

Vehicle Standards Guide 35 (VSG-35)

Implementation of width changes for Safer Freight Vehicles

In October 2023, the Australian Government made changes to the Australian Design Rules (ADRs) to allow an increase in the maximum width of some heavy motor vehicles. This was done to support manufacturers supplying safer and cleaner new vehicles in Australia. These changes are known as Safer Freight Vehicles reforms.

Changes have now been made to the *Heavy Vehicle National Law* (HVNL) to implement these changes and provide general access to these safer vehicles.

What are the changes

The reforms allow certain heavy vehicles that are fitted with a comprehensive package of safety features to be up to 2.55m wide. Vehicles equipped with this safety package are called 'Safer Freight Vehicles' or SFVs.

There are no changes for any other heavy vehicles that are not a SFV – these vehicles are limited to a maximum 2.50m wide.

For more information about measuring the width of heavy vehicles, please see VSG36 – Vehicle Width.

What types of vehicles can be SFVs

The SFV reforms only apply to new trucks and prime movers, that is ADR vehicle category NB2 or NC vehicles only, that are supplied as SFVs by the manufacturer.

Buses and trailers are not eligible to be SFVs, nor are machinery such as tractors or other agricultural equipment. Trucks and prime movers that are already in-service can also not be SFVs at this time.

What safety features do SFVs need to have

The safety features include a comprehensive range of devices and technologies that represent some of the most modern safety features for trucks.

To be a SFV truck or prime mover it must be fitted with:

ADR 14/03 - Devices for Indirect Vision

This includes requirements for additional mirrors to be fitted as a mandatory requirement, including a blind spot mirror that shows the area beside the passenger side of the cabin (Class V), across the front of the cabin (Class VI or Crossover) as well as larger side rear vision mirrors.

ADR 35/07 – Commercial Vehicle Braking Systems

This is the current version of the heavy vehicle braking standard, and requires smart features such as anti-lock braking as well as vehicle stability control to be fitted.

ADR 97/00 – Advanced Emergency Braking (AEB)

AEB is a modern safety technology that helps reduce inlane frontal collisions by scanning the area in front of the vehicle and warning the driver of potential collisions. The system can also intervene and slow the vehicle if the driver does not respond.

ADR 99/00 - Lane Departure Warning Systems

Lane departure is a warning system that gives a warning to the driver when they are getting close to leaving their lane.

ADR 105/00 - Blind Spot Information Systems (BSIS)

(only for vehicles with a GVM over 8t from 1 November 2025 for new model vehicles, and 1 February 2027 for all vehicles)

BSIS is an advanced blind spot system that senses the area along the passenger side of a vehicle and provides a visual and audible warning to the driver if another road user is detected, such as cyclists or pedestrians.

ADR 106/00 – Side Underrun Protection

Side underrun protection (SUP) is a physical barrier installed in large gaps along the side of a truck to reduce the chance of other road users falling under the sides and being caught under the wheels.

SUP is only required on rigid trucks.

Conspicuity markings complying with ADR 13/00

Conspicuity markings are an improved form of markings intended to highlight the size of a heavy vehicle and make it more visible at night or in low-light situations, like rain or fog. These markings are an upgrade to rear marking plates that are used on most vehicles.

Conspicuity markings are not mandatory on prime movers.

Table 1: Australian Design Rules governing the safety features

Note: For more information about any of these safety features, refer to the NHVR Fleet Purchasing Guide.

How to identify a SFV

Identifying if a vehicle is a SFV is broken into 2 parts:

- the non-visual requirements (indirect vision, braking, AEB, lane departure and BSIS); and
- the visual requirements (conspicuity and side underrun).

Checking non-visual requirements

Many of the SFV requirements are built into the vehicle and cannot be checked just by looking at the vehicle. To assist with checking if the non-visual requirements have been met, the Australian Government has updated the Register of Approved Vehicles (RAV) to include this information.

To determine if a vehicle is identified as a SFV access the RAV (www.infrastructure.gov.au/RAV-public) and enter the 17-character VIN (Vehicle Identification Number).



Vehicle Model ⁽²⁾			
Vehicle Make 💿	NC	Safer Freight Vehicle ③	SFV-PM-2550
		B Double Capable 🕲	
Approval Holder [®]		Road Train Capable 🕥	
Approval Number ⁽¹⁾		Seats ③	2
Entry Pathway Sub-Category	Type Approval - Standard	GCM (2)	70000
		GVM/ATM (kg) 🕲	25000
RAV Date of Entry 3	07/12/2021	Build Date 3	05/2021

Image 1: Screenshot for a SFV listed on the RAV

If a SFV code is noted against the VIN, it is considered a SFV. If this field is blank, then the vehicle is not a SFV.

Note: Information about how to decipher a SFV code is available in the Guide to safer freight vehicles, published by the Department of Infrastructure, Transport, Regional Development, Communications and the Arts.

Checking visual requirements

For the two visual requirements (conspicuity marking and side underrun) these will often not be fitted when the vehicle is built as they need to be adjusted to the operator's final set up. This may be a particular body, paintwork etc, so will usually be fitted either at the dealer or by the operator.



Image 2. Contour style conspicuity markings on a rigid truck





Image 3: Examples of side underrun devices

Note: The Australian Trucking Association's Technical Advisory Procedures have further information about some of the requirements for conspicuity markings and side underrun. For the full requirements, please refer to the Australian Design Rules.

Converting in-service vehicles

At the current time, only new vehicles are eligible to be SFVs.

The NHVR is currently working with key industry associations to develop a process to allow existing vehicles already in-service to be certified as SFVs. The NHVR expects this process to be finalised in early 2025.

Vehicle access

The SFV reforms have increased the general width limit for SFVs to 2.55m in all participating jurisdictions. This means these vehicles will have general access to the road network in these jurisdictions.

The reforms have also been implemented in the Northern Territory and Western Australia. Further information about access arrangements in these jurisdictions may be available on their websites.

Operating under notices and permits

Many heavy vehicle operators already access the road network via a permit or a notice. Because the SFV reforms only impact vehicle width, there are two possible cases:

Permit or notice states width

Some permits or notices may specifically mention the width of the vehicle. Where a permit of notice specifically states the width of a truck, prime mover or combination must not exceed 2.50m, a 2.55m wide SFV may not operate under that permit or notice.

Permit or notice does not state width

Where a permit or notice does not include any requirement about the width of a truck, prime mover or combination a 2.55m wide SFV can operate under that permit or notice

	For more information:		
1	/isit:	www.nhvr.gov.au/vehiclestandards	
S	Subscribe:	www.nhvr.gov.au/subscribe	
E	Email:	vehiclestandards@nhvr.gov.au	
F	Phone:	13 NHVR (13 64 87)*	

*Standard 13 call charges apply. Please check with your phone provider. © Copyright National Heavy Vehicle Regulator 2024, creativecommons.org/licenses/by-sa/3.0/au

© Copyright National Heavy Vehicle Regulator 2024, creativecommons.org/licenses/by-sa/3.0/a Disclaimer: This information is only a guide and should not be relied upon as legal advice.