

Republic of the Philippines
Department of Transportation

LAND TRANSPORTATION FRANCHISING & REGULATORY BOARD

East Avenue, Quezon City

**MEMORANDUM CIRCULAR
NUMBER 2022 - 047**

Subject: GUIDELINES ON THE SPECIFICATIONS OF MINIBUS COVERED BY DEPARTMENT ORDER NO. 2017-011 OTHERWISE KNOWN AS THE OMNIBUS FRANCHISING GUIDELINES

WHEREAS, the Department of Transportation (“DOTr”) issued Department Order No. 011, series of 2017, otherwise known as the Omnibus Guidelines on the Planning and Identification of Public Road Transportation Services and Franchise Issuance or Omnibus Franchising Guidelines (“OFG”), which aims to provide a reliable, safe, accessible, environment-friendly, dependable, efficient, and comfortable public road transportation throughout the country;

WHEREAS, the Land Transportation Franchising and Regulatory Board (“LTFRB” and/or “Board”), a sectoral agency of the DOTr, is tasked to implement the OFG;

WHEREAS, the Department of Trade and Industry-Bureau of Philippine Standards has issued the Philippine National Standards (PNS 2160:2021) of Minibus in December 2021 specifying therein the dimensional limits of said type of PUV in support of the PUV Modernization Program of the DOTr and LTFRB;

NOW THEREFORE, pursuant to Section 5 of Executive Order No. 202 mandates the Land Transportation Franchising and Regulatory Board (LTFRB) *“to prescribe and regulate routes of service, economically viable capacities and zones or areas of operation of public land transportation services provided by motorized vehicles in accordance with the public land transportation development plans and programs approved by the Department of Transportation and Communications”* and *“to formulate, promulgate, administer, implement and enforce rules and regulations on land transportation public utilities, standards of measurements and/or design, and rules and regulations requiring operators of any public land transportation service to equip, install and provide in their utilities and in their stations such devices, equipment facilities and operating procedures and techniques as may promote safety, protection, comfort and convenience to persons and property in their charges as well as the safety of persons and property within their areas of operations”*; and *“to perform such other functions and duties as may be provided by law, or as may be necessary, or proper or incidental to the purposes and objectives of this Department Order”*, this Board **RESOLVES** as it hereby **RESOLVED** to promulgate and adopt the following guidelines on the Standard Specifications of Public Utility Vehicles;

I. COVERAGE

This Memorandum Circular shall cover the standard specifications of Minibus.

II. BODY TYPE, MEASUREMENT, AND DIMENSION

In addition to the body make of Minibus under the OFG, the following minimum specifications shall be complied with:

Minibus (PNS 2160:2021)

1. The Board adopts the Philippine National Standards (“PNS”) 2160:2021 approved by the Department of Trade and Industry-Bureau of Philippine Standards (DTI-BPS). The said PNS specifies dimensional limits for Minibus to wit:

- a. Overall Height, Width, Length, and Weight

NOTE: The design of Minibus described in this memorandum circular shall not be limited to the illustrations indicated herein.

- i. The overall height, width, and length are specified in Table 1 and as shown in Figure 1:

Table 1. Overall height, width, and length

Overall Height (h), minimum	Overall Width (w), Maximum	Overall Length (l), maximum
Must conform to the floor-to-ceiling height of 180 cm.	250 cm	700 cm to 900 cm

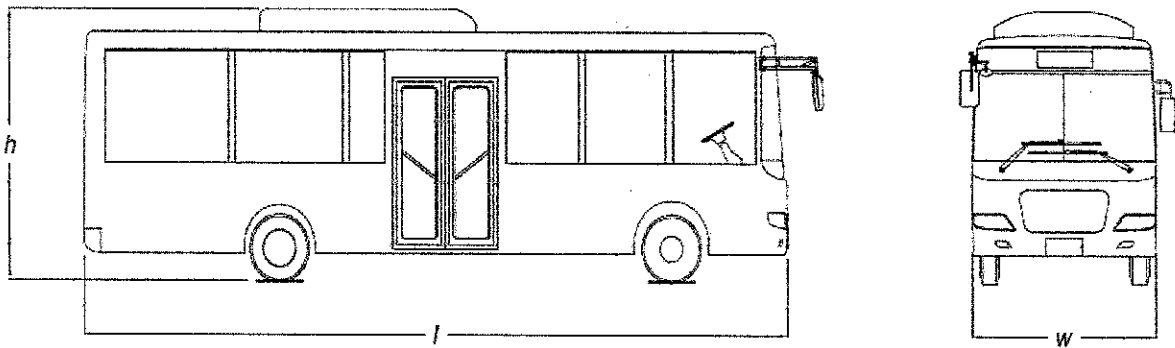


Figure 1. Overall height, width, and length

No tolerances are needed for the specified minimum and maximum dimensions as external projections are allowed up to 25 cm maximum on all sides of the Minibus (beyond the front bumper, rear bumper, both sides, and top of the vehicle).

- ii. Gross Vehicle Weight

The Minibus shall have a gross vehicle weight not exceeding 10,000 kilograms (10 tons) in accordance with PNS 2160:2021.

No tolerance is needed for gross vehicle weight. The maximum value stated shall be strictly followed in compliance to the published national standard.

- iii. Seating Capacity

The Minibus shall have an average seating capacity of 35 passengers, all seated.

- b. Wheelbase and Front and Rear Overhang

The front overhang (FOH), wheelbase (WB), and rear overhang (ROH) shall be based on the original equipment manufacturer (OEM) specifications. Figure 2 illustrates the wheelbase and front and rear overhang of the vehicle.

