

# 20 Metre R.V.V. Polecam system Suitable Vehicle Guide

The following document outlines what vehicles are suitable to have 20 metre Polecam system fitted to.

Two types of vehicle are suitable for a pole system to be fitted.

#1 A commercial van type vehicle or four wheel drive (not including SUV or sport 4WD)

OR

#2 Pickup / Tray / Utility body with or without canopy over the rear body.

## **This document deals with type # 2 vehicles**

For type # 1 vehicles see the PDF document at R.V.V. web site

<http://www.rvv.com.au/InfoDocs/RVV-type1-vehicles.pdf>

In all cases, prior to placing a deposit and order, E-mail us at RVV with the vehicle make, model and year so we can give a confirmation to go ahead with it.

This is because although a vehicle may be well within the limits, there may be something particular to the vehicle that might make it difficult.

## DIMENSIONS TO CHECK

There are some basic dimension the vehicle must conform to for a pole system to be fitted to. If your vehicle falls outside these dimensions the option to work around it may be costly, consult us about alternatives before proceeding.

**MINIMUM RACK HEIGHT** = 1350 mm

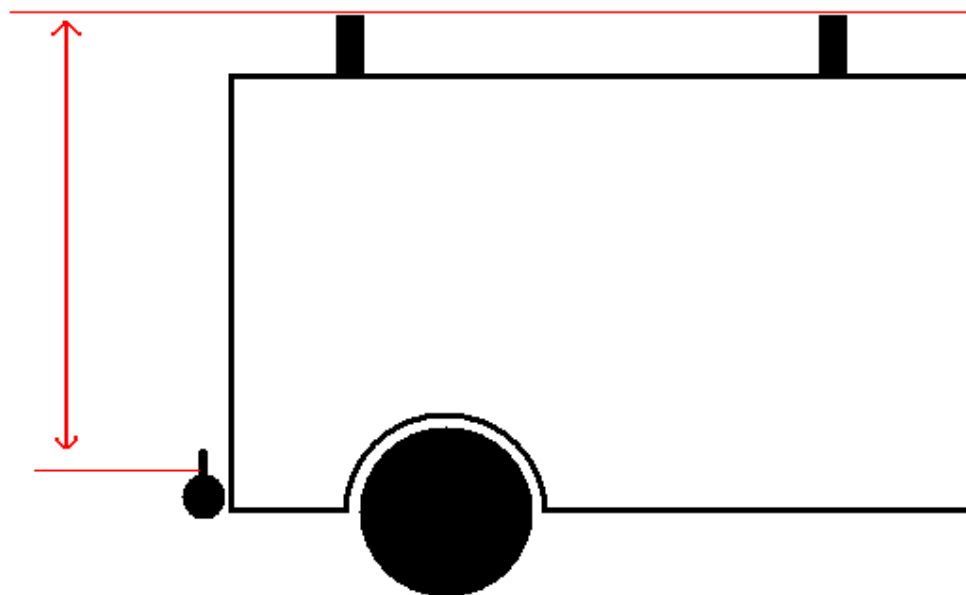
If the distance is less it is possible the base of the pneumatic mast will touch the ground when it is tilted downward in operation.

**MAXIMUM RACK HEIGHT** = 1750 mm

If this distance is greater this may be accommodated by raising the position of the lower bar that the mast base attaches to. Please tell us if this is the case so we can advise how to resolve that issue.

**Measurement taken from top of roof racks to lower rear bar top.**

**Use string line or beam over roof bars to get top line to measure to.**



**If you have a vehicle with no racks fitted to it**, for measuring purposes, add around 80mm above the roof.

So in that case measure from the roof top down to the underside of the bumper or towbar as shown in the image, and then add 80mm.

## **Type # 2 vehicle**

Pickup / Utility type vehicles WITH CANOPY

Pickup / Tray body / Utility type vehicles WITHOUT CANOPY

### **Rear and Centre roof racks**

Example shows a Holden Rodeo Utility with canopy over the rear tray body.



The unit has full height internal bars that make the rear and centre roof rack bar supports in the fibreglass canopy.

This is required to support the weight. (100 Kg / 220Lb over three roof bars)

This canopy type system is custom made must be made up to suit the vehicle at a roof rack and bar fitters nearest to the buyer.

