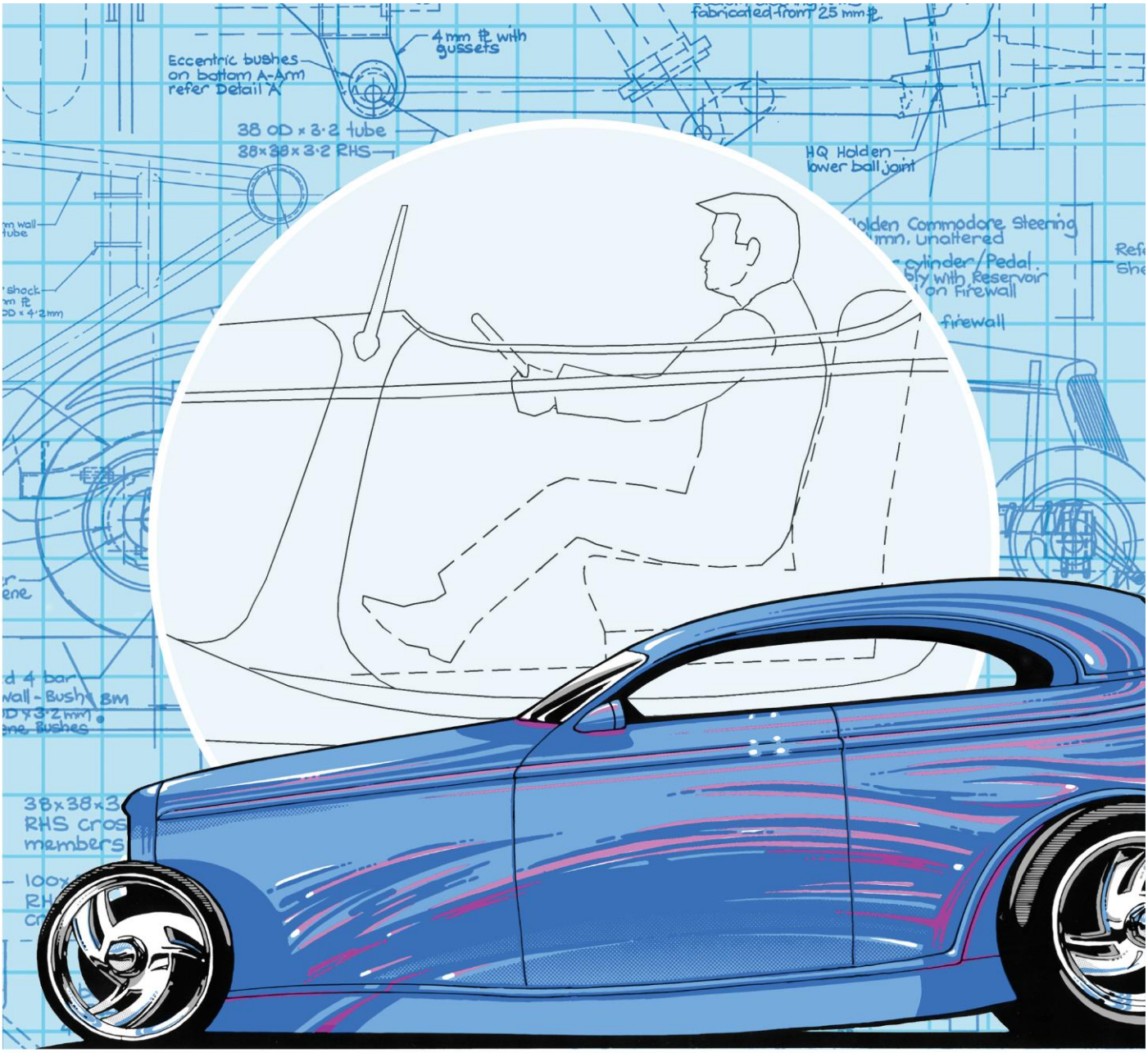
Low Volume Vehicle Technical Association (inc)

