

# T-39 Thriebeam - Permanent

**NOTE: T-39 THRIEBEAM STATUS IS LEGACY IN VICTORIA. EXISTING UNITS MAY CONTINUE TO BE USED UNTIL THE END OF SERVICE LIFE, BUT NO NEW UNITS TO BE INSTALLED.**

## Details

<b>Category:</b>	Longitudinal Barrier
<b>Sub-category:</b>	Semi-Rigid
<b>Gating/Non-Gating:</b>	N/A
<b>Redirective/Non-Redirective:</b>	Redirective
<b>Permanent/Temporary:</b>	Permanent

## Description

The T-39 Thriebeam Barrier is a proprietary semi-rigid longitudinal system, consisting of Thriebeam rail attached to specially engineered Steel Yielding Line Posts (SYLPs). The SYLPs are designed to prevent wheel snagging thereby eliminating the requirement for blocking pieces.

The T-39 has been fully crash tested and evaluated according to Test Level 3 (TL-3) and Test Level 4 (TL-4) of NCHRP Report 350.

The top of the thriebeam rail is positioned above the posts to eliminate dangerous snag points for vehicles and motorcyclists.



## Product Specifications

The T-39 Thriebeam Specifications as outlined in the Product Manual have been summarised in Table 1.

T-39 Specifications	
Post Length	1830mm
Rail Height Above Ground Level	990mm
Post Height Above Ground Level	813mm
Post Spacing	2000mm
System Width	233mm
TL3 Crash Test Dynamic Deflection:	0.63m
TL4 Crash Test Working Width:	1.86m

**Table 1: T-39 Thriebeam Manual (Release 01/11)**

## Design, Installation, and Maintenance

- Design, installation, and maintenance shall be in accordance with the T-39 Thriebeam Product Manual.
- Where T-39 Thriebeam is being installed adjacent to a trafficable lane, it is recommended that work commence at the end closest to approaching traffic.
- In the case of an impact, any undamaged section may be reused.

Installation Tolerances	
Height of barrier	±20mm
Line of barrier	±20mm in plan view
Departure from upright axis at the top of the barrier	±15mm
Post spacing	±25mm

**Table 2: T-39 Installation Tolerances**

## Deflection & Vehicle Roll

- The T-39 Thriebeam Product Manual provides both dynamic deflection and working width values to be used as required.
- Working width allows for the dynamic deflection and roll of an impacting vehicle. It should be adopted where the T-39 is specified as a TL-4 system and is required to shield a rigid vertical object, such as an overhead/cantilever sign support.

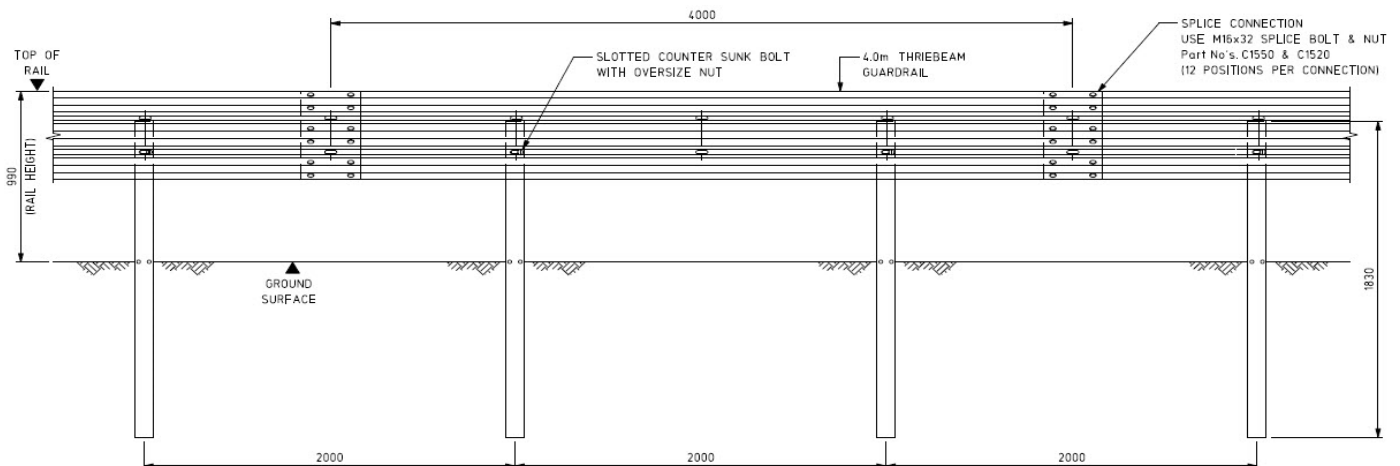
## End Terminals/Transitions

- At the time of publishing, no terminals have been accepted for use directly with the T-39 Thriebeam system.
- All T-39 Thriebeam installations must be transitioned to another accepted safety barrier system for termination. For example, T-39 Thriebeam can be transitioned to Type-B Public Domain Guard Fence, shown below.
- All transitions shall be in accordance with the T-39 Thriebeam Technical Drawings. Refer to the supplier's website for more information.

**Figure 1: T-39 Thriebeam transition to Public Domain Guard Fence**



## Drawing



## Limitations

- Cannot be used in narrow median applications.
- Cannot be used on crossfalls steeper than 10%.
- Minimum acceptable distance to the batter hinge point is 600mm.

## References

- T-39 Product Manual - contact supplier or find on their website
- VicRoads Road Design Note 06-04 Accepted Safety Barrier Products
- VicRoads Supplement to Austroads Guide to Road Design – Part 6

## For further information please contact:

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### Ingal Civil Products (Australian Supplier)

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Website: <http://www.ingalcivil.com.au/>

### Trinity Industries, Inc. (Owner)

2525 Stemmons Freeway, Dallas, Texas 75207

Website: [www.trin.net](http://www.trin.net)

**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.**

**Detail Sheet – Update Summary**

<b>Issue</b>	<b>Approved</b>	<b>Amendment</b>
November 2014	M-SSD	Revision 1 (First Edition)
September 2017	M-SSD	Second edition
November 2019	M-SSE	Third edition Updated to legacy status