

- 571.224 Standard No. 224; Rear impact protection.
- 571.225 Standard No. 225; Child restraint anchorage systems.
- 571.226 Standard No. 226; Ejection Mitigation.
- 571.227 Standard No. 227; Bus rollover structural integrity.
- 571.301 Standard No. 301; Fuel system integrity.
- 571.302 Standard No. 302; Flammability of interior materials.
- 571.303 Standard No. 303; Fuel system integrity of compressed natural gas vehicles.
- 571.304 Standard No. 304; Compressed natural gas fuel container integrity.
- 571.305 Standard No. 305; Electric-powered vehicles: electrolyte spillage and electrical shock protection.
- 571.401 Standard No. 401; Internal trunk release.
- 571.403 Standard No. 403; Platform lift systems for motor vehicles.
- 571.404 Standard No. 404; Platform lift installations in motor vehicles.
- 571.500 Standard No. 500; Low-speed vehicles.

APPENDIX A TO SUBPART B SECTION 571.108  
TABLE OF CONTENTS.

AUTHORITY: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at 49 CFR 1.95.

EDITORIAL NOTE: Nomenclature changes to part 571 appear at 69 FR 18803, Apr. 9, 2004.

## Subpart A—General

### § 571.1 Scope.

This part contains the Federal Motor Vehicle Safety Standards for motor vehicles and motor vehicle equipment established under section 103 of the National Traffic and Motor Vehicle Safety Act of 1966 (80 Stat. 718).

[33 FR 19703, Dec. 25, 1968. Redesignated at 35 FR 5118, Mar. 26, 1970]

### § 571.3 Definitions.

(a) *Statutory definitions.* All terms defined in section 102 of the Act are used in their statutory meaning.

(b) *Other definitions.* As used in this chapter—

*Act* means the National Traffic and Motor Vehicle Safety Act of 1966 (80 Stat. 718).

*Approved*, unless used with reference to another person, means approved by the Secretary.

*Boat trailer* means a trailer designed with cradle-type mountings to trans-

port a boat and configured to permit launching of the boat from the rear of the trailer.

*Bus* means a motor vehicle with motive power, except a trailer, designed for carrying more than 10 persons.

*Curb weight* means the weight of a motor vehicle with standard equipment; maximum capacity of engine fuel, oil, and coolant; and, if so equipped, air conditioning and additional weight optional engine.

*Designated seating capacity* means the number of designated seating positions provided.

*Designated seating position* means:

(1) For vehicles manufactured prior to September 1, 2011, any plan view location capable of accommodating a person at least as large as a 5th percentile adult female, if the overall seat configuration and design and vehicle design is such that the position is likely to be used as a seating position while the vehicle is in motion, except for auxiliary seating accommodations such as temporary or folding jump seats. Any bench or split-bench seat in a passenger car, truck or multipurpose passenger vehicle with a GVWR less than 4,536 kilograms (10,000 pounds), having greater than 127 centimeters (50 inches) of hip room (measured in accordance with Society of Automotive Engineers (SAE) Recommended Practice J1100a, revised September 1975, “Motor Vehicle Dimensions” (incorporated by reference, see § 571.5), shall have not less than three designated seating positions, unless the seat design or vehicle design is such that the center position cannot be used for seating. For the sole purpose of determining the classification of any vehicle sold or introduced into interstate commerce for purposes that include carrying students to and from school or related events, any location in such vehicle intended for securement of an occupied wheelchair during vehicle operation shall be regarded as four designated seating positions.

(2) For vehicles manufactured on and after September 1, 2011, *designated seating position* means a seat location that has a seating surface width, as described in § 571.10(c) of this part, of at least 330 mm (13 inches). The number of designated seating positions at a seat

location is determined according to the procedure set forth in § 571.10(b) of this part. However, for trucks and multipurpose passenger vehicles with a gross vehicle weight rating greater than 10,000 lbs, police vehicles as defined in S7 of FMVSS No. 208, firefighting vehicles, ambulances, and motor homes, a seating location that is labeled in accordance with S4.4 of FMVSS No. 207 will not be considered a designated seating position. For the sole purpose of determining the classification of any vehicle sold or introduced into interstate commerce for purposes that include carrying students to and from school or related events, any location in such a vehicle intended for securement of an occupied wheelchair during vehicle operation is regarded as four designated seating positions.

*Driver* means the occupant of a motor vehicle seated immediately behind the steering control system.

*Driver air bag* means the air bag installed for the protection of the occupant of the driver's designated seating position.

*Driver dummy* means the test dummy positioned in the driver's designated seating position.

*Driver's designated seating position* means a designated seating position providing immediate access to manually operated driving controls. As used in this part, the terms "driver's seating position" and "driver's seat" shall have the same meaning as "driver's designated seating position."

*Emergency brake* means a mechanism designed to stop a motor vehicle after a failure of the service brake system.

*5th percentile adult female* means a person possessing the dimensions and weight of the 5th percentile adult female specified for the total age group in "Weight, Height, and Selected Body Dimensions of Adults: United States—1960–1962," first published as Public Health Service Publication No. 1000 Series 11–No. 8, June 1965 and republished as DHEW Publication No. (HRA) 76–1074 (incorporated by reference, see § 571.5).

*Firefighting vehicle* means a vehicle designed exclusively for the purpose of fighting fires.

*Fixed collision barrier* means a flat, vertical, unyielding surface with the following characteristics:

(1) The surface is sufficiently large that when struck by a tested vehicle, no portion of the vehicle projects or passes beyond the surface.

(2) The approach is a horizontal surface that is large enough for the vehicle to attain a stable attitude during its approach to the barrier, and that does not restrict vehicle motion during impact.

(3) When struck by a vehicle, the surface and its supporting structure absorb no significant portion of the vehicle's kinetic energy, so that a performance requirement described in terms of impact with a fixed collision barrier must be met no matter how small an amount of energy is absorbed by the barrier.

*Forward control* means a configuration in which more than half of the engine length is rearward of the foremost point of the windshield base and the steering wheel hub is in the forward quarter of the vehicle length.

