

# Australian Standard 2640—1983

1985

## PORTABLE RAMPS FOR VEHICLES



✓ 2640—1985 Portable ramps for vehicles A4 6pp C  
(In Update Service 35)  
Specifies safety and performance requirements for portable ramps used in the maintenance and display of motor vehicles. Design requirements for stability and ease of mounting are included together with test methods for structural integrity and prevention of roll-off.  
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The following interests are represented on Committee CS/43:

Australian Automobile Association  
Australian Automobile Chamber of Commerce  
Australian Automotive Aftermarket Association  
Australian Federation of Consumer Organizations  
Confederation of Australian Industry  
Department of Home Affairs and Environment  
Department of Consumer Affairs, N.S.W.  
Department of Defence  
Department of Transport Australia  
Federation of Automotive Products Manufacturers  
Metal Trades Industry Association of Australia  
Ministry of Consumer Affairs, Victoria  
Society of Automotive Engineers—Australasia

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**AUSTRALIAN STANDARD**

**PORTABLE RAMPS  
FOR VEHICLES**

**AS 2640—1983**

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## PREFACE

This standard was prepared by the Association's Committee on Vehicle Stands and Vehicle Ramps in response to a request from the Ministry of Consumer Affairs, Victoria, which was concerned about the poor quality of some car ramps that had been brought to its attention following the collapse of a ramp after a car had been driven onto it.

The standard aims at ensuring, through minimum performance requirements, that portable vehicle ramps are sufficiently robust so that under normal use they will not fail. Further, the standard aims at ensuring that the ramps are constructed and designed so that they will be stable and will not damage the vehicle when used in their intended manner.

It should be noted that car ramps are covered by the Consumer Protection Act in New South Wales.

Other standards in related areas are as follows:

- AS 2538 Vehicle Support Stands
- AS 2615 Trolley Jacks
- AS XXXX Vehicle Jacks\*

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\*In the course of preparation.

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## STANDARDS ASSOCIATION OF AUSTRALIA

**Australian Standard**  
for  
**PORTABLE RAMPS FOR VEHICLES**

**1 SCOPE.** This standard specifies requirements for the design, construction, performance and marking of portable vehicle ramps.

**2 REFERENCED DOCUMENTS.** The following standards are referred to in this standard:

AS 1192	Electroplated Coatings—Nickel and Chromium
AS 1789	Electroplated Coatings of Zinc on Iron and Steel
AS 1790	Electroplated Coatings of Cadmium on Iron and Steel
AS 2105	Inorganic Zinc Silicate Paint
AS K108	Metal Priming Paint, Anti-corrosive

**3 DEFINITIONS.** For the purpose of this standard, the following definitions apply:

**3.1 Vehicle ramp**—a device consisting of an incline and a platform onto which a vehicle is driven for the purpose of maintenance or display (see Fig. 1).

**3.2 Base width**—the minimum width measured across the base of a vehicle ramp (see Fig. 2).

**3.3 Ramp height**—the maximum vertical distance between the platform and the base plane (see Fig. 3).

**3.4 Vehicle**—a passenger car, passenger car derivative or multi-purpose passenger car as defined by the Australian Design Rules, or a goods-carrying vehicle or a towed unit such as a caravan or trailer.

**3.5 Nominated capacity**—the capacity nominated by the manufacturer as the maximum mass that is to be supported by the vehicle ramp.

NOTE: The nominated capacity must be marked on the ramp (see Clause 7).

**3.6 Nominated tyre size**—the maximum overall tyre diameter, in millimetres, nominated by the manufacturer as being suitable for use with a given ramp.

NOTE: The nominated tyre size must be marked on the ramp (see Clause 7).

**3.7 Base plane**—the plane which includes the points of contact between the base of the vehicle ramp and the surface upon which it rests.

**3.8 Projected plan area of the base**—the maximum area in the base plane described by joining up the points of contact of the vehicle ramp with the base plane.

**3.9 Projected plan area of the incline**—the area obtained by projecting the perimeter of incline vertically downwards onto the base plane.

**3.10 Projected plan area of the platform**—the area obtained by projecting the perimeter of the platform vertically downwards onto the base plane.

NOTE: For the purpose of this definition, the contact surface of the barrier stop, where fitted, forms part of the perimeter of the platform.

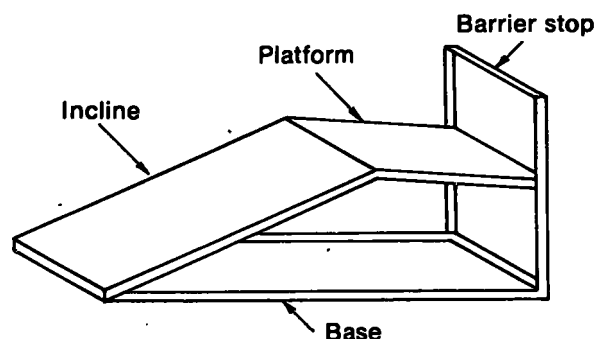


Fig. 1. TYPICAL VEHICLE RAMP

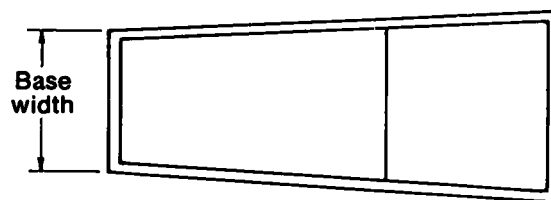


Fig. 2. BASE WIDTH OF A TYPICAL VEHICLE RAMP

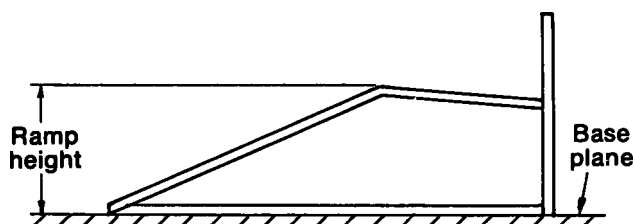


Fig. 3. HEIGHT OF A TYPICAL VEHICLE RAMP

**3.11 Roll-off**—the action of a vehicle descending from a vehicle ramp in such a way that its tyre travels down the incline of the ramp.

**3.12 Overtravel**—the action of a vehicle travelling forwards off the platform of a vehicle ramp in a direction opposite to the incline.

#### 4 CONSTRUCTION AND DESIGN.

**4.1 Materials.** Materials used in the manufacture of vehicle ramps shall not have been subjected to stresses or strains which would result in failure and shall be free from blow holes, hard spots, shrinkage defects, cracks or other defects which would adversely affect the strength of that material.

NOTE: The purpose of this requirement is to ensure that the materials used in the construction of the vehicle ramp are new or