

Correct as at 26th May 2026. It may be superseded at any time.

Extract taken from: Entry certification > Inspection and certification > Vehicle structure > Stability (Heavy PSV)

3-5 Stability (Heavy PSV)

Reasons for rejection

Mandatory requirements

1. A heavy PSV does not demonstrate static tilt stability as required in Table 3-5-1

Modification and repair

2. A vehicle does not comply with a requirement relating to modification and repair set out in the [VIRM: In-service certification, section 3-2](#).

Note 1

See [Technical Bulletin 32](#) for vehicle makes and models that can be accepted as meeting this requirement. All other documentation must be referred to the NZTA for approval.

To be considered for approval by the NZTA, documentation must be model / sub-model specific and be able to support the validity of the statement in accordance with any of the following, as appropriate:

- a summary of evidence or a certificate from independent tests carried out in accordance with the requirements of the approved vehicle standards
- a type approval issued by a relevant authorised certification organisation in accordance with the approved vehicle standards
- documents in relation to arrangements for ensuring conformity of production in accordance with the requirements of the approved vehicle standards
- documents confirming that a deviation of the vehicle or specific aspect of the vehicle from the original source design, resulting from changes to components or manufacturing methods, does not have an adverse effect on compliance with the approved vehicle standards
- any other requirements specified by the Transport Agency.

If documentation isn't available or is insufficient, an HVEC must be engaged by the manufacturer to demonstrate compliance.

Table 3-5-1. Static tilt stability requirements for a heavy PSV

Floor height	Sideways tilt	Demonstration of compliance
Less than 2m above ground	35 degrees	<ul style="list-style-type: none">• Written documentation from the vehicle manufacturer (Note 1), or• calculations, if the centre of gravity can be proven within 50mm, certified by an HVS certifier category HVEC, or• practical testing certified by an HVS certifier category HVEC.
2m or more above ground	28 degrees	

Summary of legislation

Applicable legislation

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

Mandatory requirements

1. A motor vehicle which entered service as a PSV on or after 1 July 2000 must be stable under the following conditions of static tilt:

a) a vehicle with a floor not more than 2m above the ground, and loaded with weights representing the occupants' mass in all seating positions must be stable on a surface which is subject to a sideways tilt of 35 degrees, as demonstrated by one of the following methods:

- i. written documentation from the vehicle manufacturer, or
- ii. type approval, or
- iii. calculations, if the centre of gravity can be proven within 50mm, or
- iv. practical testing certified by a HVS certifier.

b) a vehicle with a floor 2m or more above the ground, and loaded with weights representing the occupants' mass in all seating positions for a single-decked vehicle and in the upper deck only of a double-decked vehicle must be stable on a surface which is subject to a sideways tilt of 28 degrees, as demonstrated by one of the following methods:

- i. written documentation from the vehicle manufacturer, or
- ii. type approval, or
- iii. calculations, if the centre of gravity can be proven within 50mm, or
- iv. practical testing certified by a HVS certifier.

2) A statement of compliance may be issued for a vehicle or for a specific aspect of a vehicle only if the manufacturer or manufacturer's representative, or a relevant component manufacturer or component manufacturer's representative, is able to support the validity of the statement in accordance with any of the following, as appropriate:

- a) a summary of evidence or a certificate from tests carried out in accordance with the requirements of the approved vehicle standards,
 - b) a type approval issued by a relevant authorised certification organisation in accordance with the approved vehicle standards,
 - c) documents in relation to arrangements for ensuring conformity of production in accordance with the requirements of the approved vehicle standards,
 - d) documents confirming that a deviation of the vehicle or specific aspect of the vehicle from the original source design, resulting from changes to components or manufacturing methods, does not have an adverse effect on compliance with the approved vehicle standards,
 - e) any other requirements specified by the Agency.
- 3) A vehicle manufacturer or manufacturer's representative, or a relevant component manufacturer or component manufacturer's representative, must comply, within a reasonable time, with any request from the Transport Agency to provide the information or document listed in 2)(a) to (e).

Modification and repair

2. A vehicle must comply with the requirements relating to modification and repair set out in the [VIRM: In-service certification, section 3-2](#).

Page amended **1 November 2017** (see [amendment details](#)).