*Full trailer* means a trailer, except a pole trailer, that is equipped with two or more axles that support the entire weight of the trailer.

*Gross axle weight rating* or *GAWR* means the value specified by the vehicle manufacturer as the load-carrying capacity of a single axle system, as measured at the tire-ground interfaces.

*Gross combination weight rating* or *GCWR* means the value specified by the manufacturer as the loaded weight of a combination vehicle.

*Gross vehicle weight rating* or *GVWR* means the value specified by the manufacturer as the loaded weight of a single vehicle.

*H-Point* means the pivot center of the torso and thigh on the three-dimensional device used in defining and measuring vehicle seating accommodation, as defined in Society of Automotive Engineers (SAE) Recommended Practice J1100, revised February 2001, "Motor Vehicle Dimensions" (incorporated by reference, see § 571.5).

*Head impact area* means all nonglazed surfaces of the interior of a vehicle that are statically contactable by a 6.5-inch diameter spherical head form of a measuring device having a pivot point to "top-of-head" dimension infinitely

adjustable from 29 to 33 inches in accordance with the following procedure, or its graphic equivalent:

(a) At each designated seating position, place the pivot point of the measuring device—

(1) For seats that are adjustable fore and aft, at—

(i) The seating reference point; and

(ii) A point 5 inches horizontally forward of the seating reference point and vertically above the seating reference point an amount equal to the rise which results from a 5-inch forward adjustment of the seat or 0.75 inch; and

(2) For seats that are not adjustable fore and aft, at the seating reference point.

(b) With the pivot point to “top-of-head” dimension at each value allowed by the device and the interior dimensions of the vehicle, determine all contact points above the lower windshield glass line and forward of the seating reference point.

(c) With the head form at each contact point, and with the device in a vertical position if no contact points exists for a particular adjusted length, pivot the measuring device forward and downward through all arcs in vertical planes to 90° each side of the vertical longitudinal plane through the seating reference point, until the head form contacts an interior surface or until it is tangent to a horizontal plane 1 inch above the seating reference point, whichever occurs first.

*Interior compartment door* means any door in the interior of the vehicle installed by the manufacturer as a cover for storage space normally used for personal effects.

*Longitudinal or longitudinally* means parallel to the longitudinal centerline of the vehicle.

*Low-speed vehicle (LSV)* means a motor vehicle,

(1) That is 4-wheeled,

(2) Whose speed attainable in 1.6 km (1 mile) is more than 32 kilometers per hour (20 miles per hour) and not more than 40 kilometers per hour (25 miles per hour) on a paved level surface, and

(3) Whose GVWR is less than 1,361 kilograms (3,000 pounds).

*Manually operated driving controls* means a system of controls:

(i) That are used by an occupant for real-time, sustained, manual manipulation of the motor vehicle's heading (steering) and/or speed (accelerator and brake); and

(ii) That is positioned such that they can be used by an occupant, regardless of whether the occupant is actively using the system to manipulate the vehicle's motion.

*Motorcycle* means a motor vehicle with motive power having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground.

*Motor-driven cycle* means a motor-cycle with a motor that produces 5-brake horsepower or less.

*Motor home* means a multipurpose passenger vehicle with motive power that is designed to provide temporary residential accommodations, as evidenced by the presence of at least four of the following facilities: Cooking; refrigeration or ice box; self-contained toilet; heating and/or air conditioning; a potable water supply system including a faucet and a sink; and a separate 110–125 volt electrical power supply and/or propane.

*Multifunction school activity bus (MFSAB)* means a school bus whose purposes do not include transporting students to and from home or school bus stops.

*Multipurpose passenger vehicle* means a motor vehicle with motive power, except a low-speed vehicle or trailer, designed to carry 10 persons or less which is constructed either on a truck chassis or with special features for occasional off-road operation.

*Open-body type vehicle* means a vehicle having no occupant compartment top or an occupant compartment top that can be installed or removed by the user at his convenience.

*Outboard designated seating position* means a designated seating position where a longitudinal vertical plane tangent to the outboard side of the seat cushion is less than 12 inches from the innermost point on the inside surface of the vehicle at a height between the design H-point and the shoulder reference point (as shown in fig. 1 of Federal Motor Vehicle Safety Standard No. 210) and longitudinally between the

front and rear edges of the seat cushion. As used in this part, the terms “outboard seating position” and “outboard seat” shall have the same meaning as “outboard designated seating position.”

*Overall vehicle width* means the nominal design dimension of the widest part of the vehicle, exclusive of signal lamps, marker lamps, outside rearview mirrors, flexible fender extensions, and mud flaps, determined with doors and windows closed and the wheels in the straight-ahead position.

*Parking brake* means a mechanism designed to prevent the movement of a stationary motor vehicle.

*Passenger car* means a motor vehicle with motive power, except a low-speed vehicle, multipurpose passenger vehicle, motorcycle, or trailer, designed for carrying 10 persons or less.

*Passenger seating position* means any designated seating position other than the driver’s designated seating position, except as noted below. As used in this part, the term “passenger seat” shall have the same meaning as “passenger seating position.” As used in this part, “passenger seating position” includes what was a “driver’s designated seating position” prior to stowing of the present manually operated driving controls.

*Pelvic impact area* means that area of the door or body side panel adjacent to any outboard designated seating position which is bounded by horizontal planes 7 inches above and 4 inches below the seating reference point and vertical transverse planes 8 inches forward and 2 inches rearward of the seating reference point.

*Pole trailer* means a motor vehicle without motive power designed to be drawn by another motor vehicle and attached to the towing vehicle by means of a reach or pole, or by being boomed or otherwise secured to the towing vehicle, for transporting long or irregularly shaped loads such as poles, pipes, or structural members capable generally of sustaining themselves as beams between the supporting connections.