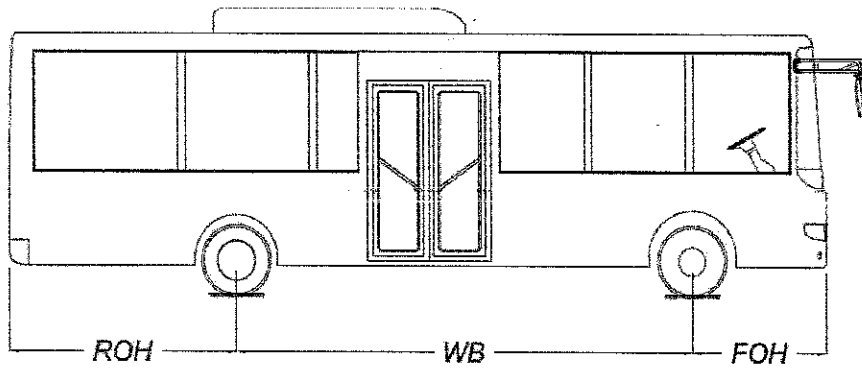


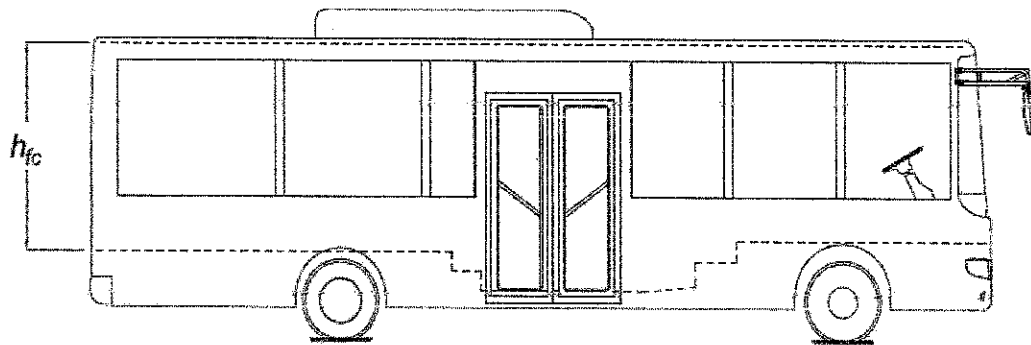
Figure 2. Wheelbase and front and rear overhang

c. Cabin Dimensions

The cabin dimensions shall be as given in Table 2 and as shown in Figures 3 and 4.

Table 2. Minimum Cabin Dimensions

Seat Configuration	Floor to Ceiling height (h_{fc})	Gangway width (w_g)
Front-facing	180	35
Side facing	180	80



NOTE: Illustrations for the floor-to-ceiling height of low entry, low floor, and step entry minibus are shown in “Annex A.”

Figure 3. Floor-to-ceiling height

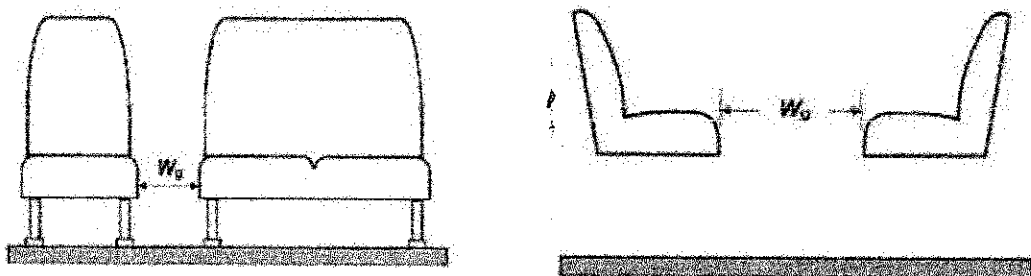


Figure 4. Gangway width

No tolerance is needed for the floor-to-ceiling height. The required minimum dimensions shall be strictly followed to allow sufficient head room inside the cabin.

Likewise, no tolerance is needed for the gangway width as the specified minimum required dimensions shall be strictly followed to allow sufficient leg room or access inside the cabin.

d. Seat Dimensions and Seat Layout

The Minibus shall have the following seat configurations — perimeter seating, front-facing, and mixed-seating configurations.

i. Minimum Seat Dimensions

The seat dimensions to determine the passenger seating capacity shall be as given in Table 3 and as shown in Figure 5.

Table 3. Minimum Seat Dimensions

Parameters	Individual Seats	Continuous Seats
Seat depth (d_s)	35 cm	35 cm
Width seat cushion (hip) (w_{sh})	40 cm	40 cm
Width seat back (shoulder) (w_{ss})	40 cm	40 cm
Armrest to top seat cushion (h_{ats})	17 cm	17 cm
Hip Guard (optional)	10 cm	10 cm

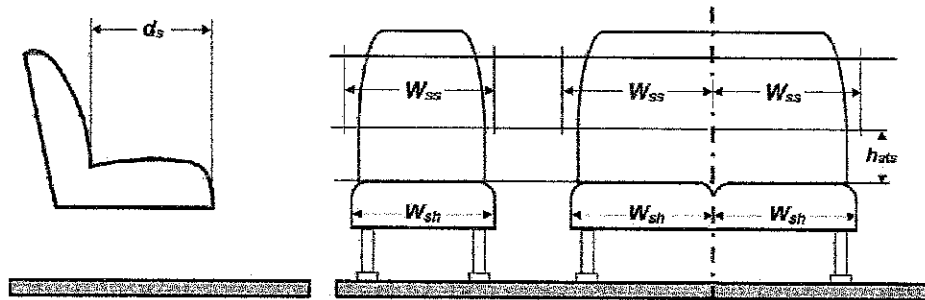


Figure 5. Seat dimensions

Armrests are optional. If armrests are to be installed, no tolerance is needed thus the specified minimum dimension shall be strictly followed.

