



## **Vehicle Standard (Australian Design Rule 8/00 – Safety Glazing Material) 2006**

I, JAMES ERIC LLOYD, Minister for Local Government, Territories and Roads,  
determine this vehicle standard under subsection 7 (1) of the *Motor Vehicle Standards  
Act 1989*.

Dated            31 July 2006

[SIGNED]

James Eric Lloyd

Minister for Local Government, Territories and Roads

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## **0. LEGISLATIVE PROVISIONS**

### **0.1 NAME OF STANDARD**

0.11 This Standard is the Vehicle Standard (Australian Design Rule 8/00 – Safety Glazing Material) 2006.

0.12 This Standard may also be cited as Australian Design Rule 8/00 — Safety Glazing Material.

### **0.2 COMMENCEMENT**

0.2.1 This Standard commences on the day after it is registered.

### **0.3 REPEAL**

0.3.1. This Standard repeals each vehicle standard with the name Australian Design Rule 8/00 — Safety Glazing Material that is:

(a) made under section 7 of the Motor Vehicle Standards Act 1989; and

(b) in force at the commencement of this Standard.

0.3.2. This Standard also repeals each instrument made under section 7 of the Motor Vehicle Standards Act 1989 that creates a vehicle standard with the name Australian Design Rule 8/00 — Safety Glazing Material, if there are no other vehicle standards created by that instrument, or amendments to vehicle standards made by that instrument, that are still in force at the commencement of this Standard.

## **PURPOSE AND SCOPE**

This Australian Design Rule (ADR) is part of the Australian motor vehicle standards system and is a national standard for the purposes of the Motor Vehicle Standards Act 1989.

The function of this Australian Design Rule is to specify the performance requirements of material used for external or internal glazing in motor vehicles which will ensure adequate visibility under normal operating conditions, will minimise obscuration when shattered, and will minimise the likelihood of serious injury if a person comes in contact with the broken glazing material.

## **APPLICABILITY**

This ADR applies to the design and construction of vehicles as set out in the table hereunder.

The Package 17 issue of /00 allows for the equivalent New Zealand standard and other 'Approved' Standards and deletes clause 8.1.3.

Vehicle Category	ADR Category Code *	UNECE Category Code *	Manufactured on or After	Acceptable Prior Rules
Moped 2 wheels	LA	L1	1 July 1988	Nil
Moped 3 wheels	LB	L2	1 March 1991	Nil
Motor cycle	LC	L3	1 July 1988	Nil
Motor cycle and sidecar	LD	L4	1 July 1988	Nil
Motor tricycle	LE	L5	1 March 1991	Nil
Passenger car	MA	M1	1 July 1988	Nil
Forward-control passenger vehicle	MB	M1	1 July 1988	Nil
Off-road passenger vehicle	MC	M1	1 July 1988	Nil
Light omnibus	MD	M2		
up to 3.5 tonnes 'GVM' and up to 12 seats	MD1		1 July 1988	Nil
up to 3.5 tonnes 'GVM' and more than 12 seats	MD2		1 July 1988	Nil
over 3.5 tonnes and up to 4.5 tonnes 'GVM'	MD3		1 July 1988	Nil
over 4.5 tonnes and up to 5 tonnes 'GVM'	MD4		1 July 1988	Nil
Heavy omnibus	ME	M3	1 July 1988	Nil
Light goods vehicle	NA	N1	1 July 1988	Nil
Medium goods vehicle	NB	N2		
over 3.5 tonnes up to 4.5 tonnes 'GVM'	NB1		1 July 1988	Nil
over 4.5 tonnes up to 12 tonnes 'GVM'	NB2		1 July 1988	Nil
Heavy goods vehicle	NC	N3	1 July 1988	Nil
Very light trailer	TA	O1	Not Applicable	
Light trailer	TB	O2	Not Applicable	
Medium trailer	TC	O3	Not Applicable	
Heavy trailer	TD	O4	Not Applicable	

## 8.0. DEFINITIONS

8.0.1. Refer to Vehicle Standard (Australian Design Rule Definitions and Vehicle Categories) 2005.

## 8.1. REQUIREMENTS FOR GLAZING MATERIAL

8.1.1. Notwithstanding the requirements of Section 8.4 all glass used for external or internal glazing shall also comply with the other particular requirements of this Rule.

8.1.2. Glazing material in the instrument panel shall not be considered as "glazing material" for the purpose of this Rule.

\* The category code may also be in the format L<sub>1</sub>, L<sub>A</sub> etc.

8.1.3. Any glass used in windscreens, windows or interior partitions in enclosed LE vehicles, and M- and N- group vehicles shall be of safety glass complying with one of the standards for glass set out in Section 8.4. Deleted in Package 17.