There is a an off the shelf solution or a custom set or bars may be made to suit.

Which you choose to go with will be according to your local availability of roof rack makers and fitters to fit either an off the shelf solution or to make a custom bent tube set.

The roof rack cross bars must be the Rhino heavy duty H section bar, or a square RHS section that is 40x40 mm minimum to 45x45mm maximum in dimension across the roof from one side to the other.

These are the custom bars made to suit the Rodeo vehicle and have been used on a number of other utility vehicles. These bars were made by a local roof rack and bar fitter near to our factory when we used to do factory installs.

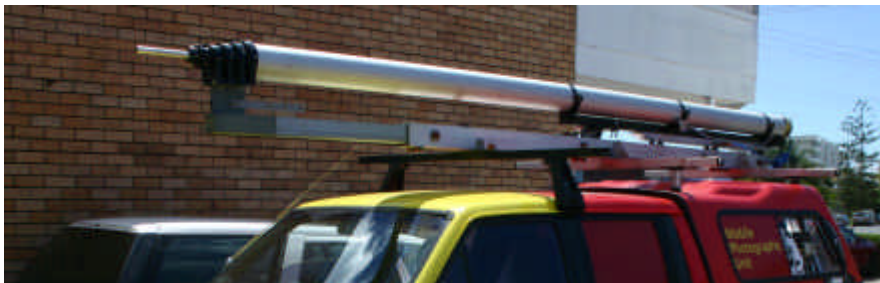


There is also a solution to provide the support bars like the custom made ones shown above that is sold by Rhino Racks, it can be adjusted to fit and bolted into a utility or pick-up type vehicle with canopy.



Some owners have the custom set made locally, others use the Rhino off the shelf system. This option is up to the buyer.

Some images of the equipment on the roof of a utility with the Rhino system fitted.



### Front roof rack

The front roof rack cross bar fits to the cabin roof to a gutter mount. If the cabin has no guttering then a track mounted roof rack is fitted.



A slip assembly bracket fits on the front roof rack cross bar that allows some limited side movement of the front of the mast mounting to account for ute tray to cabin twisting, resulting in a shift of centre line across the roof.

The front bar ends are selected to ensure the front bar comes up to level with the centre and rear bars through the canopy.

For more information on selecting and purchasing Rhino roof racks see type # 1 suitability pdf at the link provided on page 1

## Alternatives

There are variations of the support system that may be more suitable for some vehicle applications such as utility company vehicles that carry other equipment in addition to the pole system.

Utility with tool boxes shown has a frame added to the top of the unit to accommodate the pole equipment.

This type of mounting negates the need for any roof rack bar over the cabin roof as with the canopy type units earlier in this document

The side railings shown in this image are not needed for the pole system to fit in to, all that is required is three cross bars with some clearance to the centre line of the vehicle to fit the pole mounting system unit to.



With equipment fitted.



Likewise a set of hoop bars can be made to suit a tray or pick-up body that has the structure to support the equipment without the tool boxes as shown above.

The bars will have to be of a dimension that handles the load and secured to the tray or body in such a way that they are braced for load under all vehicle driving conditions and elevated mast loads.

Consult us at R.V.V about the particular set-up you intend to have built to suit before commencing that so we can provide the specific clearance and fitting needs to incorporate.

### **Rear mast fixing bar.**

There is another part that is fitted to the vehicle that the base of the mast secures to when it is raised to operate.

Adjuster links locate to this bar and to the mast base.

The bar is bolted to the towbar of the vehicle

Vehicles must be fitted with a towbar.

That is covered in the PRE install document on-line.

<http://www.rvv.com.au/InfoDocs/RVVPrelInstall.pdf>

In that you can decide which of two type of rear bar you will have fitted.

Where measurements of the towbar are needed to supply that part, we will do that on a case by case basis due to the variation in towbars or rear bars fitted

Any questions regarding anything in this document.

Please call contact us.

E-mail at [contact@rvv.com.au](mailto:contact@rvv.com.au)

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In most cases you will need to leave a message with number to call back as we are a factory direct seller so all staff are engaged in equipment building activities.

David Brimage

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