

Correct as at 30th April 2026. It may be superseded at any time.

Extract taken from: In-service certification (WoF and CoF) > Heavy PSVs > Vehicle structure

3 Vehicle structure

3-1 Structure

Reasons for rejection

Mandatory equipment

1. An open-bodied vehicle that entered service as a PSV in New Zealand on or after 1 January 2001:
 - a) has side walls that are less than 450mm above the highest point of the uncompressed seat cushion on the open-bodied part of the vehicle, or
 - b) does not have a permanent framework in addition to the side walls to provide reasonable protection for the occupants in the case of the vehicle rolling over, or
 - c) on any upper deck does not have drains to prevent water from collecting on it or draining into the body of the vehicle.
2. On a heavy open-bodied vehicle that entered service as a PSV in New Zealand on or after 1 July 2001:
 - a) a front screen to extend above the upper floor level:
 - i. is missing, or
 - ii. does not extend to at least 1m above the highest point of the uncompressed seat cushion, or
 - iii. does not extend to at least 1.95m above the upper floor level, or
 - b) a railing, or another structure, to extend above the side walls:
 - i. has a railing above the side walls through which a sphere of 125mm diameter can be passed, or
 - ii. has a railing that does not extend above the side walls to a height of at least 610mm above the highest point of the uncompressed seat cushion.

Condition

3. Refer to [heavy vehicle pages](#).
4. The structural strength of a PSV has been reduced so that it does not provide reasonable protection for the occupants in the event of roof or wall deformation resulting from the vehicle rolling over, eg:
 - a) structural parts of the superstructure have been removed or substituted with parts that are of insufficient strength or not fit for purpose.
5. A body-to-chassis attachment, such as a weld, or fastener is:
 - a) missing, or

- b) loose, or
- c) cracked, or
- d) broken, or
- e) significantly corroded, or
- f) otherwise in poor condition.

Modification

6. Refer to [heavy vehicle pages](#).

Summary of legislation

Applicable legislation

- [Land Transport Rule: Passenger Service Vehicles 1999](#).

Mandatory equipment

1. An open-bodied vehicle that entered service as a PSV in New Zealand on or after 1 January 2001 must:
 - a) on the open-bodied part of the vehicle have side walls that extend at least 450mm above the highest point of the uncompressed seat cushion, and
 - b) have a permanent framework to provide reasonable protection for the occupants in the case of the vehicle rolling over, and
 - c) on any upper deck have drains to prevent water from collecting on it or draining into the body of the vehicle.
2. A heavy open-bodied vehicle that entered service as a PSV in New Zealand on or after 1 July 2001 must have:
 - a) a front screen that extends at least 1m above the highest uncompressed seat cushion, and at least 1.95 m above the upper floor level, and
 - b) a railing, or another structure through which a sphere of 125mm diameter cannot be passed, that extends above the side walls to a height of 610mm above the highest point of the uncompressed seat cushion.

Condition

3. Refer to [heavy vehicle pages](#).
4. The structural strength must be maintained throughout the service life of the PSV.
5. The superstructure must be of robust design, and made of materials fit for the purpose.
6. The body of a PSV must be fit for its purpose and securely fixed to the chassis.
7. The structural strength of a PSV must be sufficient to provide reasonable protection for the occupants in the event of roof or wall deformation resulting from the vehicle rolling over.

Modification and repair

8. Refer to [heavy vehicle pages](#).

3-2 Stability

Reasons for rejection

Modification and repair

1. A modification or repair since 1 July 2000 affects the vehicle stability and:
 - a) is not excluded from the requirements for HVS certification (Table 3-2-1), or
 - b) the modification is not for the purpose of law enforcement or the provision of emergency services, or
 - c) is missing proof of HVS certification, ie:
 - i. the vehicle was modified or repaired before the last CoF inspection and no LANDATA record has been entered, or
 - ii. the vehicle was modified or repaired since the last CoF inspection and no valid LT400 form from an HVS certifier has been presented.

Table 3-2-1. Requirements for HVS certification

HVS certification is required	HVS certification is not required
<ol style="list-style-type: none">1. Fitting of components to the roof, eg a roof rack or an air conditioning unit.2. Changes in floor height or geometry, eg due to changes to suspension, wheel or tyre size.	<ol style="list-style-type: none">1. Any repair or modification not listed in the left-hand column unless the vehicle inspector considers that certification is required because the modification or repair has affected the vehicle's safety performance (a second opinion from an expert may be needed).

