the vehicle, plus a 50th-percentile test dummy as specified in part 572 of this chapter at each front outboard designated seating position and at any other position whose protection system is required to be tested by a dummy under the provisions of Standard No. 208. Each dummy is restrained only by means that are installed for protection at its seating position. The load is distributed so that the weight on each axle as measured at the tire-ground interface is in proportion to its GAWR. If the weight on any axle when the vehicle is loaded to its unloaded vehicle weight plus dummy weight exceeds the axle's proportional share of the test weight, the remaining weight is placed so that the weight on that axle remains the same. For the purposes of this section, unloaded vehicle weight does not include the weight of work-performing accessories. Vehicles are tested to a maximum unloaded vehicle weight of 2,495 kilograms.

S6.2 The fuel tank is filled to any level from 90 to 95 percent of capacity.

S6.3 The parking brake is disengaged and the transmission is in neutral.

S6.4 Tires are inflated to the vehicle manufacturer's specifications.

S6.5 The windshield mounting material and all vehicle components in direct contact with the mounting material are at any temperature between

–9 degrees Celsius and +43 degrees Celsius.

[41 FR 36494, Aug. 30, 1976, as amended at 42 FR 34289, July 5, 1977; 45 FR 22046, Apr. 3, 1980; 60 FR 13647, Mar. 14, 1995]

§571.213 Standard No. 213; Child restraint systems.

S1. Scope. This standard specifies requirements for child restraint systems used in motor vehicles and aircraft.

S2. Purpose. The purpose of this standard is to reduce the number of children killed or injured in motor vehicle crashes and in aircraft.

S3. Application. This standard applies to passenger cars, multipurpose passenger vehicles, trucks and buses, and to child restraint systems for use in motor vehicles and aircraft.

S4. Definitions.

Add-on child restraint system means any portable child restraint system.

Backless child restraint system means a child restraint, other than a belt-positioning seat, that consists of a seating platform that does not extend up to provide a cushion for the child's back or head and has a structural element designed to restrain forward motion of the child's torso in a forward impact.

Belt-positioning seat means a child restraint system that positions a child on a vehicle seat to improve the fit of a vehicle Type II belt system on the child and that lacks any component, such as a belt system or a structural element, designed to restrain forward movement of the child's torso in a forward impact.

Booster seat means either a backless child restraint system or a belt-positioning seat.

Built-in child restraint system means a child restraint system that is designed to be an integral part of and permanently installed in a motor vehicle.

Car bed means a child restraint system designed to restrain or position a child in the supine or prone position on a continuous flat surface.

Child restraint anchorage system is defined in S3 of FMVSS No. 225 (§571.225).

Child restraint system means any device, except Type I or Type II seat belts, designed for use in a motor vehicle or aircraft to restrain, seat, or position children who weigh 30 kilograms (kg) or less.

Contactable surface means any child restraint system surface (other than that of a belt, belt buckle, or belt adjustment hardware) that may contact any part of the head or torso of the appropriate test dummy, specified in S7, when a child restraint system is tested in accordance with S6.1.

Factory-installed built-in child restraint system means a built-in child restraint system that has been or will be permanently installed in a motor vehicle before that vehicle is certified as a completed or altered vehicle in accordance with part 567 of this chapter.

Harness means a combination pelvic and upper torso child restraint system that consists primarily of flexible material, such as straps, webbing or similar material, and that does not include a rigid seating structure for the child.

Rear-facing child restraint system means a child restraint system, except a car bed, that positions a child to face in the direction opposite to the normal direction of travel of the motor vehicle.

Representative aircraft passenger seat means either a Federal Aviation Administration approved production aircraft passenger seat or a simulated aircraft passenger seat conforming to Figure 6.

Seat orientation reference line or *SORL* means the horizontal line through Point Z as illustrated in Figure 1A.

Specific vehicle shell means the actual vehicle model part into which the built-in child restraint system is or is intended to be fabricated, including the complete surroundings of the built-in system. If the built-in child restraint system is or is intended to be fabricated as part of any seat other than a front seat, these surroundings include the back of the seat in front, the interior rear side door panels and trim, the floor pan, adjacent pillars (e.g., the B and C pillars), and the ceiling. If the built-in system is or is intended to be fabricated as part of the front seat, these surroundings include the dashboard, the steering mechanism and its associated trim hardware, any levers and knobs installed on the floor or on a console, the interior front side door panels and trim, the front seat, the floor pan, the A pillars and the ceiling.