Hip guard is not intended to be used as an armrest.

However, a 5% tolerance or 2 cm below the minimum dimensions specified for the seat cushion and seat back (backrest) is allowed.

No tolerance is needed for the minimum seat depth dimension. The specified required dimension shall be strictly followed to provide ample seating space for passengers.

ii. Seat Layout

The seat layout shall be as given in Table 4 and as shown in Figure 6.

Table 4. Seat Layout

Parameters	Dimensions
Floor to top seat cushion (h_{fts})	40 cm to 50 cm
Minimum distance between backseats (D_{bff}): front-facing	65 cm
Minimum distance between backseats (D_{bpf}): side-facing	150 cm

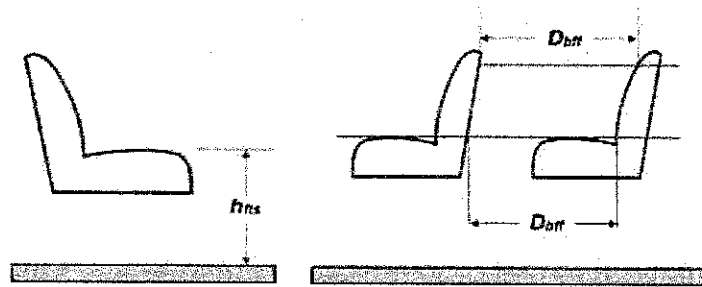


Figure 6. Seat layout

No tolerance is needed for the floor-to-top seat cushion height as a range between 40 to 50 cm has already been specified.

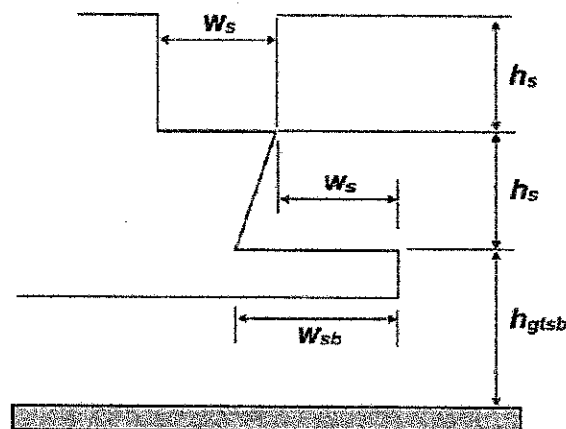
Likewise, no tolerance is needed for the distance between backseats as the specified minimum required dimensions shall be strictly followed to give comfortable seating space between seated passengers.

e. Step Board Dimensions

The step board dimensions shall be in accordance with Table 5. Figure 7 illustrates step board dimensions of the vehicle.

Table 5. Step Board Dimensions

Parameters	Low entry minibus	Low floor minibus	Step entry minibus
Ground to top of step board (h_{gtsb}), air suspension, maximum	38 cm	38 cm	38 cm
Ground to top of step board (h_{gtsb}), mechanical suspension, maximum	43 cm	43 cm	43 cm
Width of step board (w_{sb}), minimum	30 cm	30 cm	30 cm
Height per step (h_s)	N/A	N/A	12 – 35 cm
Width per succeeding step (w_s), minimum	N/A	N/A	20 cm
No. of steps, minimum	N/A	N/A	1



NOTE: Illustrations for the step board of low entry, low floor, and step entry minibus are shown in “Annex B.”

Figure 7. Step board

No tolerance is needed for the ground to top of step board height as the specified minimum required dimensions shall be strictly followed. However, it is recommended that the height be nearer to either 38 cm or 43 cm, for air suspension or mechanical suspension, respectively.

Likewise, no tolerance is needed for the height per step as a range between 12 to 35 cm has already been specified.

A 5% tolerance or 1.5 cm below the minimum width specified for the step board and width per step is allowed.

f. Service Door Dimensions

The main service door is on the right-hand side and shall be either power or manually operated to provide the driver easy control while seated. It may be situated at the front or at the middle part of the vehicle.

A power-controlled service door may be used as an emergency door, only if it can be manually overridden.

The service door dimensions shall be in accordance with Table 6. Figures 8 and 9 illustrate the service door dimensions of the vehicle.

Table 6. Minimum Service Door Dimensions

Parameters	Dimensions
Entry height (h_e)	165 cm
Aperture height (h_a)	140 cm
Entry width (w_e)	65 cm for single door; For service doors with PWD Access, entry width shall be a minimum of 90 cm with a width clear space of 80 cm.

NOTE: Clear space means unobstructed space when the service door is folded open.

