

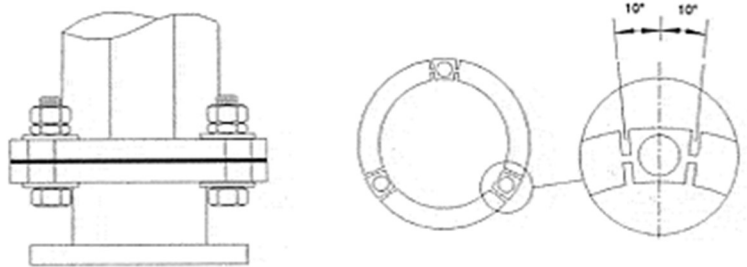
Frangible Columns

With the focus on road safety on the increase, more authorities have moved toward frangible street lighting columns and the most common of these in Australia are of the Slip base and Impact absorbing types.

Slip Base Columns

Slip base columns are used on major roads where there are unlikely to be any pedestrian traffic as the column breaks away from a fixed base section and travels upward while the vehicle passes underneath. The basic principle works on two circular base plates with 3 angular slots at 120 degrees to each other sandwiching a 1.6mm – 2mm galvanised slip washer. The whole assembly is held together by three bolts, nuts and heavy duty washers as pictured right.

On a vehicle impacting the column the slip washer breaks apart, releasing the bolts and allowing the column to topple over the car as it passes underneath.



Impact Absorbing Columns

Impact absorbing columns on the other hand are used on highways and other major roads where the probability of a slip base column hitting a pedestrian is high.

The concept of these columns is that the base remains firmly planted in the ground while the column progressively collapses over the vehicle slowing it down in a safe manner and ultimately capturing it.

The lower section of these columns has a crumple zone that is sacrificed as the vehicle slows down and comes to a halt. These columns are supplied as a base plate mounted or in-ground mounted configuration.

Pictured right: An example of an Impact Absorbing column after vehicle impact showing the sectional failure of the column. The column shown is a standard Western Power column for which A.D. Coote & Co. are the preferred supplier.

A.D. Coote & Co. can offer the full range of Slip Base and Impact Absorbing columns and are approved suppliers for most road and electrical authorities throughout Australia.