Helping New Zealanders Build & Modify Safe Vehicles

Low Volume Vehicle Standard

110-00(00)
Glazing

Initial Issue – Version 1 | Effective from 1 November 2026



Low Volume Vehicle Technical Association (inc)

Approval Record

Signed in accordance with clause *1.3(5)* of the *Low Volume Vehicle Code* of LVVTA, on 12/10/2026 by:			
New Zealand Transport Agency		Low Volume Vehicle Technical Association	
Name Jim Anderson	Signature ----------	Name Ken McAdam	Signature ----------

Amendment Record

Amendments details	Version #	Issue date	Effect date
• LVV Standard 110-00(00) - Original Issue	Version 1	15 October 2026	1 November 2026

Note 1 Text highlighted in grey shows amendments that have been made subsequent to the previous version of this standard, and a grey vertical stroke to the left of the text denotes important new or changed information (which may include information which has been removed).

About Low Volume Vehicle Standards

The Low Volume Vehicle Standards (the standards) specify that vehicles (which have been modified or constructed) require low volume vehicle certification, and provide a set of overarching technical requirements that the vehicles must meet. The standard refers to the associated *New Zealand Car Construction Manual chapter*, that sets out the specific technical requirements which must be met in order to achieve compliance with the standard.

Author, Publisher, & Owner

This standard is authored, published, and owned by the Low Volume Vehicle Technical Association Incorporated (LVVTA). LVVTA is an incorporated society established in 1992, that represents a group of specialist automotive organisations (in turn representing approximately 150,000 members) who are dedicated to ensuring that vehicles, when scratch-built or modified, meet the highest practicable safety standards.

The information in this standard has stemmed from work undertaken by LVVTA founding member organisations that commenced in 1989 and has been progressively developed as an integral part of the New Zealand Government's land transport regulatory system, by agreement and in consultation with the New Zealand Transport Agency (NZTA).

As a result, the considerable experience in applied safety engineering built up by LVVTA and its specialist automotive member groups over the past several decades can be of benefit to members of the New Zealand public who also wish to build or modify motor vehicles.

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Availability and Current Version

This standard is printed and distributed by LVVTA, and is available to the public free of charge from the LVVTA website; www.lvvta.org.nz.

Note that printed copies of this standard, like any other printed LVVTA documents, may have been superseded by a later version and become out of date.

Therefore, this and all other LVVTA documents should not be relied upon without first ensuring that the version number (on the right-hand side of the header above) is the current version – please visit the LVV Standards area of www.lvvta.org.nz to check that this standard is in fact the latest version.

Users' Feedback

This standard is constantly undergoing an evolutionary development process in order to keep pace with changing trends and technology. To assist in this, LVVTA invites users of this standard to engage in an ongoing consultation process with us by making submissions for any changes, additions, or clarifications which might improve the standard, at any time.

Any submissions made via this rolling consultation process will be thoroughly considered, and incorporated, where appropriate, at the next available amendment opportunity.

Submissions should be made to submission@lvvta.org.nz, with the name of this standard in the Subject line.

Supporting Information

This standard should be read in conjunction with *Chapter 15: Glazing & Vision* of the *New Zealand Car Construction Manual,* which provides all necessary requirements and best-practice guidance to enable compliance with this standard.

Legal Status & Copyright

This standard is incorporated by reference, as an integral part of the *Low Volume Vehicle Code*, within *Land Transport Rule: Vehicle Standards Compliance 2002*. This standard corresponds technically with *Land Transport Rule: Glazing, Windscreen Wipe and Wash, and Mirrors 1999.*

The content of this standard remains the property of LVVTA, and no part may be reproduced without LVVTA's written consent.

Disclaimer

LVVTA has made all reasonable efforts to provide sound and correct advice, based on the historical knowledge and best practice experiences of all parties involved in the development and production of this standard.