*Recreation vehicle trailer* means a trailer, except a trailer designed primarily to transport cargo, designed to be drawn by a vehicle with motive

power by means of a bumper, frame or fifth wheel hitch and designed to provide temporary residential accommodations, as evidenced by the presence of at least four of the following facilities: cooking; refrigeration or ice box; self-contained toilet; heating and/or air conditioning; a potable water supply system including a faucet and a sink; and a separate 110–125 volt electrical power supply and/or propane. “Recreation vehicle trailer” includes trailers used for personal purposes, commonly known as “sport utility RVs” or “toy haulers,” which usually have spacious rather than incidental living quarters and provide a cargo area for smaller items for personal use such as motorcycles, mountain bikes, all terrain vehicles (ATVs), snowmobiles, canoes or other types of recreational gear.

*Row* means a set of one or more seats whose seat outlines do not overlap with the seat outline of any other seats, when all seats are adjusted to their rearmost normal riding or driving position, when viewed from the side.

*School bus* means a bus that is sold, or introduced in interstate commerce, for purposes that include carrying students to and from school or related events, but does not include a bus designed and sold for operation as a common carrier in urban transportation.

*Seat outline* means the outer limits of a seat projected laterally onto a vertical longitudinal vehicle plane.

*Seating reference point* (SgRP) means the unique design H-point, as defined in Society of Automotive Engineers (SAE) Recommended Practice J1100, revised June 1984, “Motor Vehicle Dimensions” (incorporated by reference, see § 571.5), which:

(1) Establishes the rearmost normal design driving or riding position of each designated seating position, which includes consideration of all modes of adjustment, horizontal, vertical, and tilt, in a vehicle;

(2) Has X, Y, and Z coordinates, as defined in Society of Automotive Engineers (SAE) Recommended Practice J1100, revised June 1984, “Motor Vehicle Dimensions” (incorporated by reference, see § 571.5), established relative to the designed vehicle structure;

(3) Simulates the position of the pivot center of the human torso and thigh; and

(4) Is the reference point employed to position the two-dimensional drafting template with the 95th percentile leg described in Society of Automotive Engineers (SAE) Standard J826, revised May 1987, "Devices for Use in Defining and Measuring Vehicle Seating Accommodation" (incorporated by reference, see § 571.5), or, if the drafting template with the 95th percentile leg cannot be positioned in the seating position, is located with the seat in its most rearward adjustment position.

*Semitrailer* means a trailer, except a pole trailer, so constructed that a substantial part of its weight rests upon or is carried by another motor vehicle.

*Service brake* means the primary mechanism designed to stop a motor vehicle.

*Speed attainable in 1 mile* means the speed attainable by accelerating at maximum rate from a standing start for 1 mile, on a level surface.

*Speed attainable in 2 miles* means the speed attainable by accelerating at maximum rate from a standing start for 2 miles, on a level surface.

*Steering control system* means the manually operated driving control used to control the vehicle heading and its associated trim hardware, including any portion of a steering column assembly that provides energy absorption upon impact. As used in this part, the term "steering wheel" and "steering control" shall have the same meaning as "steering control system."

*Torso line* means the line connecting the "H" point and the shoulder reference point as defined in Society of Automotive Engineers (SAE) Standard J787b, revised September 1966, "Motor Vehicle Seat Belt Anchorage" (incorporated by reference, see § 571.5).

*Trailer* means a motor vehicle with or without motive power, designed for carrying persons or property and for being drawn by another motor vehicle.

*Trailer converter dolly* means a trailer chassis equipped with one or more axles, a lower half of a fifth wheel and a drawbar.

*Truck* means a motor vehicle with motive power, except a trailer, designed primarily for the transportation

of property or special purpose equipment.

*Truck tractor* means a truck designed primarily for drawing other motor vehicles and not so constructed as to carry a load other than a part of the weight of the vehicle and the load so drawn.

*Unloaded vehicle weight* means the weight of a vehicle with maximum capacity of all fluids necessary for operation of the vehicle, but without cargo, occupants, or accessories that are ordinarily removed from the vehicle when they are not in use.

*95th percentile adult male* means a person possessing the dimensions and weight of the 95th percentile adult male specified "Weight, Height, and Selected Body Dimensions of Adults: United States—1960–1962," first published as Public Health Service Publication No. 1000 Series 11–No. 8, June 1965 and republished as DHEW Publication No. (HRA) 76–1074 (incorporated by reference, see § 571.5).

*Vehicle fuel tank capacity* means the tank's unusable capacity (i.e., the volume of fuel left at the bottom of the tank when the vehicle's fuel pump can no longer draw fuel from the tank) plus its usable capacity (i.e., the volume of fuel that can be pumped into the tank through the filler pipe with the vehicle on a level surface and with the unusable capacity already in the tank). The term does not include the vapor volume of the tank (i.e., the space above the fuel tank filler neck) nor the volume of the fuel tank filler neck.

[33 FR 19703, Dec. 25, 1968. Redesignated at 35 FR 5118, Mar. 26, 1970]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 571.3, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.govinfo.gov](http://www.govinfo.gov).

#### § 571.4 Explanation of usage.

The word *any*, used in connection with a range of values or set of items in the requirements, conditions, and procedures of the standards or regulations in this chapter, means generally the totality of the items or values, any one of which may be selected by the Administration for testing, except where clearly specified otherwise.

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*Examples:* “The vehicle shall meet the requirements of S4.1 when tested at any point between 18 and 22 inches above the ground.” This means that the vehicle must be capable of meeting the specified requirements at every point between 18 and 22 inches above the ground. The test in question for a given vehicle may call for a single test (a single impact, for example), but the vehicle must meet the requirement at whatever point the Administration selects, within the specified range.

“Each tire shall be capable of meeting the requirements of this standard when mounted on any rim specified by the manufacturer as suitable for use with that tire.” This means that, where the manufacturer specifies more than one rim as suitable for use with a tire, the tire must meet the requirements with whatever rim the Administration selects from the specified group.

“Any one of the items listed below may, at the option of the manufacturer, be substituted for the hardware specified in S4.1.” Here the wording clearly indicates that the selection of items is at the manufacturer’s option.