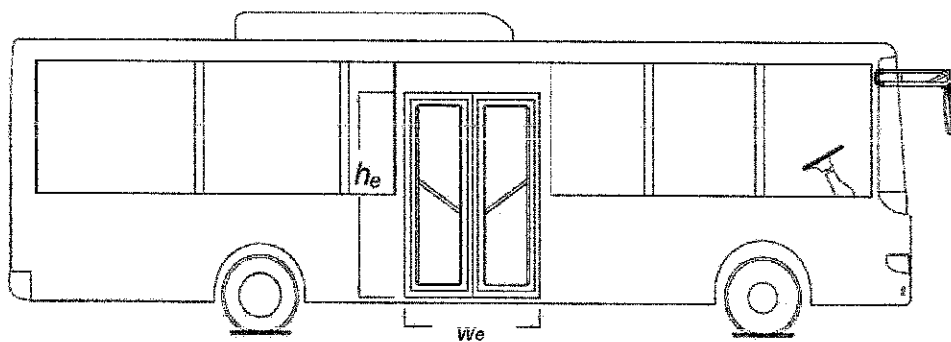


Figure 8. Service door dimensions

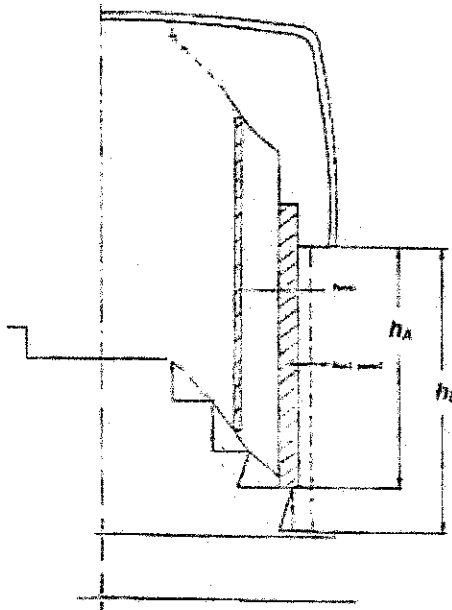


Figure 9. Service door dimensions

No tolerance is needed for the service door dimensions as these are minimum accepted practice and industry standards for access/entry way.

g. Tire Sizing

Tire Size shall correspond to the load capacity of the Minibus relative to its Gross Vehicle Weight (GVW). The tire sizing shall conform to Pneumatic Tires – Specification (PNS 2160:2021).

h. Emergency Exit Dimensions

The emergency exit could be a door, a window, or a hatch, with signage conforming to the specifications in Clause 1. The emergency exit dimensions shall be in accordance with Table 7.

Table 7. Emergency Exit Dimensions

Aperture	Minimum Dimensions	Remarks
Emergency doors	Height: 145 cm, minimum Width: 60 cm, minimum	
Emergency window	Aperture area: 4,000 cm ² , minimum	It shall be possible to inscribe in this area a rectangle of 50 cm x 70 cm
Escape hatch	Aperture area: 4,500 cm ²	It shall be possible to inscribe in this area a rectangle of 60 cm x 70 cm

The exits shall be placed in such a way that there is at least one exit on each side of the vehicle. The forward half and the rearward half of the passenger compartment shall each contain at least one exit.

A door for emergency use shall, provided that it is not a service door, be permitted in the rear face of the vehicle.

No tolerance is needed for the minimum emergency exit dimensions. The specified required dimensions shall be strictly followed as these are highly important to the safety of the riding public during emergencies.

i. Handrails and handholds

The length of gangway handrail / handhold (l_{ghr}) shall be 10 cm at the minimum. The bottom of the gangway handrail (h_{bhr}) and the bottom of strap hanger (h_{bsh}) shall not be less than 80 cm and note more than 195 cm for handrails and 150 cm for strap hangers above the floor. The gangway handrails are optional. Figure 10 illustrates the handrails and handholds of the vehicle.

Handrails and/or handholds shall be provided in sufficient numbers of each point of the floor area intended for the declared number of standing passengers. For standing passengers, at least two handrails or handholds can be reached. For this purpose, strap hangers, if fitted, may be counted as handholds, provided that they are held in their position by suitable means.

The height of the center of the service door handrail (h_{cdhr}) shall be 80 cm to 110 cm on both sides above the first step board. The service door handrail is optional.

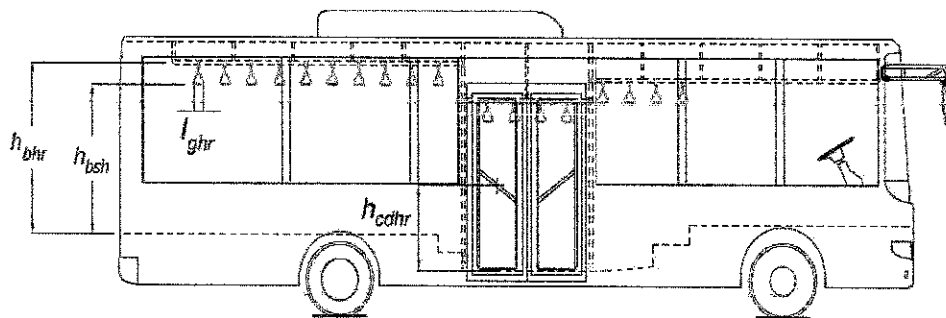


Figure 10. Handrails

No tolerance is needed for the handrail and handhold installation requirements. The specified required dimensions shall be strictly followed as these consider the average height of the riding public.

j. External Projection

A maximum external projection of 25 cm beyond the front bumper, rear bumper, both sides, and top of the vehicle shall be allowed.

No tolerance is needed for the external projection requirements. The specified required dimension is already at maximum allowing an additional 25 cm on all sides of the Minibus.

k. Baggage/Luggage Compartment

The occupants of the vehicle shall be protected from objects liable to fall or slide out from the baggage/luggage compartments under braking or cornering forces. If baggage/luggage compartments are fitted, it shall be constructed in such a way that baggage/luggage is prevented from falling or sliding out in the event of sudden braking and cornering.

For Minibus with baggage/luggage compartment, the vehicles shall be clearly marked with letters or pictograms not less than 5.1 cm high, with the mass of baggage/luggage, which may be carried when the vehicle is fully loaded. As appropriate, this shall include the design capacity of the baggage/luggage compartment

The baggage/luggage compartment for every Minibus shall have at least one of the below provided areas. It shall be constructed that it can accommodate the provided size limit for each of the following areas:

i. Overhead Bins

The size limit for the baggage/luggage compartment shall be constructed taking into consideration the floor-to-ceiling height specified in Table 1 without compromising the sitting height of a passenger and as shown in Figure 11.

The baggage/luggage compartment shall not protrude above the gangway.

The baggage/luggage compartment shall be reinforced to accommodate its design capacity.

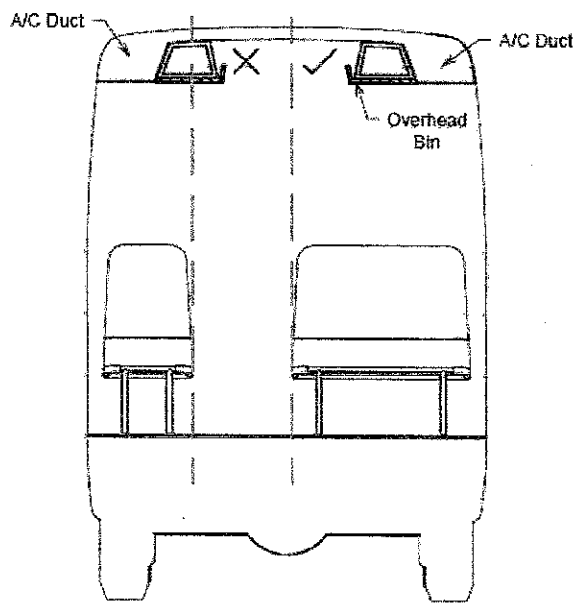


Figure 11. Baggage/Luggage compartment in the Overhead bin

ii. Under the Seat

The size limit for the baggage/luggage compartment shall be constructed taking into consideration the seat layout parameters specified in Table 4 and illustrated in Figure 12.

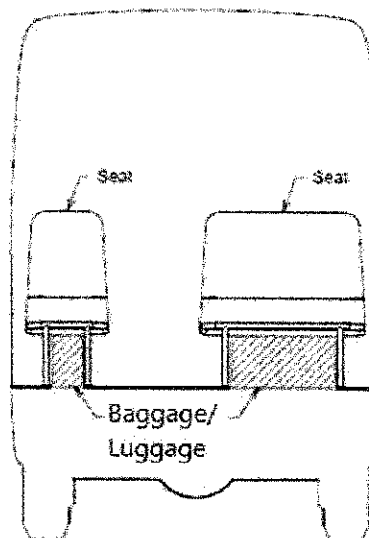
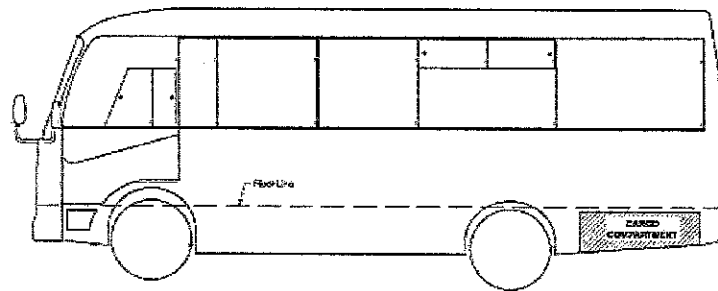


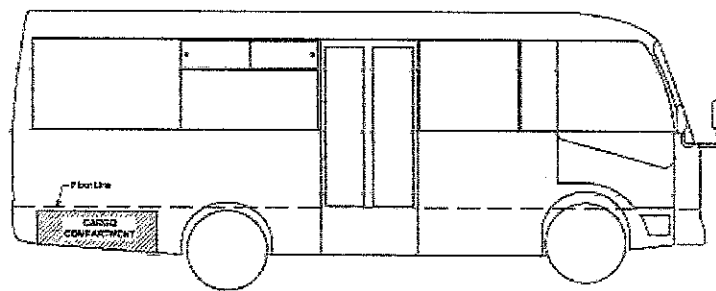
Figure 12. Baggage/Luggage compartment under the seat

iii. On the Lower Side Skirt

The size limit for the baggage/luggage compartment shall be constructed depending on the available space in the lower side skirt located on either side of the vehicle (see Figure 13).



Lower Side Skirt, Left-Hand Side



Lower Side Skirt, Right-Hand Side

Figure 13. Baggage/Luggage compartment on the lower side skirt (left-hand side and right-hand side)

iv. Rear Part of the Vehicle

The size limit for the baggage/luggage compartment shall be constructed depending on the available space after the rearmost seat of the vehicle.

The baggage/luggage compartment may be accessible from either inside or outside the vehicle.

1. Baggage/luggage compartment accessed from inside the vehicle

Occupants sitting on the rearmost row of seats directly delimiting the loading space should be protected by a partitioning system in order to improve the protection against unsecured load also above the backrests. Partitioning system must protect passengers seated anywhere in the vehicle.

The rearmost seat may be folded or detached to increase the baggage/luggage compartment space inside the vehicle.

2. Baggage/luggage compartments accessed from outside the vehicle

Baggage/luggage compartments may be accessible through a rear door (see Figure 14).

The provision of an additional door in the rear face of a vehicle principally for loading/unloading of goods or luggage, but may be used by passengers where circumstances so require.