However, no responsibility or liability is accepted by LVVTA for any error or omission, or any loss suffered by any person relying directly or indirectly on this standard. Any person who builds or modifies a motor vehicle accepts that there may be some associated risks, and does so in the full knowledge of this, and accepts full responsibility for their own actions.

Credits

LVVTA acknowledges the following contributors for their assistance in the development of this standard:

- Cover blueprint drawings, and cover central CAD diagram: Graeme Walls
- Cover car illustration: Tony Johnson

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110-30(00)

Glazing

Purpose of this Standard

The purpose of this low volume vehicle standard (the standard) is to provide the legal framework for the low volume vehicle certification of a vehicle which has been scratch-built or has undergone a change or modification to its glazing.

Such a vehicle is required by the *Land Transport Rule: Glazing, Windscreen Wipe and Wash, and Mirrors 1999* to comply with the *Low Volume Vehicle Code*, which in turn, requires compliance with this standard.

This standard sets out:

- which vehicles are required to meet this standard; and
- how this standard is applied to those vehicles; and
- the technical requirements which must be met by vehicles required to comply with this standard.

Section 1 Scope and Application of this Standard

1.1 Scope of this standard

1.1(1) This standard applies to a light vehicle, other than one specified in section 3, that (see Note 1 below):

(a) is modified either:

(i) on or after 1 January 1992 in such a way that its glazing may have been affected; or

(ii) before 1 January 1992 in such a way that its glazing may have been affected, and has not been continuously registered in New Zealand since that date;

or

(b) is scratch-built either:

(i) on or after 1 January 1992; or

(ii) before 1 January 1992 and has not been continuously registered in New Zealand since that date.

Note 1	For the avoidance of doubt, 1.1(1) specifies that a low volume vehicle (which has been scratch-built, or modified in such a way that its glazing may have been affected) is not required to be certified to this standard only if the vehicle: • was scratch-built or modified prior to 1 January 1992; and • has been issued with a valid *Modification Declaration Certificate*; and • has been continuously registered in New Zealand since 1 January 1992; and • has not had subsequent modifications made that may affect the glazing.

1.2 Application of this standard

1.2(1) A light vehicle that is modified or scratch-built as in 1.1(1), becomes a low volume vehicle, and must either (see Notes 1 and 2 below):

(a) in the case of a vehicle that was scratch-built or modified before 1 January 1992 and has not been continuously registered in New Zealand, or a vehicle that was scratch-built or modified between 1 January 1992 and 1 January 2007:

(i) be certified in accordance with the procedures specified in *chapter 2* of the *Low Volume Vehicle Code*; and

(ii) comply with the general safety requirements in 2.1; and

(iii) comply with those technical requirements in 2.2, as determined to be appropriate by a Low Volume Vehicle Certifier;

or

(b) in the case of a vehicle that was scratch-built or modified after 1 January 2007:

(i) be certified in accordance with the procedures specified in *chapter 2* of the *Low Volume Vehicle Code*; and

(ii) comply with the general safety requirements in 2.1; and

(iii) comply with all technical requirements in 2.2.

Note 1	The date of 1 January 2007 specified in 1.2(1)(a) and 1.2(1)(b) is the implementation date of *Chapter 15: Glazing & Vision* of the *New Zealand Hobby Car Manual* (subsequently renamed the *New Zealand Car Construction Manual*), that introduced specific technical requirements which must be met.
Note 2	In the case of a vehicle specified in 1.2(1)(a), an LVV Certifier must apply the applicable technical requirements referred to in 2.2 as a guideline upon which to base their discretionary judgement on the safety of the vehicle, taking into account the modification or construction date of the vehicle.

Section 2 Technical Requirements of this Standard

2.1 General safety requirements

2.1(1) A low volume vehicle must (see Note 1 below):

(a) be designed and constructed using materials and components that are fit for their purpose; and

(b) be safe to be operated on the road.