[36 FR 2511, Feb. 5, 1971]

### § 571.5 Matter incorporated by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the National Highway Traffic Safety Administration (NHTSA) must publish a document in the FEDERAL REGISTER and the material must be available to the public. All approved incorporation by reference (IBR) material is available for inspection at NHTSA and at the National Archives and Records Administration (NARA). Contact NHTSA at: NHTSA, 1200 New Jersey Avenue SE, Washington, DC 20590, (202) 366-2588, website: <https://www.nhtsa.gov/about-nhtsa/electronic-reading-room>. For information on the availability of this material at NARA, email: [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to: [www.archives.gov/federal-register/cfr/ibr-locations.html](http://www.archives.gov/federal-register/cfr/ibr-locations.html). The material may be obtained from the sources in the following paragraphs of this section.

(b) American Association of Textile Chemists and Colorists (AATCC), 1 Davis Dr., P.O. Box 12215, Research Triangle Park, NC 27709. Web site: <https://www.aatcc.org>.

## 49 CFR Ch. V (10–1–23 Edition)

(1) AATCC Test Method 30–1981, “Fungicides, Evaluation on Textiles: Mildew and Rot Resistance of Textiles,” into § 571.209.

(2) AATCC Gray Scale for Evaluating Change in Color into §§ 571.209; 571.213.

(c) American National Standards Institute (ANSI), 1899 L St., NW., 11th floor, Washington, DC 20036. Telephone: (202) 293-8020; Fax: (202) 293-9287; Web site: <https://www ansi.org>. Copies of ANSI/RESNA Standard WC/Vol.1–1998 Section 13 may also be obtained from Rehabilitation Engineering and Assistive Technology Society of North America (RESNA), 1700 North Moore St., Suite 1540, Arlington, VA 22209-1903. Telephone: (703) 524-6686; Web site <https://www.resna.org>.

(1) ANSI S1.11–2004, “Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters,” approved February 19, 2004, into § 571.141.

(2) ANSI Z26.1–1977, “Safety Code for Safety Glazing Materials for Glazing Motor Vehicles Operating on Land Highways,” approved January 26, 1977, into § 571.205(a).

(3) ANSI Z26.1a–1980, “Safety Code for Safety Glazing Materials for Glazing Motor Vehicles Operating on Land Highways,” approved July 3, 1980, into § 571.205(a).

(4) ANSI/SAE Z26.1–1996, “American National Standard for Safety Glazing Materials for Glazing Motor Vehicles and Motor Vehicle Equipment Operating on Land Highways-Safety Standard,” approved August 11, 1997, into § 571.205.

(5) ANSI/RESNA Standard WC/Vol. 1–1998, Section 13, “Wheelchairs: Determination of Coefficient of Friction of Test Surfaces,” into § 571.403.

(d) ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. Telephone: (610) 832-9500; Fax (610) 832-9555; Web site: <https://www.astm.org>.

(1) 1985 Annual Book of ASTM Standards, Vol. 05.04, “Test Methods for Rating Motor, Diesel, Aviation Fuels, A2. Reference Materials and Blending Accessories, (“ASTM Motor Fuels section”),” A2.3.2, A2.3.3, and A2.7, into §§ 571.108; 571.205(a).

(2) ASTM B117-64, "Standard Method of Salt Spray (Fog) Testing," revised 1964, into § 571.125.

(3) ASTM B117-73 (Reapproved 1979), "Standard Method of Salt Spray (Fog) Testing," approved March 29, 1973, into §§ 571.108; 571.209.

(4) ASTM B117-97, "Standard Practice for Operating Salt Spray (Fog) Apparatus," approved April 10, 1997, into § 571.403.

(5) ASTM B117-03, "Standard Practice for Operating Salt Spray (Fog) Apparatus," approved October 1, 2003, into §§ 571.106; 571.111.

(6) ASTM B456-79, "Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium," approved January 26, 1979, into § 571.209.

(7) ASTM B456-95, "Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium," approved October 10, 1995, into § 571.403.

(8) ASTM C150-56, "Standard Specification for Portland Cement," approved 1956, into § 571.108.

(9) ASTM C150-77, "Standard Specification for Portland Cement," approved February 26, 1977, into § 571.108.

(10) ASTM D362-84, "Standard Specification for Industrial Grade Toluene," approved March 30, 1984, into §§ 571.108; 571.205(a).

(11) ASTM D445-65, "Standard Method of Test for Viscosity of Transparent and Opaque Liquids (Kinematic and Dynamic Viscosities)," approved August 31, 1965, into § 571.116.

(12) ASTM D471-98, "Standard Test Method for Rubber Property—Effect of Liquids," approved November 10, 1998, into § 571.106.

(13) ASTM D484-71, "Standard Specification for Hydrocarbon Drycleaning Solvents," effective September 15, 1971, into § 571.301.

(14) ASTM D756-78, "Standard Practice for Determination of Weight and Shape Changes of Plastics under Accelerated Service Conditions," approved July 28, 1978, into § 571.209.

(15) ASTM D1003-92, "Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics," approved October 15, 1992, into § 571.108.

(16) ASTM D1056-07, "Standard Specification for Flexible Cellular Mate-

rials—Sponge or Expanded Rubber," approved March 1, 2007, into § 571.213.

(17) ASTM D1121-67, "Standard Method of Test for Reserve Alkalinity of Engine Antifreezes and Antirusts," accepted June 12, 1967, into § 571.116.

(18) ASTM D1123-59, "Standard Method of Test for Water in Concentrated Engine Antifreezes by the Iodine Reagent Method," revised 1959, into § 571.116.

(19) ASTM D1193-70, "Standard Specification for Reagent Water," effective October 2, 1970, into § 571.116.

(20) ASTM D1415-68, "Standard Method of Test for International Hardness of Vulcanized Natural and Synthetic Rubbers," accepted February 14, 1968, into § 571.116.

(21) ASTM D2515-66, "Standard Specification for Kinematic Glass Viscometers," adopted 1966, into § 571.116.

(22) ASTM D4329-99, "Standard Practice for Fluorescent UV Exposure of Plastics," approved January 10, 1999, into § 571.106.

(23) ASTM D4956-90, "Standard Specification for Retroreflective Sheeting for Traffic Control," approved October 26, 1990, into § 571.108.

(24) ASTM E1-68, "Standard Specifications for ASTM Thermometers" (including tentative revisions), accepted September 13, 1968, into § 571.116.

