Proposal for the 06 series of amendments to Regulation No. 107 (M₂ and M₃ vehicles)


The text reproduced below was adopted by the Working Party on General Safety Provisions (GRSG) at its 104th session (ECE/TRANS/WP.29/GRSG/83, para. 19). It is based on ECE/TRANS/WP.29/GRSG/2012/15 as reproduced in Annex IV to the report. It is submitted to the World Forum for Harmonization of Vehicle Regulations (WP.29) and to the Administrative Committee AC.1 for consideration.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, programme activity 02.4), the World Forum will develop, harmonize and update regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
Insert new paragraphs 2.41. to 2.43., to read:

"2.41. "Overnight locking system" means a system designed to provide the possibility to secure the service and emergency doors of the vehicle against opening. Systems that are intended to be operated by passengers from inside the vehicle shall not be regarded as overnight locking systems.

2.42. "Emergency lighting system" means a system that provides a minimum level of lighting necessary to enable occupants to safely egress from the vehicle, including the emergency exits.

2.43. "Safety sign" means a configuration of visual elements intended to convey a safety-related message."

Paragraph 4.2., amend to read:

"4.2. An approval number shall be assigned to each vehicle type-approved. Its first two digits (at present 06, corresponding to the 06 series of amendments) shall indicate the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party shall not assign the same number to another vehicle or bodywork type within the meaning of paragraph 2.2."

Paragraphs 10.1. to 10.15., shall be deleted.

Paragraphs 10.16. to 10.23. (former), renumber as paragraphs 10.1. to 10.8. and amend to read:

"10.1. As from the official date of entry into force of the 04 series of amendments, no Contracting Party applying this Regulation shall refuse to grant approval under this Regulation as amended by the 04 series of amendments.

10.2. As from 24 months after the date of entry into force of the 04 series of amendments, Contracting Parties applying this Regulation shall grant approvals only if the vehicle type to be approved meets the requirements of this Regulation as amended by of the 04 series of amendments.

10.3. As from 36 months after the entry into force of the 04 series of amendments, Contracting Parties applying this Regulation may refuse to grant national/regional approvals and first national registration (first entry into service) of a vehicle which does not meet the requirements of the 04 series of amendments to this Regulation.

10.4. Contracting Parties applying this Regulation shall not refuse to grant extensions of approval to the 03 series of amendments to this Regulation for vehicles which are not affected by the 04 series of amendments.

10.5. Notwithstanding paragraphs 10.2. and 10.3., approvals of vehicles granted to the 03 series of amendments to the Regulation, which are not affected by the 04 series of amendments, shall remain valid and Contracting Parties applying the Regulation shall continue to accept them.

10.6. As from the official date of entry into force of the 05 series of amendments, no Contracting Party applying this Regulation shall refuse to grant approval under this Regulation as amended by the 05 series of amendments.

10.7. As from 24 months after the date of entry into force of the 05 series of amendments, Contracting Parties applying this Regulation shall grant approvals only if the vehicle type to be approved meets the requirements of this Regulation as amended by the 05 series of amendments.

10.8. As from 36 months after the entry into force of the 05 series of amendments, Contracting Parties applying this Regulation may refuse to grant..."
national/regional approvals and first national registration (first entry into service) of a vehicle which does not meet the requirements of the 05 series of amendments to this Regulation.”

Insert new paragraphs 10.9. to 10.12., to read:

"10.9. As from the official date of entry into force of the 06 series of amendments, no Contracting Party applying this Regulation shall refuse to grant or refuse to accept type-approvals under this Regulation as amended by the 06 series of amendments.

10.10. As from 48 months after the date of entry into force of the 06 series of amendments, Contracting Parties applying this Regulation shall grant type-approvals only if the vehicle type to be approved meets the requirements of this Regulation as amended by the 06 series of amendments.

10.11. Contracting Parties applying this Regulation shall not refuse to grant extensions of type-approvals for existing types which have been issued according to the 05 series of amendments to this Regulation.

10.12. As from 60 months after the date of entry into force of the 06 series of amendments to this Regulation, Contracting Parties applying this Regulation shall not be obliged to accept, for the purpose of national or regional type-approval, a vehicle type-approved to the 05 series of amendments to this Regulation.”

Annex 2, amend to read:

"Arrangements of Approval Marks

Model A
(See paragraph 4.4. of this Regulation)

The above approval mark … under approval number 062439. The approval number … as amended by the 06 series of amendments.

