

### **DETAIL SHEET**

## SAFETY ROLLER Steel Rail Safety Barrier - Permanent

## **VicRoads Requirements**

Refer to Austroads - Safety Barrier System Acceptance Conditions for the SAFETY ROLLER Steel Rail Safety Barrier. All requirements listed by Austroads have been adopted by VicRoads for use on the Victorian declared road network.

In this instance, VicRoads applies no additional requirements/conditions for use of SAFETY ROLLER Steel Rail Safety Barrier on the Victorian declared road network including.

Please Note: VicRoads requirements take precedence over any Product Manual instructions and Austroads conditions where conflicting.

### References

- Product Installation Manual and Product
   Operational Manual
- VicRoads Road Design Note 06-04 Accepted Safety Barrier Products



## For further information please

#### contact:

VicRoads Technical Services 60 Denmark Street Kew, Vic, 3101 Telephone: 8391 7192

Accepted safety barrier products are subject to periodic review and the information provided in this document may be superseded. Please refer to *Road Design Note 06-04 – Accepted Safety Barrier products* for the current VicRoads acceptance status.





# Safety Barrier System Acceptance Conditions

## SAFETY ROLLER Steel Rail Safety Barrier - Permanent

	Proponent	KSI Global Australia Pty Ltd
	Australian Distributor	KSI Global Australia Pty Ltd
	New Zealand Distributor	KSI Global Australia Pty Ltd
	Date Issued	19 January 2015

Status	Accepted – May be used on the classified road network. These acceptance conditions take precedence over any instructions in the Product Manual.	
Variants accepted	SAFETY ROLLER Steel Rail Safety Barrier consisting of vertical steel posts that support a series of horizontal rollers. Two top rails and two bottom rails run horizontally along the length of the barrier system. Intermediate posts, placed centrally between line posts, are supported by top and bottom rail members only.	
Variants NOT accepted	<ul> <li>Variants that are not on the list above are not accepted.</li> <li>Variants accepted in other jurisdictions, but not accepted in the local jurisdiction, are NOT permitted.</li> </ul>	

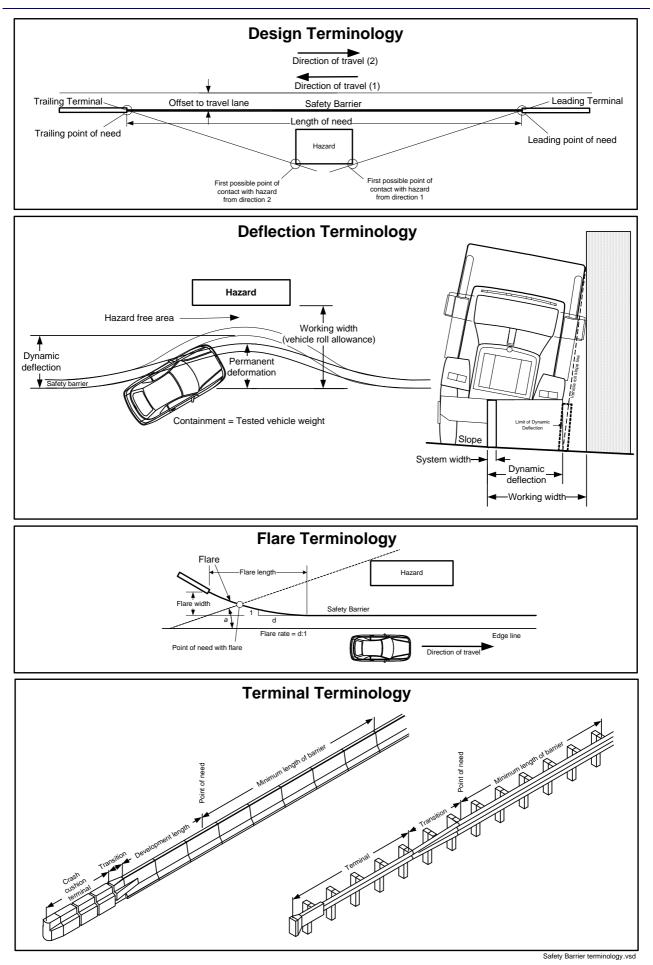
Speed limit (km/h)	100 km/h. Permanent barriers accepted for 100km/h may be used in 110 km/h speed zones.	
Tested containment (kg)	2,270 kg at 100 km/h and 25°. 10,000 kg at 90 km/h and 15°.	
Adopted dynamic deflection	100 km/h 0.3 metres.	
(Nominal 2 tonne vehicle)	80 km/h	Use 100 km/h deflection.
	70 km/h	Use 100 km/h deflection.
	50 km/h	Use 100 km/h deflection.
	Deflections shown will be exceeded with flared installations and/or high mass vehicles. Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers Section 6 for design advice.	
Point of need	Point of Need is 4.98 metres from the interface between the terminal and the barrier.	
Development length	Not applicable.	
Minimum length of barrier between terminals	60 metres.	
System width (m)	0.37 metres.	

