

Guard Rail

Fact sheet

The Department for Infrastructure and Transport is continually assessing the road network to identify opportunities to improve safety. A range of measures are used to improve safety on our road network. A guard rail is one of these potential measures.

Who determines what is a suitable safety measure on the road network?

An Australian National Risk Assessment Model (ANRAM) is used to identify and prioritise locations that would benefit from new safety measures.

Each location is assessed individually to identify potential hazards and determine the most suitable safety measure. As appropriate, the safety measure may include a guard rail.

Why is a guard rail installed?

A guard rail protects drivers who may veer off the road, preventing them from hitting roadside obstacles and helping them to safely come to a stop. Guard rails also assist to prevent vehicles from rolling and provide protection for pedestrians and property.

The guard rail is designed to deflect on impact and 'guide' the vehicle back to the roadway or assist in bringing the vehicle to a stop.

A guard rail may be considered as part of designing a new road or when making safety improvements to an existing road.

For more information

Please contact DIT Engagement team on 1300 794 880 or via email dit.engagement@sa.gov.au

Where is a guard rail used?

We use guard rails to protect drivers from a range of hazards such as outer curves in the roadway, significant drop offs and other roadside obstacles including trees or stobie poles.

Why would a guard rail be chosen over other types of safety barrier?

A guard rail is best suited to areas with limited space available. Compared to other types of safety barriers (such as wire ropes), a guard rail requires a smaller space between the roadside protection and the hazard.

How is a guard rail installed?

The steel posts are installed with specialised machines. Steel rails are then hung on the posts and bolted in place.

Hydro excavation (a form of excavation using water) is used when required to ensure a tree's root system is protected. It will also be used when underground services are located nearby.

Ensuring suitable line of sight

Guard rails are only installed in locations where line of sight is not impacted.

Due to its height, in most instances a guard rail is low enough not to impact the line of sight.

Protecting wildlife

The length of the guard rail considers the need for wildlife to be able to still cross the road. Smaller wildlife is to move under the rail.



Government
of South Australia

Department for Infrastructure
and Transport