Model B
(See paragraph 4.5. of this Regulation)

The above approval mark ….. Regulation No. 107 included the 06 series of amendments and Regulation No. 43 was in its original form.
Model C
(See paragraph 4.4.3. of this Regulation)

The above … pursuant to Regulation No. 107 under approval number 062439. The approval number indicates … as amended by the 06 series of amendments.”

Annex 3, paragraph 7.6.1.1., amend to read:

"7.6.1.1. The minimum number of doors in a vehicle shall be two, either two service doors or one service door and one emergency door. Every double-deck vehicle shall have two doors on the lower deck (see also paragraph 7.6.2.3.). The minimum number of service doors required is as follows:

<table>
<thead>
<tr>
<th>Number of passengers</th>
<th>Minimum number of service doors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Class I &amp; A</td>
</tr>
<tr>
<td>9 - 45</td>
<td>1</td>
</tr>
<tr>
<td>46 - 70</td>
<td>2</td>
</tr>
<tr>
<td>71 - 100 (2 in the case of a double-deck vehicle)</td>
<td>3</td>
</tr>
<tr>
<td>&gt; 100</td>
<td>4</td>
</tr>
</tbody>
</table>

Annex 3, paragraphs 7.6.1.3. and 7.6.1.4., amend to read:

"7.6.1.3. For the purpose of this requirement, service doors equipped with a power-operated control system shall not be deemed to be emergency doors unless they can be readily opened by hand, once the control prescribed in paragraph 7.6.5.1. has been actuated, if necessary.

7.6.1.4. The minimum number of emergency exits shall be such that the total number of exits in a separate compartment is as follows:

<table>
<thead>
<tr>
<th>Number of passengers and crew to be accommodated in each compartment or deck</th>
<th>Minimum total number of exits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 8</td>
<td>2</td>
</tr>
<tr>
<td>9 - 16</td>
<td>3</td>
</tr>
<tr>
<td>17 - 30</td>
<td>4</td>
</tr>
<tr>
<td>31 - 45</td>
<td>5</td>
</tr>
<tr>
<td>46 - 60</td>
<td>6</td>
</tr>
<tr>
<td>61 - 75</td>
<td>7</td>
</tr>
<tr>
<td>76 - 90</td>
<td>8</td>
</tr>
<tr>
<td>91 - 110</td>
<td>9</td>
</tr>
<tr>
<td>111 - 130</td>
<td>10</td>
</tr>
<tr>
<td>&gt;130</td>
<td>11</td>
</tr>
</tbody>
</table>
The number of exits for each separate deck (in the case of a double-deck vehicle) and each separate compartment must be determined separately. Toilet compartments or galleys are not considered to be separate compartments for the purposes of defining the number of emergency exits. Escape hatches can only count as one of the above-mentioned number of emergency exits. 

Annex 3, paragraphs 7.6.1.7. to 7.6.1.7.3., amend to read:

"7.6.1.7. If the driver's compartment does not provide access to a passenger compartment by means of a passageway that permits:

(a) The front edge of the cylindrical gauge referred to in Annex 4, figure 6 to reach at least the transverse vertical plane tangential to the foremost point of the driver's seat back in its rearmost longitudinal position, and

(b) From this plane, to move the panel shown in Annex 4, figure 7 forwards from the contact position, with the cylindrical gauge until it reaches at least the vertical plane tangential to the foremost point of the driver's seat cushion,

then the requirements of the following paragraphs 7.6.1.7.1. to 7.6.1.7.5. shall be met:

7.6.1.7.1. The driver's compartment shall have two exits, which shall not both be in the same lateral wall. When one of the exits is a window, this window shall have a minimum area of 400,000 mm², it shall be possible to inscribe in this area a rectangle measuring 500 mm x 700 mm and it shall comply with the requirements set out in paragraph 7.6.8. for emergency windows.

7.6.1.7.2. One or two seats are permitted alongside the driver for additional people, in which case both of the exits referred to in paragraph 7.6.1.7.1. shall be doors. The driver's door shall be accepted as the emergency door for the occupants of those seats, provided that it is possible to move a test gauge from the occupants' seats to the exterior of the vehicle through the driver's door (see Annex 4, figure 27).