(25) ASTM E4-79, "Standard Methods of Load Verification of Testing Machines," approved June 11, 1979, into § 571.209.

(26) ASTM E4-03, "Standard Practices for Force Verification of Testing Machines," approved August 10, 2003, into § 571.106.

(27) ASTM E8-89, "Standard Test Methods of Tension Testing of Metallic Materials," approved May 15, 1989, into § 571.221.

(28) ASTM E77-66, "Standard Method for Inspection, Test, and Standardization of Etched-Stem Liquid-in-Glass Thermometers," revised 1966, into § 571.116.

(29) ASTM E274-65T, "Tentative Method of Test for Skid Resistance of Pavements Using a Two-Wheel Trailer," issued 1965, into §§ 571.208; 571.301.

(30) ASTM E274-70, "Standard Method of Test for Skid Resistance of Paved

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Surfaces Using a Full-Scale Tire,” revised July 1974, into §§ 571.105; 571.122a.

(31) ASTM E298-68, “Standard Methods for Assay of Organic Peroxides,” effective September 13, 1968, into § 571.116.

(32) ASTM E308-66, “Standard Practice for Spectrophotometry and Description of Color in CIE 1931 System,” reapproved 1981, into § 571.108.

(33) [Reserved]

(34) ASTM E1337-19, “Standard Test Method for Determining Longitudinal Peak Braking Coefficient (PBC) of Paved Surfaces Using Standard Reference Test Tire,” approved December 1, 2019, into §§ 571.105; 571.121; 571.122; 571.126; 571.135; 571.136; 571.500.

(35) ASTM F1805-20, “Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow- and Ice-Covered Surfaces,” approved May 1, 2020; into § 571.139.

(36) ASTM G23-81, “Standard Practice for Generating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Non-metallic Materials,” approved March 26, 1981, into § 571.209.

(37) ASTM G151-97, “Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources,” approved July 10, 1997, into § 571.106.

(38) ASTM G154-00, “Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Non-metallic Materials,” approved February 10, 2000, into § 571.106.

(e) Department of Defense, DODSSP Standardization Document Order Desk, 700 Robbins Ave., Philadelphia, PA 19111-5098. Web site: <https://dodssp.daps.dla.mil/>.

(1) MIL-S-13192, “Military Specification, Shoes, Men’s, Dress, Oxford,” October 30, 1976, into § 571.214.

(2) MIL-S-13192P, “Military Specification, Shoes, Men’s, Dress, Oxford,” 1988, including Amendment 1, October 14, 1994, into § 571.208.

(3) MIL-S-21711E, “Military Specification, Shoes, Women’s,” 3 December 1982, including Amendment 2, October 14, 1994, into §§ 571.208; 571.214.

(f) General Services Administration (GSA), Superintendent of Documents, U.S. Government Printing Office,

Washington, DC 20402. Telephone: (202) 512-1800; Web site: <https://www.gsa.gov>.

(1) GSA Federal Specification L-S-300, “Sheeting and Tape, Reflective; Nonexposed Lens, Adhesive Backing,” September 7, 1965, into § 571.108.

(2) [Reserved]

(g) Illuminating Engineering Society of North America (IES), 120 Wall St., 7th Floor, New York, NY 10005-4001. Telephone: (212) 248-5000; Web site: <https://www.iesna.org>.

(1) IES LM 45, “IES Approved Method for Electrical and Photometric Measurements of General Service Incandescent Filament Lamps,” approved April 1980, into § 571.108.

(2) [Reserved]

(h) International Commission on Illumination (CIE), CIE Central Bureau, Kegelgasse 27, A-1030 Vienna, Austria. <https://www.cie.co.at>.

(1) CIE 1931 Chromaticity Diagram, developed 1931, into § 571.108.

(2) [Reserved]

(i) International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse, CP 56, CH-1211 Geneva 20, Switzerland. Telephone: + 41 22 749 01 11. Fax: + 41 22 733 34 30. Web site: <https://www.iso.org/>.

(1) ISO 7117:1995(E), “Motorcycles—Measurement of maximum speed,” Second edition, March 1, 1995, into § 571.122.

(2) ISO 10844:1994(E) “Acoustics—Test Surface for Road Vehicle Noise Measurements,” First edition, 1994-09-01, into § 571.141.

(3) ISO 10844: 2011(E) “Acoustics—Specification of test tracks for measuring noise emitted by road vehicles and their tyres,” Second edition, 2011-02-01 into § 571.141.

(4) ISO 10844: 2014(E) “Acoustics—Specification of test tracks for measuring noise emitted by road vehicles and their tyres,” Third edition, 2014-05-15 into § 571.141.

(j) National Center for Health Statistics, Centers for Disease Control (CDC), National Division for Health Statistics, Division of Data Services, Hyattsville, MD 20782. Telephone: 1 (800) 232-4636. Web site: <https://www.cdc.gov/nchs>.

(1) DHEW Publication No. (HRA) 76-1074, “Weight, Height, and Selected Body Dimensions of Adults: United States—1960-1962,” first published as Public Health Service Publication No.



1000 Series 11—No. 8, June 1965, into § 571.3.

(2) [Reserved]

(k) National Highway Traffic Safety Administration (NHTSA), 1200 New Jersey Ave. SE., Washington, DC 20590. Web site: <https://www.nhtsa.gov>.

(1) Drawing Package, "NHTSA Standard Seat Assembly; FMVSS No. 213, No. NHTSA-213-2003," (consisting of drawings and a bill of materials), June 3, 2003, into § 571.213.

(2) Drawing Package, SAS-100-1000, Standard Seat Belt Assembly with Addendum A, Seat Base Weldment (consisting of drawings and a bill of materials), October 23, 1998, into § 571.213.

(3) "Parts List; Ejection Mitigation Headform Drawing Package," December 2010, into § 571.226.

(4) "Parts List and Drawings; Ejection Mitigation Headform Drawing Package" December 2010, into § 571.226.

(5) "Parts List and Drawings, NHTSA Standard Seat Assembly; FMVSS No. 213a—Side impact No. NHTSA-213a-2021, CHILD SIDE IMPACT SLED" dated December 2021; into § 571.213a.

