

The Otira Viaduct

What is a Viaduct?

A viaduct is a particular type of bridge. A viaduct usually spans the gap between two high points of land and does not always cross a river.

Why was the Otira Viaduct built?

State Highway 73 winds its way high through the huge mountains of the Southern Alps, joining Westland and Canterbury. One very steep part of this road in the Otira valley crossed an old landslide path. This piece of the road was always prone to rockfall, snow avalanches and landslides. It was decided that a new section of road was needed to make State Highway 73 safer and easier to maintain. Roading engineers decided the best and safest way to get past this tricky place in the mountains was to build an long, unusual type of bridge, the Otira Viaduct!

When was the Otira Viaduct built and how long did it take?

The first foundations for the Otira Viaduct were laid in January 1998 and the first cars drove over in November 1999. The cold and wet weather of the mountains in winter made the job very hard for those building the viaduct. Sadly one of the construction team was killed in an accident while building the Otira Viaduct

Otira Viaduct Facts:

Length: 440 metres

Height: 35 metres

Foundation depth: 25 metres

Concrete volume: 5000 cubic metres

Earth moved: 80 000 cubic metres

Gradient/steepness: 12% or 1 metre fall in every 9 metres

Cost: 25 million dollars