Verification of the access to the driver's door shall be subject to the requirements of paragraph 7.7.3.2., by using the test gauge having a dimension of 600 x 400 mm, as described in paragraph 7.7.3.3.

The service door shall be in the side of the vehicle opposite to that containing the driver's door and shall be accepted as the emergency door for the driver.

7.6.1.7.3. Paragraphs 7.6.3. to 7.6.7., 7.7.1., 7.7.2. and 7.7.7. shall not apply to the exits provided for the driver's compartment as referred to in paragraphs 7.6.1.7.1. and 7.6.1.7.2."

Annex 3, insert new paragraphs 7.6.1.7.4. and 7.6.1.7.5., to read:

"7.6.1.7.4. In the circumstances described in paragraphs 7.6.1.7.1. and 7.6.1.7.2., the exits provided in the driver's compartment, and for the occupants of any seats alongside the driver shall not count as one of the doors required by paragraphs 7.6.1.1. to 7.6.1.2., nor as one of the emergency exits required by paragraph 7.6.1.4. for any other passenger compartment.

7.6.1.7.5. Up to five additional seats may be fitted in a compartment incorporating the driver's compartment and any seats alongside the driver, provided that the additional seats and the space for these seats comply with all requirements of this Regulation and at least one of the emergency exits required by paragraph
7.6.1.4. is a door giving access to the passenger compartment complying with the requirements of paragraph 7.6.3.1.2. for emergency doors.”

Annex 3, paragraphs 7.6.1.8. to 7.6.1.9.3., amend to read:

“7.6.1.8. If the driver's compartment is accessible from a passenger compartment by means of a passageway complying with the requirements of parts (a) and (b) of paragraph 7.6.1.7., and any seats adjacent to this driver's compartment, are accessible from that same passenger compartment by means of a passageway complying with one of the conditions described in paragraph 7.7.5.1.1., no external exit is required from the driver's compartment.

7.6.1.9. If, under the circumstances described in paragraph 7.6.1.8., a driver's door is provided in vehicles of classes A or B it may count as an emergency door for passengers provided:

7.6.1.9.1. the driver's door satisfies the requirements relating to the dimensions of emergency door indicated in paragraph 7.6.3.1.2.;

7.6.1.9.2. the driver's door fulfils the requirements of paragraph 7.6.1.7.2.;

7.6.1.9.3. the space reserved for the driver's seat shall communicate with the main passengers' compartment through an appropriate passage; such requirement shall be deemed to be fulfilled if the test gauge described in paragraph 7.7.5.1. is able to be moved unobstructed from the gangway, until the front end of the gauge reaches the vertical plane tangential to the foremost point of the driver's seat back (this seat being situated in its rearmost longitudinal position) and, from this plane, the test gauge described in paragraph 7.7.3.3. is able to be moved to the emergency door in the direction established by such paragraph (see Annex 4, Figure 28) with seat and steering wheel adjustment in their mid-position.”

Annex 3, paragraphs 7.6.1.11. and 7.6.1.12., amend to read:

“7.6.1.11. Vehicles of Class II, III and B shall be fitted with escape hatches, additional to the emergency doors and windows. In the case of double-deck vehicles, these hatches shall be fitted in the upper deck roof only. The minimum number of hatches shall be:

<table>
<thead>
<tr>
<th>Number of passengers (in the upper deck in the case of double-deck vehicles)</th>
<th>Minimum number of hatches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not exceeding 30</td>
<td>1</td>
</tr>
<tr>
<td>Exceeding 30</td>
<td>2</td>
</tr>
</tbody>
</table>

Except as provided in paragraph 7.6.1.12., hatches may also be fitted in the case of Class I and A vehicles. There shall not be any escape hatches fitted in the roof of a trolleybus.

7.6.1.12. Hatches shall not be fitted in positions where technical components are installed which present possible danger to passengers using the escape hatches (e.g. high voltage systems, systems containing dangerous liquids and/or gas, etc.).”

Annex 3, paragraph 7.6.1.14., amend to read:

“7.6.1.14. All persons accommodated in the lower deck of a double-deck vehicle shall, in an emergency situation, have access to the exterior of the vehicle without having to enter the upper deck.”
Annex 3, paragraphs 7.6.1.15.1. and 7.6.1.15.2., amend to read:

"7.6.1.15.1. At least one and one-half staircases shall be provided in the case of vehicles of Class I if more than 50 passengers are carried on the upper deck;

7.6.1.15.2. At least one and one-half staircases shall be provided in the case of vehicles of Class II and Class III if more than 30 passengers are carried on the upper deck."