(1) SAE International, 400 Commonwealth Drive, Warrendale, PA 15096. Telephone: (724) 776-4841; Web site: <https://www.sae.org>.

(1) SAE Recommended Practice J100-1995, "Class 'A' Vehicle Glazing Shade Bands," revised June 1995, into § 571.205.

(2) SAE Recommended Practice J211a, "Instrumentation for Impact Tests," revised December 1971, into § 571.222.

(3) SAE Recommended Practice J211, "Instrumentation for Impact Tests," revised June 1980, into §§ 571.213; 571.218.

(4) SAE Recommended Practice J211/1, "Instrumentation for Impact Tests—Part 1—Electronic Instrumentation"; revised March 1995; into §§ 571.202a; 571.208; 571.213a; 571.218; 571.403.

(5) SAE Recommended Practice J211-1 DEC2003, "Instrumentation for Impact Test—Part 1—Electronic Instrumentation," revised December 2003, into §§ 571.206; 571.209.

(6) SAE Recommended Practice J227a, "Electric Vehicle Test Procedure," revised February 1976, into §§ 571.105; 571.135.

(7) SAE Standard J527a, "Brazed Double Wall Low Carbon Steel Tubing," revised May 1967, into § 571.116.

(8) SAE Recommended Practice J567b, "Bulb Sockets," revised April 1964, into § 571.108.

(9) SAE Recommended Practice J573d, "Lamp Bulbs and Sealed Units," revised December 1968, into § 571.108.

(10) SAE Recommended Practice J575-1983, "Tests for Motor Vehicle Lighting Devices and Components," revised July 1983, into § 571.131.

(11) SAE Recommended Practice J578, "Color Specification," revised May 1988, into § 571.131.

(12) SAE Recommended Practice J578-1995, "Color Specification," revised June 1995, into § 571.403.

(13) SAE Recommended Practice J592 JUN92, "Clearance, Side Marker, and Identification Lamps," revised June 1992, into § 571.121.

(14) SAE Recommended Practice J592e-1972, "Clearance, Side Marker, and Identification Lamps," revised July 1972, into § 571.121.

(15) SAE Recommended Practice J602-1963, "Headlamp Aiming Device for Mechanically Aimable Sealed Beam Headlamp Units," reaffirmed August 1963, into § 571.108.

(16) SAE Recommended Practice J602-1980, "Headlamp Aiming Device for Mechanically Aimable Sealed Beam Headlamp Units," revised October 1980, into § 571.108.

(17) SAE Recommended Practice J673a, "Automotive Glazing," revised August 1967, into § 571.205(a).

(18) SAE Recommended Practice J673, "Automotive Safety Glasses," revised April 1993, into § 571.205.

(19) SAE Recommended Practice J726 SEP79, "Air Cleaner Test Code," revised April 1979, into § 571.209.

(20) SAE Recommended Practice J759 JAN95, "Lighting Identification Code," revised January 1995, into § 571.121.

(21) SAE Standard J787b, "Motor Vehicle Seat Belt Anchorage," revised September 1966, into § 571.3.

(22) SAE Recommended Practice J800c, "Motor Vehicle Seat Belt Assembly Installations," revised November 1973, into § 571.209.

(23) SAE Standard J826-1980, "Devices for Use in Defining and Measuring Vehicle Seating Accommodation," revised April 1980, into §§ 571.208; 571.214.

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(24) SAE Standard J826 MAY87, "Devices for Use in Defining and Measuring Vehicle Seating Accommodation," revised May 1987, into §§ 571.3; 571.210.

(25) SAE Standard J826-1992, "Devices for Use in Defining and Measuring Vehicle Seating Accommodation," revised June 1992, into § 571.225.

(26) SAE Standard J826 JUL95, "Devices for Use in Defining and Measuring Vehicle Seating Accommodation," revised July 1995, into §§ 571.10; 571.111; 571.202; 571.202a; 571.216a.

(27) SAE Recommended Practice J839b, "Passenger Car Side Door Latch Systems," revised May 1965, into § 571.201.

(28) SAE Recommended Practice J839-1991, "Passenger Car Side Door Latch Systems," revised June 1991, into § 571.206.

(29) SAE Recommended Practice J902, "Passenger Car Windshield Defrosting Systems," revised August 1964, into § 571.103.

(30) SAE Recommended Practice J902a, "Passenger Car Windshield Defrosting Systems," revised March 1967 (Editorial change June 1967), into § 571.103.

(31) SAE Recommended Practice J903a, "Passenger Car Windshield Wiper Systems," revised May 1966, into § 571.104.

(32) SAE Recommended Practice J921, "Instrument Panel Laboratory Impact Test Procedure," approved June 1965, into § 571.201.

(33) SAE Recommended Practice J941, "Passenger Car Driver's Eye Range," approved November 1965, into § 571.104.

(34) SAE Recommended Practice J941b, "Motor Vehicle Driver's Eye Range," revised February 1969, into § 571.108.

(35) SAE Recommended Practice J942, "Passenger Car Windshield Washer Systems," approved November 1965, into § 571.104.

(36) SAE Recommended Practice J944 JUN80, "Steering Control System—Passenger Car—Laboratory Test Procedure," revised June 1980, into § 571.203.

(37) SAE Standard J964 OCT84, "Test Procedure for Determining Reflectivity of Rear View Mirrors," reaffirmed October 1984, into § 571.111.

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(38) SAE Recommended Practice J972, "Moving Rigid Barrier Collision Tests," revised May 2000, into § 571.105.

(39) SAE Recommended Practice J977, "Instrumentation for Laboratory Impact Tests," approved November 1966, into § 571.201.

(40) SAE Recommended Practice J1100a, "Motor Vehicle Dimensions," revised September 1975, into § 571.3.

(41) SAE Recommended Practice J1100 JUN84, "Motor Vehicle Dimensions," revised June 1984, into §§ 571.3; 571.210.

(42) SAE Recommended Practice J1100-1993, "Motor Vehicle Dimensions," revised June 1993, into § 571.225.