Note 1	The requirements specified in 2.1(1) are selected from *2.3* of *Part 2* of the *Low Volume Vehicle Code*, reproduced here in the interest of convenience, and are over-riding requirements which make it clear that, regardless of what technical requirements are or are not in place, every vehicle certified to the *Low Volume Vehicle Code* must be fit for its purpose, and must be safe.

2.1(2) A low volume vehicle must meet all applicable general safety requirements contained in *Sections 2* and *3* of *Land Transport Rule: Glazing, Windscreen Wipe and Wash, and Mirrors 1999* (see Notes 1 and 2 below).

Note 1	Every vehicle must comply with all general safety requirements listed in all applicable *Land Transport Rules*. The *Land Transport Rules* listed above are those *Rules* which correspond technically with this low volume vehicle standard, and therefore contain general safety requirements with which a low volume vehicle certified to this standard must comply.
Note 2	The applicable general safety requirements from the *Land Transport Rules* listed above are incorporated, or referenced within, those *New Zealand Car Construction Manual Chapters* specified in 2.2(3).

2.2 Overarching technical requirements

2.2(1) A low volume vehicle must be fitted with glazing made from an appropriate material, which will be determined by:

(a) the position of the glazing on the vehicle; and

(b) whether the vehicle is fitted with a windscreen or a wind deflector; and

(c) the vehicle's class and year of manufacture.

2.2(2) Glazing fitted to a low volume vehicle must:

(a) be secure and in good condition; and

(b) provide the driver with clear vision to the front and sides of the vehicle; and

(c) be supported by evidence that the glazing meets an approved trade name or approved standard.

2.2(3) In order to demonstrate compliance with 2.2(1) and 2.2(2), a low volume vehicle must comply with all applicable requirements for glazing specified in *Chapter 15: Glazing & Vision* of the *NZ Car Construction Manual* (see Notes 1 to 4 below).

Note 1	For the avoidance of duplication, the technical requirements for glazing are contained in *Chapter 15: Glazing & Vision* of the *New Zealand Car Construction Manual*.
Note 2	For the avoidance of doubt, a low volume vehicle to which 1.2(1)(a) applies, must comply with only those relevant requirements for glazing specified in *Chapter 15: Glazing & Vision* of the *New Zealand Car Construction Manual* considered appropriate by an LVV Certifier, taking into account the modification or construction date of the vehicle.
Note 3	An electronic version of *Chapter 15: Glazing & Vision,* and all other chapters of the *New Zealand Car Construction Manual,* can be accessed from www.lvvta.org.nz either individually or as a complete Manual, free of charge.
Note 4	Printed copies of LVV documents may become out of date and should not be relied upon without ensuring that the version is current – visit www.lvvta.org.nz to check that any document referred to is the latest version.

Section 3 Vehicles Not Required to Comply With this Standard

3.1 Specified vehicle classes

3.1(1) A vehicle is not required to comply with this standard if the vehicle is:

(a) a powered bicycle of Class AB; or

(b) a light trailer of Class TA or TB.

3.2 Enforcement, emergency, & second-stage manufactured vehicles

3.2(1) A vehicle is not required to comply with this standard if the vehicle is either:

(a) modified for the purpose of law enforcement or provision of emergency services; or

(b) identified as having been modified by a second-stage vehicle manufacturer, and complies with an approved overseas standard that is listed in *Annex 6* of the *Low Volume Vehicle Code*, and has not been subsequently modified further.

3.3 Specified modifications

3.3(1) A modification to a vehicle is not required to comply with this standard if the modification:

(a) has not compromised the safe performance of the vehicle; and

(b) is listed as a modification which does not require low volume vehicle certification, within either:

(i) the *LVVTA Modification Threshold Schedule*; or

(ii) a relevant *Modification Table* in the *Vehicle Inspection Requirements Manual* of the New Zealand Transport Agency.