Annex 3, insert new paragraphs 7.6.1.17. to 7.6.1.17.2., to read:

"7.6.1.17. In the case of vehicles of classes A or B, if there is a door opposite the driver's door it may count as one of the required exits for passengers provided:

7.6.1.17.1. There is not more than one passenger's seat beside the driver's compartment, and

7.6.1.17.2. It complies with the provisions of paragraph 7.6.1.9."

Annex 3, paragraph 7.6.2., amend to read (inserting a new paragraph number 7.6.2.1.):

"7.6.2. Positioning of exits

7.6.2.1. Vehicles of Classes I, II and III shall meet the requirements shown below."

Annex 3, paragraphs 7.6.2.1. to 7.6.2.1.3. (former), renumber as paragraphs 7.6.2.1.1. to 7.6.2.1.1.3. and amend to read:

"7.6.2.1.1. The service door(s) shall be situated on the side of the vehicle that is nearer to the side of the road corresponding to the direction of traffic for which the vehicle is designed and as declared by the manufacturer in the communication form of Annex 1, Part I, Appendix 1, paragraph 2.8. of this Regulation. At least one of them shall be in the forward half of the vehicle. This shall not preclude:

7.6.2.1.1.1. The provision of a specially designed door in the rear or side faces of a vehicle for use in place of a service door by wheelchair passengers, or

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

7.6.2.1.1.3. The provision of one or more additional service door(s) on the opposite side of the vehicle in the case of vehicles designed for use in circumstances which require boarding / alighting of passengers on both sides of the vehicle. Vehicles so equipped shall be provided with control(s) that allow the driver to inhibit normal operation of the doors that are not currently in use."

Annex 3, paragraph 7.6.2.1.4., shall be deleted.

Annex 3, insert new paragraphs 7.6.2.2. to 7.6.2.2.3., to read:

"7.6.2.2. Vehicles of Classes A and B shall meet the following requirements:

7.6.2.2.1. The service door(s) shall be situated on the side of the vehicle that is nearer to the side of the road corresponding to the direction of the traffic for which the vehicle is designed and as declared by the manufacturer in the communication form of Annex 1, Part I, Appendix 1, paragraph 2.8. of this Regulation.

7.6.2.2.2. The exits shall be placed in such a way that there is at least one exit on each side of the vehicle.

7.6.2.2.3. The forward half and the rearward half of the passenger compartment shall each contain at least one exit."
Annex 3, paragraphs 7.6.2.2. to 7.6.2.3. (former), renumber as paragraphs 7.6.2.3. to 7.6.2.4.

Annex 3, paragraphs 7.6.2.4. to 7.6.2.7. (former), renumber as paragraphs 7.6.2.5. to 7.6.2.8. and amend to read:

"7.6.2.5. At least one exit shall be situated either in the rear face or in the front face of the vehicle:

7.6.2.5.1. In the case of Class I and A vehicles, the requirements of paragraph 7.6.2.5. above are fulfilled if an escape hatch is fitted; or, if paragraph 7.6.1.12. applies, an additional exit to those specified in paragraph 7.6.1., is fitted on each side of the vehicle.

7.6.2.5.2. In the case of double-deck vehicles, the requirements of paragraph 7.6.2.5. above shall apply only to the upper deck.

7.6.2.6. The exits on the same side of the vehicle shall be suitably separated along the length of the passenger compartment.

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

7.6.2.8. Required escape hatches shall be positioned as follows:

(a) If there is only one hatch, it shall be situated in the middle third of the passenger compartment; or

(b) If there are two hatches, they shall be separated by a distance of at least 2 m measured between the nearest edges of the apertures in a line parallel to the longitudinal axis of the vehicle."

Annex 3, paragraphs 7.6.3.1.1. to 7.6.3.1.3., amend to read:

"7.6.3.1.1. Service doors shall have an aperture creating an access in accordance with the requirements shown in paragraph 7.7.1. of this Annex.

7.6.3.1.2. Emergency doors shall have an aperture with a minimum height of 1,450 mm and a minimum width of 600 mm.

7.6.3.1.3. Emergency windows shall have a minimum area of 400,000 mm². It shall be possible to inscribe in this area a rectangle measuring 500 mm x 700 mm."