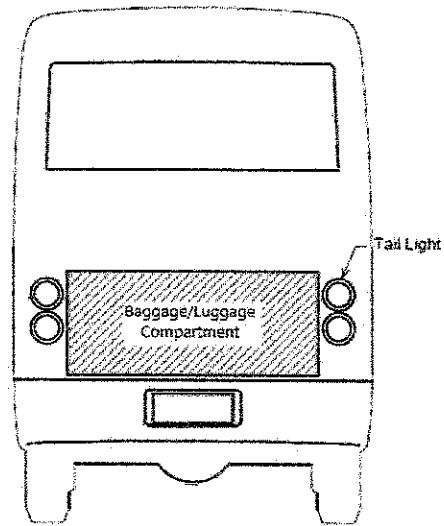


Figure 14. Baggage/Luggage compartment on the rear part of the vehicle

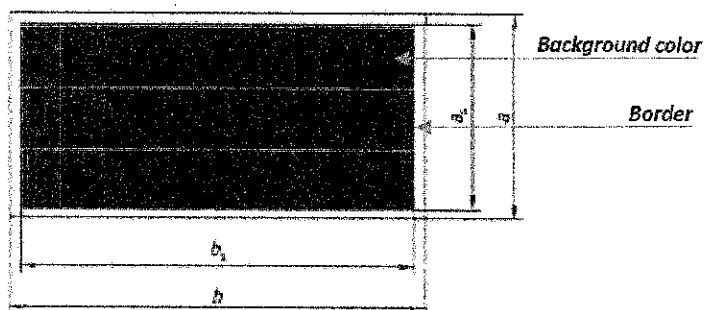
1. Signage

For Public Utility Vehicles with access for all passengers, especially persons with disabilities, passengers with reduced mobility, and pregnant women, signage shall refer to the requirements under sub-clause 5.5 of PNS 2144.

i. Emergency Exit

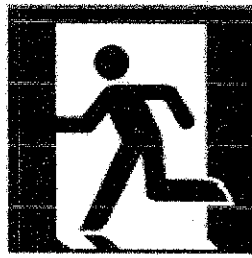
Each safety sign required by this Standard shall be used to communicate only one safety message. The information provided shall be in the form of pictograms; however, words, letters, and numbers may supplement the pictogram in combination on the same sign. It shall be located and orientated so as to be easily understood.

Supplementary information signs and symbols in the emergency door, emergency window, or escape hatch shall comply with the layout requirements given in Figure 15.



- Background color: green
- Symbol or text color: relevant contrast color
- Border: white
- Size (minimum): 10 cm x 20 cm ($a \times b$)
- Size without border: $a_s \times b_s$

The safety color green shall cover at least 50% of the area of the sign.



E001

Emergency exit
(left hand)



E002

Emergency exit
(right hand)

Figure 15. Emergency exit signs and symbols

Safety signs shall follow the principles shown in Figure 16, i.e., a header section depicting the safety message, a second section containing instructional information and a third, optional, footer section for non-critical text.

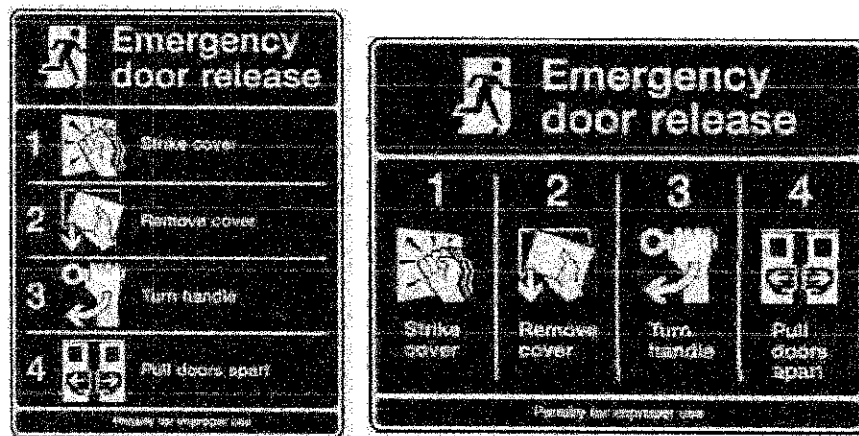


Figure 16. Sample safety signs

m. Marking of Vehicles

i. For Manufacturers

1. General

Supplementary information signs shall conform to the character height requirements under sub-clause 5.5.4.3 of PNS 2144.

Supplementary information signs for the marking of the vehicle shall be placed on/near the service door and shall comply with the layout requirements given in Figure 17.

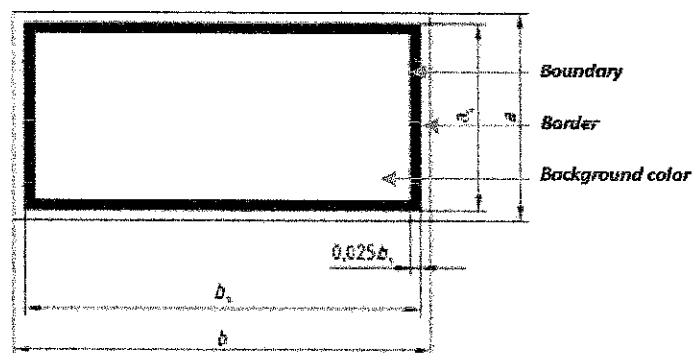


Figure 17. PUV Details signage

Background color: white
Symbol or text color: relevant contrast color
Boundary: black
Border: white
Size (minimum): 10 cm x 20 cm ($a \times b$)
Size without border: $a_s \times b_s$

2. PUV Details

The vehicle shall be clearly marked in letters or pictograms not less than 5.1 cm high with:

- a. The maximum number of seating places the vehicle is designed to carry;
- b. The maximum number of standing places, if any, the vehicle is designed to carry;
- c. The maximum number of wheelchairs which the vehicle is designed to carry, if any;
- d. The maximum gross vehicle weight.

ii. For Operators

Supplementary information signs for PUV operators shall conform to the previously released Memorandum Circulars:

