

# Vehicle Standard (Australian Design Rule 13/00 – Installation of Lighting and Light Signalling Devices on other than L-Group Vehicles) 2005

5.4. For **side marker** lamps, manufacturers may choose not to meet the requirements of paragraph 6.18 of Appendix A, in which case they must meet the requirements of clause 7.2 of this standard.

Table 1

LAMP	COLOUR OF EMITTED LIGHT	Component Rule
Side-marker lamp	Amber to the front, red to the rear. For side-marker lamps complying with ADR 74/00 and fitted according to paragraph 6.18 of Appendix A of this vehicle standard, the lamp must emit amber light to the front and rear except for the rearmost lamp which may emit red light.	74/00 or 45/01

## Option 1 (Clause 7.2) – Australian Alternative Standard

### 7.2. **SIDE MARKER LAMPS'**

7.2.1. **Presence:** see clause 5.4

7.2.1.1. Required on motor vehicles with an 'Overall Width' over 2.1 metres and a 'Total Length' over 7.5 metres.

7.2.1.2. Required on trailers with an 'Overall Width' over 2.1 metres or a 'Total Length' over 7.5 metres.

7.2.1.3. Required on 'Semi-trailers' irrespective of 'Overall Width' or 'Total Length'.

7.2.1.4. Optional on all other vehicles.

7.2.2. **Number:** Lamps complying with ADR 45/... are to be fitted according to the following Arrangement. Alternatively, lamps complying with ADR 74/... and fitted according to paragraph 6.18 of Appendix A of this standard are deemed to comply.

7.2.3. **Arrangement:**

(A) 2 at the rear

(B) 2 at the front plus (A)

(C) (B) plus one each side, midway between the front and the rear lamps.

7.2.3.1. Additional pairs of lamps, equally spaced between the front and the rear lamps, are permitted, provided that the distances between the centres of adjacent lamps is not more than 5 metres.

- 7.2.3.2. Arrangement A applies to motor vehicles with a “Total Length” over 7.5 metres. And to trailers with an ‘Overall Width’ over 2.1 metres.
- 7.2.3.3. Arrangement B applies to ‘Semi-trailers’ with a ‘Total Length’ equal to or less than 7.5 metres.
- 7.2.3.4. Arrangement C must apply to trailers (including ‘semi trailers’) with a ‘Total Length’ over 7.5 metres.
- 7.2.4. **Position:**
- 7.2.4.1. In width: that point on the illuminating surface which is farthest from the vehicle’s median longitudinal plane must not be more than 150 mm from the extreme outer edge of the vehicle.
- 7.2.4.2. In height: at the same height as far as practicable above the ground not less than 600 mm nor more than 1,500 mm (2,100 mm if the shape of the body-work makes it impossible to keep within 1,500 mm.)
- 7.2.4.3. In length: According to the arrangement of clause 7.2.3.
- That point on the illuminating surface which is farthest from the vehicle’s median longitudinal plane must:
- 7.2.4.3.1. in the case of rear lamps, not be more than 300 mm from the rear of the side of the vehicle on which the lamp is mounted.
- 7.2.4.3.2. In the case of front lamps mounted on trailers, not be more than 300 mm from the front of the side of the vehicle on which the lamp is mounted.
- 7.2.4.3.3. In the case of front lamps mounted on motor vehicles, be within the front third of the vehicle’s length but not forward of a vertical transverse plane through the rear most point of the driver’s ‘Seat’ when in its rearmost normal driving position.
- 7.2.4.3.4. Where it would be reasonably impracticable for constructional reasons to comply with the requirements of clauses 7.2.4.3.1 and/or 7.2.4.3.2 and 7.2.4.3.3, be as close as possible to the front and/or rear respectively, provided that where the distance between the front and rear lamps would then be less than 2.5 metres, only the rearmost pair of lamps need be fitted.
- 7.2.5. **Geometric visibility:**
- Horizontal angle: from 5°, if the height of the lamp is less than 750 mm.
- 7.2.6. **Orientation:** Outwards
- 7.2.7. **Electrical connections:** No specific requirement.
- 7.2.8. **Tell-tale:** Optional. If it exists its function must be carried out by the tell-tale required for the front and rear position lamps.
- 7.2.9. **Other requirements:** None

## Option 2 (Paragraph 6.18 of Appendix A) – European Standard

### 6.18. SIDE-MARKER LAMPS (Regulation No. 91)

#### 6.18.1. Presence

Mandatory: On all vehicles the length of which exceeds 6 m, except for chassis-cabs. The SM1 type of side-marker lamp shall be used on all categories of vehicles; however the SM2 type of side-marker lamps may be used on the M<sub>1</sub> category of vehicles.

In addition, on M<sub>1</sub> and N<sub>1</sub> category vehicles less than 6 m in length, side-marker lamps shall be used, if they supplement the reduced geometric visibility requirements of front position lamps conforming to paragraph 6.9.5.2. and rear position lamps conforming to paragraph 6.10.5.2.

Optional:

On all other vehicles.

The SM1 or SM2 types of side-marker lamps may be used.

#### 6.18.2. Minimum number per side

Such that the rules for longitudinal positioning are complied with.

#### 6.18.3. Arrangement

No individual specifications.

#### 6.18.4. Position

6.18.4.1. In width: no individual specifications.

6.18.4.2. In height: above the ground, not less than 250 mm nor more than 1,500 mm (2,100 mm if the shape of the bodywork makes it impossible to keep within 1,500 mm).

6.18.4.3. In length: at least one side-marker lamp must be fitted to the middle third of the vehicle, the foremost side-marker lamp being not further than 3 m from the front. The distance between two adjacent side-marker lamps shall not exceed 3 m. If the structure of the vehicle makes it impossible to comply with such a requirement, this distance may be increased to 4 m.

The distance between the rearmost side-marker lamp and the rear of the vehicle shall not exceed 1 m.

However, for vehicles the length of which does not exceed 6 m and for chassis-cabs, it is sufficient to have one side-marker lamp fitted within the first third and/or within the last third of the vehicle length.

6.18.5. Geometric visibility

Horizontal angle: 45° to the front and to the rear; however, for vehicles on which the installation of the side-marker lamps is optional this value can be reduced to 30°.

If the vehicle is equipped with side-marker lamps used to supplement the reduced geometric visibility of front and rear direction indicator lamps conforming to paragraph 6.5.5.2. and/or position lamps conforming to paragraphs 6.9.5.2. and 6.10.5.2., the angles are 45° towards the front and rear ends of the vehicle and 30° towards the centre of the vehicle (see the figure in paragraph 6.5.5.2. above).

Vertical angle: 10° above and below the horizontal. The vertical angle below the horizontal may be reduced to 5° in the case of a side-marker lamp less than 750 mm above the ground.

6.18.6. Orientation

Towards the side.

6.18.7. Electrical connections

On M<sub>1</sub> and N<sub>1</sub> category vehicles less than 6 m in length amber side-marker lamps may be wired to flash, provided that this flashing is in phase and at the same frequency with the direction indicator lamps at the same side of the vehicle.

For all other categories of vehicles: no individual specification.

6.18.8. Tell-tale

Tell-tale optional. If it exists its function shall be carried out by the tell-tale required for the front and rear position lamps.

6.18.9. Other requirements

When the rearmost side-marker lamp is combined with the rear position lamp reciprocally incorporated with the rear fog-lamp or stop lamp, the photometric characteristics of the side-marker lamp may be modified during the illumination of the rear fog lamp or stop lamp.

Rear side-marker lamps must be amber if they flash with the rear direction-indicator lamp.