Annex 3, paragraph 7.6.3.1.5., amend to read:

"7.6.3.1.5. Escape hatches shall have an aperture with a minimum area of 450,000 mm². It shall be possible to inscribe in this area a rectangle measuring 600 mm x 700 mm."

Annex 3, insert new paragraphs 7.6.4.11. to 7.6.4.11.2., to read:

"7.6.4.11. If an overnight locking system is provided, the following shall apply:

7.6.4.11.1. The locking system shall have been automatically deactivated when the ignition is in the "ON" position, or

7.6.4.11.2. A warning shall be provided to the driver indicating that the overnight locking system remains in operation at one or more door(s) when the ignition is in the "ON" position. One signal may be used for more than one door."

Annex 3, paragraph 7.6.7.2., amend to read:

"7.6.7.2. Emergency doors, during their use as such, shall not be of the power-operated type unless, once either a service door control prescribed in paragraph 7.6.5.1., or a control for a dedicated emergency door complying with the provisions of paragraph 7.6.5.1. has been actuated and returned to its normal
position, the doors do not close again until the driver subsequently operates a closing control. Activation of one of the controls …”

Annex 3, insert new paragraphs 7.6.7.7. to 7.6.7.7.2., to read:

"7.6.7.7. If an overnight locking system is provided, the following shall apply:
7.6.7.7.1. The locking system shall have been automatically deactivated when the ignition is in the "ON" position, or
7.6.7.7.2. A warning shall be provided to the driver indicating that the overnight locking system remains in operation at one or more door(s) when the ignition is in the "ON" position. One signal may be used for more than one door."

Annex 3, paragraphs 7.6.11. to 7.6.11.4., should be replaced by new paragraphs 7.6.11. to 7.6.11.8. to read:

"7.6.11. Safety signs
7.6.11.1. All safety signs shall comply with requirements contained in paragraph 6.5. of ISO standard 3864-1:2011.
7.6.11.2. Each safety sign required by this Regulation 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.
7.6.11.2.1. Safety signs shall follow the principles shown in the example layouts below, 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.
7.6.11.2.2. Pictograms indicating required actions by the user shall show a person, or the relevant part of a person, operating the equipment or device.

7.6.11.2.3. Pictograms indicating a required movement shall, where appropriate, show an arrow pointing in the direction of motion. Where a rotational movement is required, a curved arrow shall be used.

7.6.11.2.4. Where devices are to be operated, panels removed or doors opened, the pictogram shall indicate the action in progress.

7.6.11.2.5. The lower case letter(s) of supplementary words, single letters and numbers shall have a minimum height of 8 mm. Words shall not be in upper case letters only.

7.6.11.3. All safety signs that are visible from the inside of the vehicle shall be of photo-luminescent material having luminance decay characteristics conforming, as a minimum, to sub-classification C in Table 2 of ISO Standard 17398:2004, when measured in accordance with paragraph 7.11. of that standard.

7.6.11.4. Safety signs shall not be located in positions where they may be obscured during operation of the vehicle. However, a curtain or blind may be positioned over an emergency window provided an additional safety sign indicates that the emergency window is located behind the curtain or blind.

7.6.11.5. Each emergency exit, and any other exit that meets the prescriptions for an emergency exit, shall be marked by one of the relevant pictograms described in Table 3 of ISO Standard 7010:2011; pictograms shall be legible from both the inside and the outside of the vehicle.

7.6.11.6. Safety signs shall be positioned adjacent to, or surround, or be on, all internal and external emergency controls and device(s) for breaking emergency window(s).

7.6.11.7. No part of a safety sign shall obscure any misuse protection that may be present, e.g. a cover.

7.6.11.8. The language in which any textual safety sign intended to comply with paragraphs 7.6.11.1. to 7.6.11.7. are to be inscribed shall be determined by the approving authority bearing in mind the country / countries in which the applicant intends to market the vehicle in liaison if necessary with the competent authorities of the country / countries concerned. If the authority of the country / countries where the vehicle is to be registered has the language changed, this change shall imply no new type approval process."
Annex 3, paragraph 7.7.3.2., amend to read:

"7.7.3.2. The direction of motion of the test gauge shall be in the direction in which a passenger evacuating the vehicle would be expected to move. The test gauge shall be kept perpendicular to that direction of motion and shall not meet any obstacle."

