ICS 43.020
CCS T09

# NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA



# GB 13094-2025

Replacing GB 13094-2017

## Safety requirements for bus construction

客车结构安全要求

**Issued on: December 31, 2025** **Implemented on: July 1, 2027**

**Issued by: State Administration for Market Regulation;**
**Standardization Administration of China**

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## 1 Scope

GB 13094-2025 is the Chinese national standard on safety requirements for bus construction, in the field of road vehicles engineering. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 31

December 2025 by the State Administration for Market Regulation; Standardization Administration of China, and takes effect on 1 July 2027. Classification: ICS 43.020, CCS T09. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the safety requirements, determination of the same type, and implementation of the standard for bus construction. This document applies to categories M2 and M3 buses; as well as to special buses as a reference. This document does not apply to buses that travel off-road.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 2408-2021, Plastics - Determination of burning characteristics - Horizontal and vertical test

GB/T 3730.1, Terms and definitions of motor vehicles, trailers and combination vehicle - Part

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions, as well as those given in GB/T 3730.1, GB/T 3730.2, GB/T 4780 and GB/T 15089, apply.

3.1 trolley bus Bus powered by electricity via overhead power lines.

Note. Including dual-source trolley bus with an additional on-board energy storage device. [Source: GB/T 3730.1-2022, 5.10, modified]

3.2 gangway The walking space for passengers to move from one (row of) seat(s) or the wheelchair area to other (rows of) seats, wheelchair area, service door access passage, intercommunication staircase or passenger standing area.

Note. Excluding.

a) the space 300 mm in front of the forward-facing/rearward-facing seats;

b) the space 225 mm in front of the side-facing seats;

c) the space above steps or stairs (excluding steps that are connected to the floor surface of a gangway or an access passage);

d) the walking space only for access to a (row of) seat(s) or between rows of seats facing

each other.

3.3 access passage The space extending from the service door into the vehicle up to the outer edge of the uppermost step (i.e., the edge of the gangway), connecting to an intercommunication staircase or half staircase.

3.19.1 lift A device or system, with a liftable platform for passengers and wheelchairs to move between the ground (or curb/shoulder) and the passenger compartment floor.

3.19.2 ramp A device that connects the passenger compartment floor and the ground (or curb/shoulder) to facilitate wheelchair access.

3.19.3 portable ramp A ramp that can be removed from the vehicle and placed in its place of use by the driver or the member of the crew.

3.20 mass of the vehicle in running order The mass of a bus when it is in operation but not carrying passengers and luggage.



### 4.1 General requirements

4.1.1 If a bus belongs to two or more of the following categories. Class A, Class B, Class I, Class II, and Class III, then the vehicle shall comply with the relevant clauses of each of its categories in this document.

4.1.2 Unless otherwise specified, the measurements in this document shall be taken on a horizontal plane when the bus is of mass of the vehicle in running order (with members of the crew seated or with appropriate counterweight); the adjustable backrest angles of the passenger seats and driver's seats, as well as other seat adjustments, shall be at the design reference positions specified by the manufacturer. If the bus is equipped with a kneeling system, the system shall be installed at the height specified by the bus manufacturer.

4.1.3 This document requires that a certain surface inside the vehicle shall be horizontal or at a certain angle under the mass of the vehicle in running order. For buses with mechanical suspension, the surface may be tilted or exceed the specified angle under the mass of the vehicle in running order, provided that the requirement is met under the loading conditions declared by the bus manufacturer. If the bus is equipped with a kneeling system, the system shall be in the condition specified by the bus manufacturer.

4.1.4 Buses that provide facilities for passengers with reduced mobility shall comply with the relevant provisions of Appendix A. If the bus is only equipped with priority seats and guide dog space, then it only needs to comply with the relevant provisions of A.2 ~ A.6.

### 4.2 Axle load and passenger usable area

4.2.1 Axle load distribution Under the mass of the vehicle in running order and the maximum design total mass of the bus, the percentage of the load on its front axle to the

total mass of the bus under the corresponding load state shall be greater than or equal to the provisions in Table 1.

4.2.2 Passenger usable area The effective area of the passenger compartment shall be calculated in accordance with the provisions of GB/T 12428.For Class I, Class II, and Class A buses, the number of passenger seats on each deck shall be at least equal to the nearest integer obtained by rounding down the effective area of the passenger compartment on that deck (in square meters). The number of passenger seats in Class I buses (excluding the upper deck of a double-deck bus) shall not be less than 90% of this integer.

Note. The effective area of the passenger compartment is the passenger usable area.

### 4.3 Roll stability

4.3.1 When the test platform where the bus is parked is tilted 28° to the left and then to the right from a horizontal position, the bus shall not roll over.

4.3.2 When conducting the stability test, the bus shall be in the mass of the vehicle in running order (with the driver and members of the crew assumed to be 75 kg/person), and the number of standing passengers shall be calculated according to the relevant provisions of GB/T 12428.Configure the load as follows:

a) A load (66 kg for Class I and Class A buses, and 69 kg for Class B, Class II, and Class III buses) shall be applied to each seat (for double-deck buses, only the upper-deck seats); for single-deck buses with a passenger standing area, the load for each standing passenger (66 kg for Class I and Class A buses, and 69 kg for Class II buses) shall be evenly distributed in the corresponding standing area, with the center of gravity 875 mm above the floor; for double- deck buses with a passenger standing area, no load shall be applied to the standing area. There shall be no luggage in the vehicle's luggage rack or luggage compartment.

b) If the bus is designed to accommodate one or more wheelchairs, the wheelchair area shall be configured as follows: 1) For the area, as specified in A.8.4, reserved solely for wheelchair users, the combined mass of the wheelchair and its user shall be 250 kg, and the center of gravity shall be located 500 mm above the center floor of each wheelchair space; 2) For Class III and Class B vehicles, if seats are installed in this area, a load shall be applied to the seats according to the mass of seated passengers for the corresponding class; 3) For Class A, Class I, and Class II buses, if seats are installed in this area, a load shall be applied to the seats according to the mass of seated passengers for the corresponding class; and to the remaining area according to the mass of standing passengers; 4) For Class A, Class I and Class II buses, if there are no seats in the area, the load shall be applied based on the mass of standing passengers.

4.3.3 During the test, the height of the stop used to prevent the wheel from sliding to the side shall not exceed the greater of 2/3 of the distance between the tire contact plane and