Summary of legislation

Applicable legislation

- [Land Transport Rule: Passenger Service Vehicles 1999](#)
- [Land Transport Rule: Vehicle Standards Compliance 2002.](#)

Modification and repair

1. A modification or repair, on or after 1 July 2000, that affects the stability of a heavy PSV must be inspected and certified by an HVS certifier, unless the vehicle:
 - a) is excluded from the requirements for HVS certification (Table 3-2-1), and

b) has been inspected in accordance with the requirements in this manual, including those for equipment, condition and performance.

Page amended **1 April 2023** (see [amendment details](#)).

3-3 Heavy PSV roof racks

Reasons for rejection

Mandatory requirement

1. A roof rack does not have a sign or plate on the left-hand side.
2. A roof rack sign or plate does not state:
 - a) the purpose of the roof rack, if other than for general baggage, or
 - b) the maximum weight it is allowed to carry, or
 - c) the manufacturer of the roof rack, or
 - d) at least one of the following:
 - i. the make, model and registration number of the PSV to which it is fitted
 - ii. vehicle identification number or chassis number of the PSV to which it is fitted
 - iii. if rated and certified **either by the vehicle manufacturer or by a heavy vehicle specialist certifier** for a vehicle model, the approval for that vehicle model.

Condition

3. The roof rack sign or plate is:
 - a) not securely fitted, or
 - b) not legible.
4. A roof rack that is fitted to a heavy PSV:
 - a) is not fitted as appropriate for that particular vehicle make and model, or
 - b) is not fitted securely, eg fastenings are missing, broken or loose, or
 - c) shows signs of significant deterioration that affects its ability to hold or retain the rated load.

Modification and repair

5. A modification or repair affects the roof rack, or a roof rack has been fitted, and:
 - a) is not excluded from the requirements for HVS certification (Table 3-3-1), or
 - b) the modification is not for the purpose of law enforcement or the provision of emergency services, or
 - c) is missing proof of HVS certification **(other than one rated and certified by the vehicle manufacturer)**, ie:
 - i. the vehicle was modified or repaired before the last CoF inspection and no LANDATA record has been entered, or

- ii. the vehicle was modified or repaired since the last CoF inspection and no valid LT400 form from a HVS certifier of category HVEC or HMCD has been presented.

Table 3-3-1. Requirements for HVS certification

HVS certification is required	HVS certification is not required
Fitting a roof rack (other than one rated and certified by the vehicle manufacturer)	Any repair or modification not listed in the left-hand column unless the vehicle inspector considers that certification is required because the modification or repair has affected the vehicle's safety performance (a second opinion from an expert may be needed, eg the manufacturer's representative or a reputable workshop).

Summary of legislation

Applicable legislation

- [Land Transport Rule: Passenger Service Vehicles 1999](#)
- [Land Transport Rule: Vehicle Standards Compliance 2002.](#)

Mandatory requirement

1. A roof rack that is fitted to a heavy PSV must have a sign or plate on the left-hand side stating:
 - a) the purpose of the roof rack, if other than for general baggage, and
 - b) the maximum weight it is allowed to carry, and
 - c) the manufacturer of the roof rack, and
 - d) either:
 - i. the make, model and registration number of the PSV to which it is fitted, or
 - ii. vehicle identification number or chassis number of the PSV to which it is fitted, or
 - iii. if rated and certified by the vehicle manufacturer or a category HVEC or HMCD heavy vehicle specialist certifier for a vehicle model, the approval for that vehicle model.

Condition

2. A roof rack fitted to a heavy PSV must:

- a) be fitted and rated as appropriate for that particular make and model of PSV, or
- b) be rated and certified by a category HVEC or HMCD heavy vehicle specialist certifier and fitted in accordance with their instructions.

3. A roof rack that is fitted to a heavy PSV must be fitted in accordance with instructions by a category HVEC or HMCD heavy vehicle specialist certifier.

Modification

4. A modification that affects the roof rack of a heavy PSV, including the fitting of a roof rack, must be inspected and certified by an HVS certifier, unless the vehicle:

- a) is excluded from the requirements for HVS specialist certification (Table 3-3-1), and
- b) has been inspected in accordance with the requirements in this manual, including those for equipment, condition and performance.

Page amended **1 April 2023** (see [amendment details](#))