8.1.4. Any glazing material other than glass used in a motor vehicle shall be of a kind that does not shatter.

## **8.2. MARKING OF GLASS**

8.2.1. All glass shall carry the indelible mark or marks of the relevant standards, visible when the glass is fitted in the vehicle.

8.2.2. The mark or marks shall identify the type of glass and the relevant standard to which the glass conforms.

8.2.3. For any windscreen glass having a zone of modified heat treatment, the marking shall indicate the position of any such zone.

## **8.3. GLASS USED FOR WINDSCREENS**

8.3.1. Not used

8.3.2. Primary Vision Area - The requirements for the primary vision area shall be as specified:

- (i) in clauses 8.3.2.1 and 8.3.2.1.1; or
- (ii) at the option of the 'Manufacturer' and in the case of passenger car windscreens only, clause 8.3.2.2.

8.3.2.1. The primary vision area shall include the area of the windscreen between a plane tangential to the top of the '95th Percentile Eye Ellipses', inclined 10 degrees above the horizontal measured parallel to the longitudinal axis of the vehicle, to a plane tangential to the bottom of the '95th Percentile Eye Ellipses', which includes a horizontal line at ground level transverse to the longitudinal axis of the vehicle and 11 m from the rearmost eye position on the '95th Percentile Eye Ellipses', measured horizontally and parallel to the longitudinal axis of the vehicle and between a vertical plane tangential to the outboard of the '95th Percentile Eye Ellipses' and inclined 15 degrees to the right, to a vertical plane tangential to the inboard of the '95th Percentile Eye Ellipses' and inclined 56 degrees to the left.

8.3.2.1.1. Notwithstanding the requirements of clause 8.3.2.1 it shall be permissible to exclude from the primary vision area, any area of glass within 65 mm of the upper and lower edges of the glass and 90 mm of the side edges of the glass.

8.3.2.2. The primary vision area shall be "Zone B" as specified in ECE R 43 "Safety Glazing"; Annex 12 - "Procedure for Determining Test Areas on Passenger Car Windscreens in Relation to the "V" Points" --paragraph 2.3, and referenced in Annex 3 - "General Test Conditions" - paragraph 9.1.2.2.

8.3.2.2.1. There shall be not less than 75 per cent optical transmission below the plane defining the upper boundary of the primary vision area.

- 8.3.2.2.2. There shall be not less than 75 per cent optical transmission within "Zone B" as specified in clause 8.3.2.2.
- 8.3.3. Modified Zone For Heat-treated Windscreens
- 8.3.3.1. For windscreens, heat-treated safety glass shall have a zone of modified heat-treatment which fractures into larger pieces than the remainder of the glass, thus affording a better view through the zone. The area of the zone shall be not less than an ellipse, with a horizontal major axis, and a minor axis in a vertical plane parallel to the longitudinal axis of the vehicle and passing through a point midway between the rearmost eye positions of the '95th Percentile Eye Ellipses'.
- 8.3.3.2. The length of the major axis shall be at least 400 mm. The minor axis shall extend at least between planes tangential to, the top and bottom of the '95th Percentile Eye Ellipses' and inclined at 3 degrees downwards from the horizontal.
- 8.3.3.3. Where the location of the zone as determined by clauses 8.3.3.1 and 8.3.3.2 would cause the outline of the zone to encroach within 100 mm of the edge of the glass, the zone size should be maintained but moved bodily so that the minimum distance of 100 mm is maintained.
- 8.3.4. Laminated Safety Glass for Windscreens.
- When laminated glass is used for windscreens it shall be of a quality that is suitable for windscreens and shall comply with the optical requirement specified in clause 8.3.2.3 of this Rule.

#### **8.4. SPECIFICATIONS FOR GLAZING MATERIAL**

- 8.4.1. All material used for external or internal vehicle glazing shall have properties at least equivalent to the requirements of one or more of the following:
- 8.4.1.1. Australian Standard AS 2080 1977 "Safety Glass for Vehicles"; or AS 2080 1983 "Safety Glass for Land Vehicles" up to and including amendment No. 1.
- 8.4.1.2. Economic Commission for Europe R 43/00 "Uniform Provisions concerning Approval of Safety Glazing and Glazing Materials for Installation on Power Driven Vehicles and their Trailers".
- 8.4.1.3. British Standards Institution BS AU178:1980 "Road Vehicle Safety Glass".
- 8.4.1.4. Japanese Industrial Standard JIS R 3211 1979 ; JIS R 3211 1985 "Safety Glasses for Road Vehicles".
- 8.4.1.5. American National Standard ANSI Z26.1 1980 "Safety Code for Safety Glazing Materials for Glazing Motor Vehicles Operating on Land Highways".
- 8.4.1.6. New Zealand NZ5443 1987
- 8.4.1.7. Other 'Approved ' Standard