- a. MC 2011-004 (particularly for outside markings) - 2011 Revised Terms and Conditions of CPC and Providing Penalties for Violations Thereof (*Terms and Conditions Nos. 38 and 41*).
 - b. MC 2015-025 (LTFRB 24/7 markings) - Amendment to Memorandum Circular No. 2005-006 and 2012-008 Regarding Required Markings for All Public Utility Vehicles.
 - c. MC 2019-055 – Amendment on the Current Markings for Public Utility Bus (PUB)/Minibus Service.
- n. Other Requirements for Public Utility Vehicles with Access for All Passengers Especially Persons with Disabilities, Passengers with Reduced Mobility, and Pregnant Women

The following requirements shall be considered in the construction of Public Utility Vehicle Minibus, which may be referred to in PNS 2144:

- Priority seats (sub-clause 5.2)
- Guides for the design of Wheelchair space (sub-clause 5.3)
- Safety accessories (sub-clause 5.4)
- Signage (sub-clause 5.5)
- (requirements for) Ramps, step board, and floor (sub-clause 5.6)
- Handrails and handholds (sub-clause 5.7)
- Audio Announcement System (sub-clause 5.8)
- Video Announcement System (sub-clause 5.9)

- Stop Request Signal (sub-clause 5.10)

All manufacturers and distributors of modernized units must comply with the specifications provided by the DTI-PNS, this Memorandum Circular, and the Omnibus Franchising Guidelines, notably Section 5.2.1, which requires the use of Environment-friendly units or that vehicles that use an electric drive and/or combustion engine that complies with Euro-IV or better emission standards as prescribed by the DENR; and are required to secure a Certification of Compliance from the DOTr.

III. OTHER VEHICLE REQUIREMENTS

Other vehicle requirements and/or features of PUVs under the OFG shall conform to the following minimum standards:

A. Global Navigation Satellite System (GNSS) Receiver

1. The GNSS receivers to be installed must conform to the specifications, data format, and operational requirements set by the Board in M.C. No. 2015-013. Device providers shall submit their devices to the Board to undergo the testing procedures pursuant to M.C. No. 2015-024.

B. WiFi

1. Provision of WiFi;
2. Free for all passengers;
3. The maximum user is based on the maximum seating capacity.

C. Closed Circuit Television (CCTV)

1. The CCTV must be continuously recording the past seventy-two (72) hours of operation; suitable to detect, monitor, recognize, and identify persons;
2. Four (4) CCTVs Installed in conspicuous part of the PUV and should cover all of its angles, including that of the door, the passengers, and driver.

D. Automatic Fare Collection System (AFCS)

1. PUJs, and UV Express Service are required to have installed integrated and interoperable AFCS. Transport operators may freely select from among the AFC providers available in the market and avail of their services through entering into Service Agreements. Such Service Agreements must specify that the AFC provider shall comply with the forthcoming National Standard and Business Rules within the two (2) year transition period.
2. To ensure that an integrated and interoperable system can be achieved in the medium term, the DOTr/LTFRB shall issue a national technical standard and specifications for the AFC industry ("National Standards"). The announcement of the National Standard will also specify a testing and certification process to ensure that all AFC devices and fare media are compliant with the National Standard.

E. Speed Limiter

1. The speed limiter must conform to the specifications and standards pursuant to Republic Act ("R.A.") No. 10916, otherwise known as, the "Road Speed Limiter Act of 2016".

F. Dashboard Camera

1. Must have recording for at least twenty-four (24) hours;
2. The camera must be in high definition and suitable to detect, monitor, recognize, and identify persons.

The features herein specified shall be incorporated in the operator's FLEET MANAGEMENT SYSTEM. A separate Circular shall be issued by the Board for the requirements for this system.

IV. EXCEPTIONS

Any exception to the specifications stated in the OFG, the PNS, as adopted, and this MC shall be granted expressly and in writing by the LTFRB through a formal unanimous resolution.

V. REPEALING CLAUSE

All other issuances inconsistent herewith are deemed modified or superseded accordingly.

VI. PENALTIES

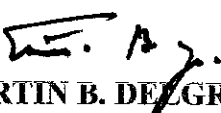
Modifications/alterations of specifications, upon inspection, after the issuance of the Certificate of Compliance, shall cause the revocation of the manufacturer and distributor Certificate of Compliance.

VII. EFFECTIVITY

This Memorandum Circular shall take effect immediately following its publication in at least one (1) newspaper of general circulation. Let three (3) copies hereof be filed with the UP Law Center pursuant to Presidential Memorandum Circular No. 11, dated 09 October 1992.

SO ORDERED.

Quezon City, Philippines, 06 APR 2022


ATTY. MARTIN B. DELGRA III, REB REA EnP
 Chairman




P/COL. JOEL C. PERNITO (Ret.)
 Board Member


ENGR. SHERWIN MYLLES S. BEGYAN
 Board Member

EFFECTIVITY
 DATE: 08 APR 2022

Attested by:


MARIA KRISTINA E. CASSION, MBA CESE
 Executive Director

IDF/lvd 03.10.22

ANNEX A
(informative)

Illustrations for the floor to ceiling height (h_{fc}) of low entry, low floor, and step entry minibus