(43) SAE Recommended Practice J1100, "Motor Vehicle Dimensions," revised February 2001, into § 571.3.

(44) SAE Recommended Practice J1133, "School Bus Stop Arm," revised April 1984, into § 571.131.

(45) SAE Standard J1703b, "Motor Vehicle Brake Fluid," revised July 1970, into § 571.116.

(46) SAE Standard J1703 NOV83, "Motor Vehicle Brake Fluid," revised November 1983, into § 571.116.

(47) SAE RM-66-04, "Compatibility Fluid," Appendix B to SAE Standard J1703 JAN95, "Motor Vehicle Brake Fluid," revised January 1995, into §§ 571.106; 571.116.

(48) SAE Recommended Practice J2009, "Discharge Forward Lighting Systems," revised February 1993, into § 571.108.

(49) SAE Standard J2889-1, "Measurement of Minimum Noise Emitted by Road Vehicles," December 2014 into § 571.141.

(50) SAE Aerospace-Automotive Drawing Standards, issued September 1963, into §§ 571.104; 571.202.

(m) United Nations Economic Commission for Europe (UNECE), United Nations, Conference Services Division, Distribution and Sales Section, Office C.115-1, Palais des Nations, CH-1211, Geneva 10, Switzerland. Web site: [www.unece.org/trans/main/wp29/wp29regs.html](http://www.unece.org/trans/main/wp29/wp29regs.html).

(1) UNECE Regulation 17 "Uniform Provisions Concerning the Approval of Vehicles with Regard to the Seats, their Anchorages and Any Head Restraints": ECE 17 Rev. 1/Add. 16/Rev. 4 (July 31, 2002), into § 571.202.

(2) UNECE Regulation 48 “Uniform Provisions Concerning the Approval of Vehicles With Regard to the Installation of Lighting and Light-Signaling Devices,” E/ECE/324-E/ECE/TRANS/505, Rev.1/Add.47/Rev.1/Corr.2 (February 26, 1996), into § 571.108.

[77 FR 752, Jan. 6, 2012, as amended at 77 FR 11647, Feb. 27, 2012; 77 FR 51671, Aug. 24, 2012; 78 FR 21852, Apr. 12, 2013; 79 FR 19243, Apr. 7, 2014; 80 FR 36100, June 23, 2015; 81 FR 90514, Dec. 14, 2016; 87 FR 34808, June 8, 2022; 87 FR 39309, Aug. 1, 2022]

**§ 571.7 Applicability.**

(a) *General.* Except as provided in paragraphs (c) and (d) of this section, each standard set forth in subpart B of this part applies according to its terms to all motor vehicles or items of motor vehicle equipment the manufacture of which is completed on or after the effective date of the standard.

(b) [Reserved]

(c) *Military vehicles.* No standard applies to a vehicle or item of equipment manufactured for, and sold directly to, the Armed Forces of the United States in conformity with contractual specifications.

(d) *Export.* No standard applies to a vehicle or item of equipment in the circumstances provided in section 108(b)(5) of the Act (15 U.S.C. 1397 (b)(5)).

(e) *Combining new and used components.* When a new cab is used in the assembly of a truck, the truck will be considered newly manufactured for purposes of paragraph (a) of this section, the application of the requirements of this chapter, and the Act, unless the engine, transmission, and drive axle(s) (as a minimum) of the assembled vehicle are not new, and at least two of these components were taken from the same vehicle.

(f) *Combining new and used components in trailer manufacture.* When new materials are used in the assembly of a trailer, the trailer will be considered newly manufactured for purposes of paragraph (a) of this section, the application of the requirements of this chapter, and the Act, unless, at a minimum, the trailer running gear assembly (axle(s), wheels, braking and suspension) is not new, and was taken from an existing trailer—

(1) Whose identity is continued in the reassembled vehicle with respect to the Vehicle Identification Number; and

(2) That is owned or leased by the user of the reassembled vehicle.

[33 FR 19703, Dec. 25, 1968. Redesignated at 35 FR 5118, Mar. 26, 1970, and amended at 36 FR 7855, Apr. 27, 1971; 38 FR 12808, May 16, 1973; 40 FR 49341, Oct. 22, 1975; 41 FR 27074, July 1, 1976]

**§ 571.8 Effective date.**

(a) *Firefighting vehicles.* Notwithstanding the effective date provisions of the motor vehicle safety standards in this part, the effective date of any standard or amendment of a standard issued after September 1, 1971, to which firefighting vehicles must conform shall be, with respect to such vehicles, either 2 years after the date on which such standard or amendment is published in the rules and regulations section of the FEDERAL REGISTER, or the effective date specified in the notice, whichever is later, except as such standard or amendment may otherwise specifically provide with respect to firefighting vehicles.

(b) *Vehicles built in two or more stages and altered vehicles.* Unless Congress directs or the agency expressly determines that this paragraph does not apply, the date for manufacturer certification of compliance with any standard, or amendment to a standard, that is issued on or after September 1, 2006 is, insofar as its application to intermediate and final-stage manufacturers and alterers is concerned, one year after the last applicable date for manufacturer certification of compliance. Nothing in this provision shall be construed as prohibiting earlier compliance with the standard or amendment or as precluding NHTSA from extending a compliance effective date for intermediate and final-stage manufacturers and alterers by more than one year.

[70 FR 7435, Feb. 14, 2005]

**§ 571.9 Separability.**

If any standard established in this part or its application to any person or circumstance is held invalid, the remainder of the part and the application

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of that standard to other persons or circumstances is not affected thereby.

[33 FR 19705, Dec. 25, 1968. Redesignated at 35 FR 5118, Mar. 26, 1970]

### § 571.10 Designation of seating positions.

(a) *Application.* This section applies to passenger cars, trucks, multipurpose passenger vehicles, and buses manufactured on or after September 1, 2010. However, paragraph (b) of this section does not apply to trucks and multipurpose passenger vehicles with a gross vehicle weight rating greater than 10,000 lbs, school buses, police vehicles as defined in S7 of Standard No. 208 (49 CFR 571.208), firefighting vehicles, ambulances, or motor homes. To determine the number of passenger seating positions in school buses, see S4.1 of Standard No. 222 (49 CFR 571.222).