Annex 3, paragraph 7.8.3., amend to read (inserting new paragraphs 7.8.3.1. to 7.8.3.10.):

"7.8.3. Vehicles of Classes II, III and B shall be equipped with an emergency lighting system:

7.8.3.1. It shall be possible for the driver to activate the emergency lighting system from the driver’s seating position.

7.8.3.2. The operation of the emergency control of any service or emergency door shall activate the emergency lighting system.

7.8.3.3. The emergency lighting system, once activated, shall remain active for at least 30 minutes unless de-activated by the driver.

7.8.3.4. The power supply for the emergency lighting shall be suitably located within the vehicle to minimise the risk of its continued operation being prejudiced as the result of an accident.

7.8.3.5. All units providing the emergency lighting shall produce a white light.

7.8.3.6. The uniformity of illuminance of the lighting shall be assessed in accordance with the following measures:

\[
\text{Maximum uniformity of illuminance} = \frac{\text{Maximum lighting level recorded}}{\text{Average lighting level recorded}}
\]

\[
\text{Minimum uniformity of illuminance} = \frac{\text{Minimum lighting level recorded}}{\text{Average lighting level recorded}}
\]

7.8.3.7. The emergency lighting system shall provide a minimum illuminance of 10 lux directly under each light unit in the passenger compartment at a height of 750 mm above the centreline of all access passages and gangways.

7.8.3.8. The uniformity of the illuminance over the length of the passenger compartment at a height of 750 mm above all access passages and gangways shall be between 0.15 and 2.

7.8.3.9. The emergency lighting system shall provide a minimum illuminance of 1 lux at floor level in the centreline of all access passages and gangways and at the centre of any step, at step level.

7.8.3.10. Conformity with the uniformity requirements shall be demonstrated over a period of at least 30 minutes from initiation of the emergency lighting by measurements taken at distances not exceeding 2 metres."

Annex 4, Figure 20, amend the title to read:

"Testing device for positioning of handholds"

Annex 4, Figure 26, amend to read:

"Reserved"
Annex 7, paragraph 1.1., amend to read:

"1.1. Minimum dimensions for exits

The several kinds of exits shall have the following minimum dimensions:

<table>
<thead>
<tr>
<th>Aperture</th>
<th>Minimum dimensions</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Door</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Entry height:</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A 1,650 mm</td>
<td></td>
<td>The service door entry height shall be measured as the vertical distance measured on a vertical plane of the horizontal projections of the mid-point of the door aperture and the top surface of the lowest step.</td>
</tr>
<tr>
<td>B 1,500 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aperture Height</td>
<td></td>
<td>The vertical height of the service door aperture shall be such as to permit the free passage of the dual panel referred to in paragraph 7.7.1.1. of Annex 3. The upper corners may be reduced with round-offs, with a radius of not more than 150 mm.</td>
</tr>
<tr>
<td>Width:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single door:</td>
<td>650 mm</td>
<td>For Class B vehicles where the service door aperture height lies between 1,400 mm and 1,500 mm a minimum single door aperture width of 750 mm shall apply. For all the vehicles the width of any service door may be reduced by 100 mm when the measurement is made at the level of the handholds and by 250 mm in cases where intruding wheel arches or the actuating mechanism for automatic or remote-control doors or the rake of the windscreen so require.</td>
</tr>
<tr>
<td>Double door:</td>
<td>1,200 mm</td>
<td></td>
</tr>
<tr>
<td>Emergency door</td>
<td>Height: 1,250 mm</td>
<td>The width may be reduced to 300 mm in cases where intruding wheel arches so require, providing that the width of 550 mm is respected at the minimum height of 400 mm above the lowest part of the door aperture. The upper corners may be reduced with round-offs, with a radius of not more than 150 mm.</td>
</tr>
<tr>
<td></td>
<td>Width: 550 mm</td>
<td></td>
</tr>
<tr>
<td>Emergency Window</td>
<td>Aperture area: 400,000 mm²</td>
<td>It shall be possible to inscribe in this area a rectangle of 500 mm x 700 mm.</td>
</tr>
<tr>
<td>Escape hatch</td>
<td>Aperture area: 450,000 mm²</td>
<td>It shall be possible to inscribe in this area a rectangle of 600 mm x 700 mm.</td>
</tr>
</tbody>
</table>

Annex 7, paragraphs 1.2. to 1.2.4., shall be deleted.