



Vehicle Standard (Australian Design Rule 11/00 – Internal Sun Visors) 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 29 May 2006

[SIGNED]

James Eric Lloyd

Minister for Local Government, Territories and Roads

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11.0. LEGISLATIVE PROVISIONS**11.0.1. NAME OF STANDARD**

11.0.1.1. This Standard is the Vehicle Standard (Australian Design Rule 11/00 – Internal Sun Visors) 2006.

11.0.1.2. This Standard may also be cited as Australian Design Rule 11/00 — Internal Sun Visors.

11.0.2. COMMENCEMENT

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

11.0.3. REPEAL

11.0.3.1. This Standard repeals each vehicle standard with the name Australian Design Rule 11/00 — Internal Sun Visors that is:

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

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

11.0.3.2. This Standard also repeals each instrument made under section 7 of the Motor Vehicles Standard Act 1989 that creates a vehicle standard with the name Australian Design Rule 11/00 — Internal Sun Visors, 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 requirements for internal ‘Sun Visors’ to reduce the injury potential of internal ‘Sun Visors’ and the adjacent vehicle structure.

APPLICABILITY

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

Vehicle Category	ADR Category Code	UNECE Category Code	Manufactured on or After	Acceptable Prior Rules
Moped 2 wheels	LA	L1	Not Applicable	
Moped 3 wheels	LB	L2	Not Applicable	
Motor cycle	LC	L3	Not Applicable	
Motor cycle and sidecar	LD	L4	Not Applicable	
Motor tricycle	LE	L5		
	LEM		Not Applicable	
LEP & LEG Enclosed vehicles only			1 March 1991	Nil
LEP & LEG All vehicles			1 July 1992	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		Not Applicable	Nil
Heavy omnibus	ME	M3	Not Applicable	
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		Not Applicable	
Heavy goods vehicle	NC	N3	Not Applicable	
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	

11.1. DEFINITIONS

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

11.2. GENERAL REQUIREMENTS

11.2.1. Mounting

Each 'Sun Visor' mounting shall present no rigid material edge radius of less than 3 mm that is statically 'Contactable' by a spherical 165 mm diameter head form.

11.2.2. Mirror

Each edge of a 'Contactable' mirror attached to a 'Sun Visor' shall be covered with a thickness of at least 1.5 mm of energy absorbing material. Glazing material used in 'Contactable' mirrors shall comply with the requirements of the ADR for "Safety Glazing Material", or shall be so constructed as to prevent the particles formed on fracture from becoming detached from the 'Sun Visor'.

11.3. SPECIFIC REQUIREMENTS

- 11.3.1. When tested in accordance with the procedure of Clause 11.3.4, a 'Sun Visor' shall meet the requirements of Clauses 11.3.2 and 11.3.3.

11.3.2. Design

The 'Sun Visor' shall be constructed of or covered with energy absorption materials nominally over the whole area such that requirements of Clause 11.3.3 are met. These requirements shall be met by both sides of a 'Sun Visor' if both sides are 'Contactable'. Any rigid structure required to support the 'Sun Visor' or maintain its shape shall be of such dimensions as to limit the likelihood of injury to the head on impact.

11.3.3. Energy Absorption

When tested in accordance with the procedure of Clause 11.3.4 or by any other 'Approved' test procedure, the test sample shall arrest the moving head in such a way that the deceleration does not exceed 80 times the acceleration due to gravity, except during a period of less than 3 milliseconds when no peak shall exceed 200 times the acceleration due to gravity. Deceleration peaks exceeding 200 times the acceleration due to gravity and of very short duration are permissible if it can be shown that they are due to ringing of the test equipment.

11.3.4. Test Procedure

- 11.3.4.1. test sample shall be a right square prism with plane dimensions at least 100 mm by 100 mm. It shall consist of the energy absorbing materials used in the 'Sun Visor' with a thickness equal to their minimum thickness measured at any point 25 mm or more from the edge of the 'Sun Visor'. Alternatively the test sample may be the 'Sun Visor' itself. In this case the requirements shall be met for impact at any point more than 40 mm from the edge of the 'Sun Visor'. The test sample shall be

conditioned for at least 6 hours at $25 + 5^{\circ}\text{C}$ and tested at that temperature.

- 11.3.4.2. The dynamic testing equipment shall consist of a rigid moving head having an effective mass of $6.8 + 0.1$ kg and a rigid anvil having a mass of at least 300 kg. The moving head and anvil should have sufficient rigidity to obviate undesirable vibrations in the equipment. The portion of the moving head which contacts the test sample must be of spherical shape with a diameter of 165 mm. The face of the anvil should be perpendicular to the direction of travel of the moving head just prior to impact. However, where a 'Sun Visor' of tapered thickness is being tested, the anvil may be tilted or a rigid support provided, to ensure that the surface of the 'Sun Visor' at the impact point is perpendicular to the direction of travel of the moving head.
- 11.3.4.3. The moving head shall impact the test sample at a velocity of not less than 3.5 m/s and a means of measuring this velocity shall be provided.
- 11.3.4.4. A transducer shall be mounted on the moving head such that a complete deceleration time curve is obtained using an oscilloscope or other recording device. The deceleration channel must have a frequency response flat to within $+ 5$ per cent from one to 1000 Hz.

11.4. ALTERNATIVE STANDARDS

The energy absorption requirements of this Rule shall be deemed to be satisfied if the 'Sun Visor (s)' have satisfied the requirements of the "Energy Dissipation Test" in Annex 4 of the ECE Regulation 21/01, "Interior Fittings", provided that the testing is conducted with the 'Sun Visor' mounted on the structural supporting member on which the 'Sun Visor' is to be installed and for the installed geometry of the 'Sun Visor' with respect to the 'H-point'.