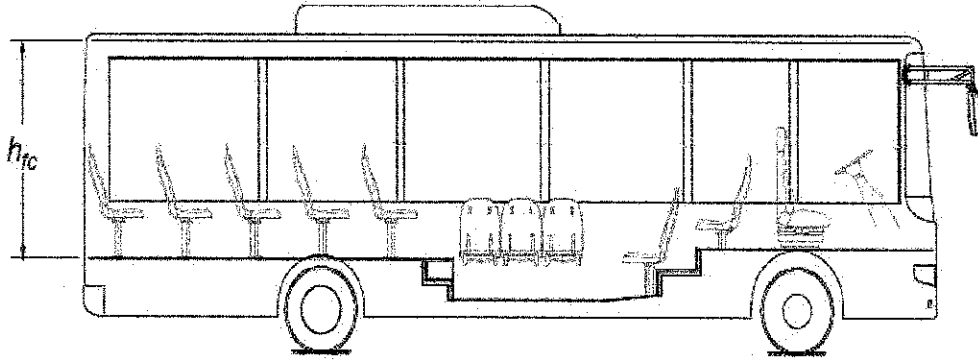


Figure A.1 – Floor to ceiling height of low entry minibus

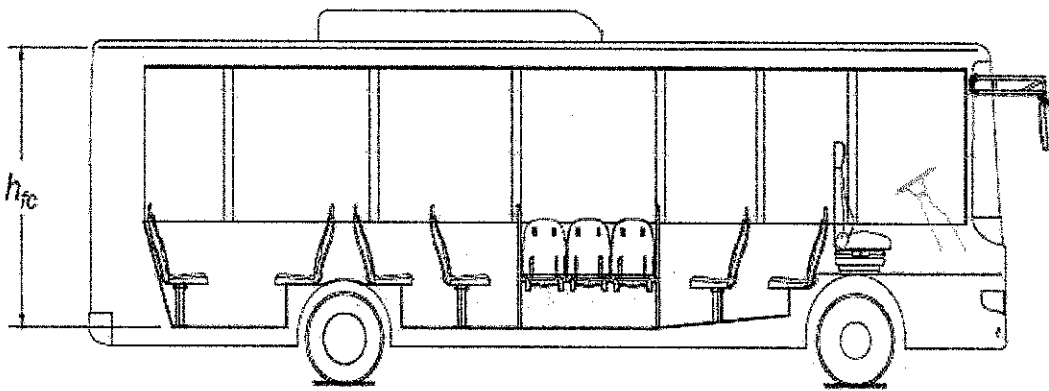


Figure A.2 – Floor to ceiling height of low floor minibus

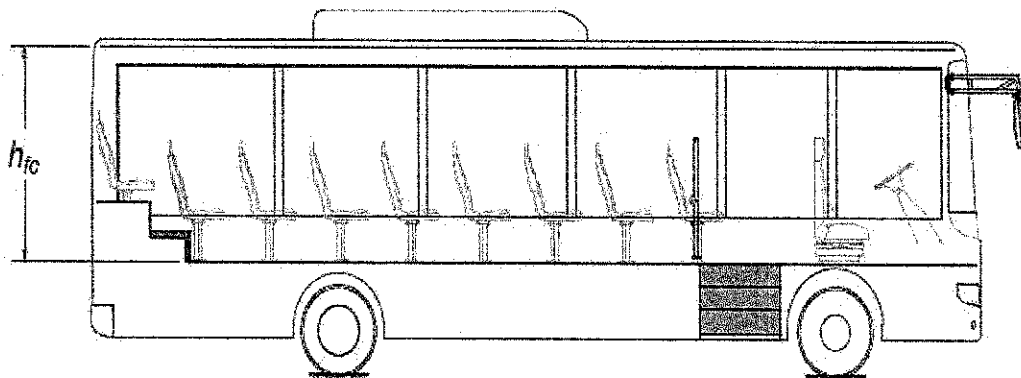
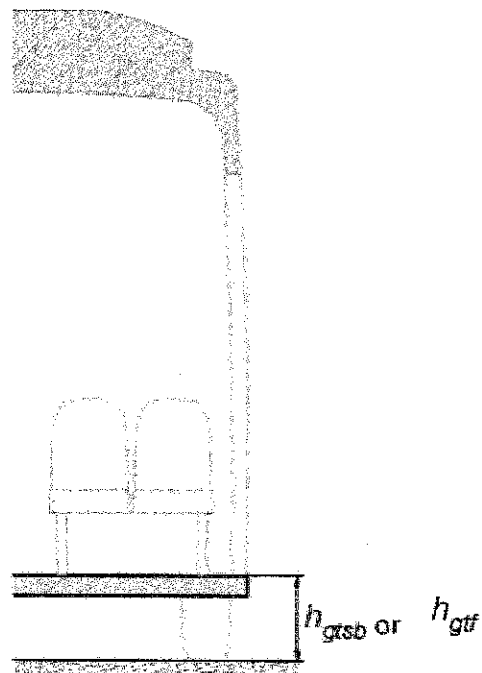


Figure A.3 – Floor to ceiling height of step entry minibus

ANNEX B
(informative)

Illustrations for the step board of low entry, low floor, and step entry minibus



**Figure B.1 – Step board of low entry minibus or
Ground-to-floor entry height (h_{gtf}) of low floor minibus**

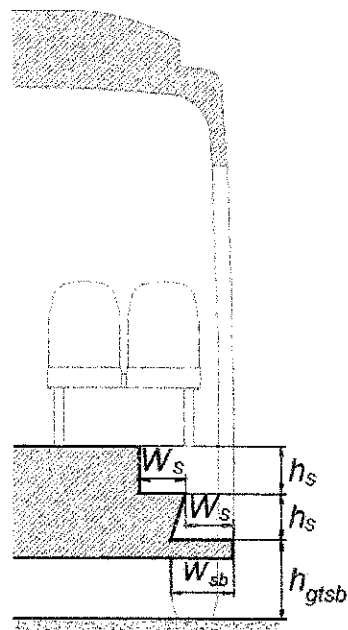


Figure B.2 – Step board of step entry minibus