System conditions	<ol> <li>Flaring across the clear zone without a terminal listed below is NOT permitted.</li> <li>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.</li> </ol>
Terminal conditions	<ol> <li>ACCEPTED W-BEAM TERMINAL.</li> <li>Permitted for use with SAFETY ROLLER Steel Rail Safety Barrier - Permanent.</li> <li>The accepted transition must be used to connect the terminal to the barrier.</li> </ol>

	<ul> <li>A terminal must be fitted to both ends of the barrier.</li> <li>See terminal acceptance document for conditions of use.</li> </ul>		
Gore area use	Permitted.		
Pedestrian area use	Permitted – consider potential for snagging and deflection.		
Cycleway use	Permitted – consider potential for snagging and deflection.		
Frequent impact likely	Permitted.		
Remote location	Permitted.		
Median use	Permitted.		
Minimum median width (m)	Not specified.		
Flare rate	Not specified.		
(See Explanation of Terms diagram)			
Offset to travel lane (m)	Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers, Section 6.3.5.		
Hazard free area beside barrier or terminal (Working Width)	Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers, Section 6.3.16.		

Installation	The SAFETY ROLLER Steel Rail Safety Barrier - Permanent must be installed and maintained in accordance with the Product Manual and Road Agency specifications. The Road Agency specifications and standards shall have precedence.		
Minimum distance to excavation	<ul><li>1.85 metres minimum distance between the edge of the barrier and the edge of an excavation.</li><li>(Being 1.5 times the embedment depth of the anchor).</li></ul>		
Slope limit	Not specified.	Not specified.	
Foundation pavement	Concrete Permitted with cored holes.		
conditions	Deep lift Asphaltic Concrete	Permitted with cored holes.	
	Asphaltic 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	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.		
Damaged components	Damaged components must be replaced. Repaired components must not be used.		
Delineation	The installed system shall include delineation as prescribed by Road Agency specifications and drawings.		

Traceability and markings	<ul> <li>Product markings shall be in accordance with marking/s prescribed by the current Australian/New Zealand Standard "AS/NZS 3845 Road Safety Barrier Systems" and Road Agency specifications. Traceability details that must be permanently fixed to the product are: <ul> <li>Name of the product.</li> <li>Manufacturer or distributor name.</li> <li>Date of manufacture.</li> <li>Model or version details of the product, if applicable.</li> <li>Batch number, if applicable.</li> <li>Serial number, if applicable.</li> <li>Traceability details must be easily visible but unobtrusive and not be in a form that becomes prominent advertising. No advertising shall be displayed on the installation.</li> </ul> </li> </ul>
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Notes	Acceptance is based on drawings GS-G506-TL4, Transition-TL3, Transition-TL4 and the Product Manual supplied by the Proponent, dated 15 May 2013 (Version 1.0). This acceptance will cease if there is any change in the product design or specifications.
	Only the Product Manual authorised by the Proponent shall be used in any marketing of the product.
	Acceptance of the SAFETY ROLLER Steel Rail Safety Barrier - Permanent does not place any obligation on the Road Agency, or its contractors, to purchase or use the product.
	The Austroads Safety Barrier Assessment Panel may periodically re- assess the SAFETY ROLLER Steel Rail Safety Barrier - Permanent. The Road Agency may withdraw or modify at any time, the acceptance status or conditions of use of the product without notice. Users should refer to the Road Agency web site to ensure they have the latest version of the conditions related to this product.



For more information, refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers