# W-BEAM Steel Rail Safety Barrier

**Distributor**: Public Domain  
**Date Issued**: May 1996

## Status

**Accepted** – May be used on the classified road network.

These acceptance conditions should be read in conjunction with the Product Manual and Roads and Maritime Specification R132 – Safety Barrier Systems and the Standard (Road) Drawings. These acceptance conditions take precedence over any instructions in the Product Manual.

Roads and Maritime Services may withdraw or modify this acceptance at any time without notice. Users should refer to the Roads and Maritime Services website to ensure they have the latest version of the conditions related to this product.

## Product accepted

- Post type = Steel ‘C’ section post  
- Post spacing = 2.0m  
- Footing = driven post

### Variants

- Ingal Flexbeam Guardrail with SYT posts and Ingal Blocks  
- ACP W Beam with steel breakaway posts and ACP blocks

### Options

- Nested Rail  
- Hiasa Motorcycle Protection Rail  
- MPR Motorcycle Protection Rail  
- Abraham Blockout  
- Post on base plate  
- Post on slip base plate

## Variants NOT accepted

- Multiple blockouts  
- Variants that are not on the list above are not accepted.  
- Variants accepted in other jurisdictions, but not accepted in the local jurisdiction, are NOT permitted.

## Speed limit (km/h)

110 km/h

## Tested containment

NCHRP 350 Test Level 3 (2,000kg at 100km/h and 25°)

## Accepted dynamic deflection

| All speeds | 1.0 metres |

Note: the accepted deflections are those measured in crash tests performed under controlled conditions. Crash tests represent an approximation of what is likely to be seen in the field. The use of interpolated/extrapolated deflection values is not accepted.
### Accepted working width

| All speeds | Not specified. Refer to *Austroads Guide to Road Design Part 6: Section 6.3.16* for guidance |

Working width is the distance between the traffic face of the road safety barrier system before the impact and the maximum lateral position of any major part of the system or vehicle during and after the impact.

Note: the accepted working widths are those measured in crash tests performed under controlled conditions. Crash tests represent an approximation of what is likely to be seen in the field. The use of interpolated/extrapolated values is not accepted.

### Point of need

The interface between the barrier and the terminal.

### Minimum length of barrier between terminals

| 10 metres |

### System conditions

1. Flaring across the clear zone without a terminal listed below is NOT permitted.
2. Installation on top of a kerb is not recommended, however if installed on top of a kerb, all system components must be free to operate.

### Approved terminals and connections

| Thrie-Beam guardrail | Permitted |
| Type F Concrete Safety Barrier | Permitted |
| Proprietary Products | Refer to end treatment acceptance conditions for approved connections. |

### Gore area use

Permitted

### Pedestrian area use

Permitted – consider potential for snagging and deflection

### Cycleway use

Permitted – consider potential for snagging and deflection

### Median use

Permitted

### Slope limit

Side slope limit: 10 Horizontal to 1 Vertical (10%)

### Foundation pavement conditions

| Concrete | Permitted |
| Deep lift Asphalitic Concrete | Permitted |
| Asphalitic concrete over granular pavement | Permitted |
| Flush seal over granular pavement | Permitted |
| Unsealed compacted formation | Permitted |
| Natural surface | Permitted |

Foundation pavement conditions must be smooth and free of snag points, kerbs or obstructions that may interfere with the operation of the product.

### Attachments and screens

In accordance with the requirements of Australian/New Zealand Standard AS/NZS 3845, road furniture such as headlight screens, signs, lighting posts and fences for pedestrians, visual screens, debris screens, platforms for workers and other non-product hardware must not be attached to the product.

Screens may be placed adjacent to the side of the product not exposed to traffic. The distance between the screen and the product shall be determined by a site specific risk assessment that considers the deflection distance.

Screens must not have horizontal members that present a risk of impaling errant vehicles that impact the product.

Acceptance of this product does not place any obligation on Roads and Maritime Services, or its contractors, to purchase or use the product.