(b) *Number of designated seating positions.* The formula for calculating the number of designated seating positions (N) for any seat location with a seating surface width greater than 330 mm (13 inches) is as follows:

(1) For seat locations with a seating surface width, as described in paragraph (c), of less than 1400 mm (55.2 inches):  $N = \text{The greater of 1 or } [\text{seating surface width (in mm)} / 350] \text{ rounded down to the nearest whole number;}$

(2) For seat locations with a seating surface width, as described in paragraph (c), greater than or equal to 1400 mm (55.2 inches):  $N = \text{No less than } [\text{seating surface width (in mm)} / 450] \text{ rounded down to the nearest whole number.}$

(c) *Seating surface measurement.* (1) As used in this section, “seating surface” only includes the seat cushion and soft trim and excludes unpadded trim components such as a decorative seat shield, seat adjusters, or adjuster covers. As used in paragraphs (c)(1)(ii) and (iii) of this section, “outboard” and “inboard” are determined with respect to the measurement zone established in paragraph (c)(1)(i) of this section. As used in this section, “seating surface width” is the maximum horizontal width of a seating surface determined by the following procedure:

(i) Establish a measurement zone bounded by two vertical planes oriented perpendicular to the direction

the seat is facing. One is located 150 mm (5.9 inches) behind the front leading surface of the seat and the other is located 250 mm (9.8 inches) behind the front leading surface of the seat. A measurement location within this zone is any vertical plane parallel to the planes establishing the boundary of the zone.

(ii) For each measurement location within the zone, establish vertical reference planes parallel to the direction the seat faces that intersect the most outboard point on each side of the seating surface at that measurement location. If outboard interior trim contacts the top surface of the seat cushion, establish another vertical plane parallel to the direction the seat faces that intersects the most inboard point of contact between outboard interior trim and the top surface of the seat cushion.

(iii) For measurement within the zone, measure horizontally between and perpendicular to the most inboard vertical reference planes established in (ii), as shown in Figure 1 (provided for illustration purposes).

(2) Adjacent seating surfaces are considered to form a single, continuous seating surface whose overall width is measured as specified in (c)(1) of this section, unless

(i) The seating surfaces are separated by:

(A) A fixed trimmed surface whose top surface is unpadded and that has a width not less than 140 mm (5.5 inches), as measured in each transverse vertical plane within that measurement zone, or

(B) A void whose cross section in each transverse vertical plane within that measurement zone is a rectangle that is not less than 140 mm (5.5 inches) wide and not less than 140 mm (5.5 inches) deep. The top edge of the cross section in any such plane is congruent with the transverse horizontal line that intersects the lowest point on the portion of the top profile of the seating surfaces that lie within that plane, or

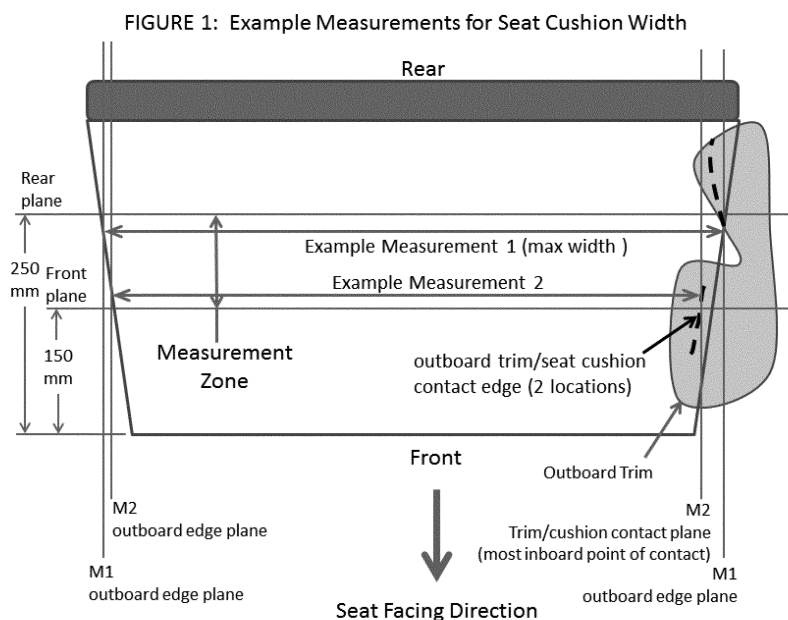
(ii) Interior trim interrupts the measurement of the nominal hip room between adjacent seating surfaces, measured laterally along the “X” plane through the H-point. For purposes of this paragraph, the H-point is located using the SAE three-dimensional H-

point machine per Society of Automotive Engineers (SAE) Surface Vehicle Standard J826, revised July 1995, "Devices for Use in Defining and Measuring Vehicle Seating Accommodation" (incorporated by reference, see section 571.5) with the legs and leg weights removed, or

(iii) The seating surfaces are adjacent outboard seats, and the lateral

distance between any point on the seat cushion of one seat and any point on the seat cushion of the other seat is not less than 140 mm (5.5 inches).

(3) Folding, removable, and adjustable seats are measured in the configuration that results in the single largest maximum seating surface width.



**Plan view of a seat showing several example measurement locations for the determination of seating surface width. Measurement 1 is the seat surface width for this illustration.**

[73 FR 58897, Oct. 8, 2008, as amended at 74 FR 68190, Dec. 23, 2009; 78 FR 68756, Nov. 15, 2013; 79 FR 57830, Sept. 26, 2014]

### Subpart B—Federal Motor Vehicle Safety Standards

SOURCE: 36 FR 22902, Dec. 2, 1971, unless otherwise noted.

### § 571.101 Standard No. 101; Controls and displays.

**S1. Scope.** This standard specifies performance requirements for location, identification, color, and illumination of motor vehicle controls, telltales and indicators.

**S2. Purpose.** The purpose of this standard is to ensure the accessibility, visibility and recognition of motor vehicle controls, telltales and indicators, and to facilitate the proper selection of