

T-LOK 350 F-TYPE Concrete Safety Barrier - Temporary

NOTE: T-LOK 350 STATUS IS LEGACY IN VICTORIA. EXISTING UNITS MAY CONTINUE TO BE USED UNTIL THE END OF SERVICE LIFE, BUT NO NEW UNITS TO BE MANUFACTURED.

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

Description

The T-LOK F-Type Concrete Safety Barrier is a semi-rigid temporary concrete barrier system with a Type F profile and patented coupling system. The system functions as a portable longitudinal barrier to prevent errant vehicle penetration, vaulting, or under riding. Impacting vehicles are redirected at a shallow angle in the vicinity of the impact area, thereby reducing the potential for dangerous secondary impacts.

Ownership

Rockingham Pre-Cast
Website: <http://www.t-lok.com/>

Supplier:

Saferoads Pty Ltd
PO Box 340 Drouin, Victoria 3818
Ph 1800 060 672 Fax 1800 060 673

Accepted Test Level

NCHRP 350 Test Level 2 (TL-2) + 10 km/h: 80 km/h

VicRoads Requirements

Refer to Austroads - Safety Barrier System Acceptance Conditions for the T-LOK F-Type Concrete 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 additional requirements/conditions for use of T-LOK F-Type Concrete Safety Barrier on the Victorian declared road network including:

- Status: Legacy (Maintain only)



Installation & Maintenance

- Careful lifting of units required to avoid damage to joint connection
- Units may need to be repaired or replaced after impact depending on the extent of damage.
- Installation and maintenance to be in accordance with the Supplier T-LOK 350 F-Type Product Manual.

References

- Supplier T-LOK 350 F-Type Concrete Safety Barrier Installation Manual
- VicRoads Road Design Note 06-04 Accepted Safety Barrier Products

Accepted safety barrier products are subject to periodic review and the information provided in this document may be superseded.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.



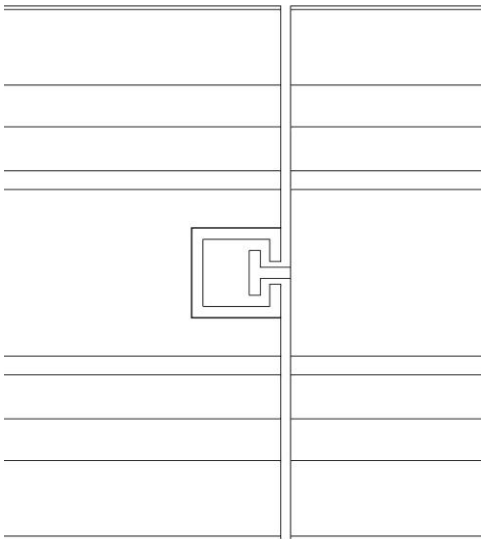
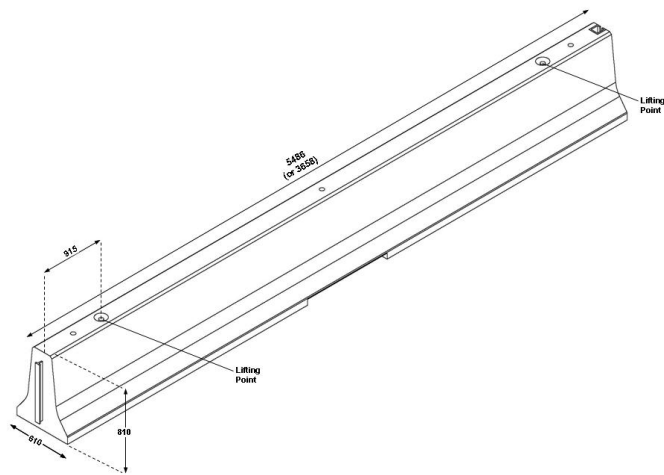
For further information please contact:

VicRoads Safe System Design team
 60 Denmark Street
 Kew, Vic, 3101
 Telephone: 03 8391 7192
 Email: SafeSystemDesign@roads.vic.gov.au

Detail Sheet - T-LOK 350 F-TYPE – Revision Summary

Issue	Approved	Date	Amendment
June 2017	NDS- SSD	June 2017	Minor Amendment- Name change
October 2017	NDS - SSD	October 2017	Updated ASBAP conditions

Drawing



T-Lok Connection

Safety Barrier System Acceptance Conditions

T-LOK 350 F-TYPE Concrete Safety Barrier - Temporary

 	Australian Distributor	Saferoads Pty Ltd
	New Zealand Distributor	Saferoads Pty Ltd
	Date Issued	5 September 2017

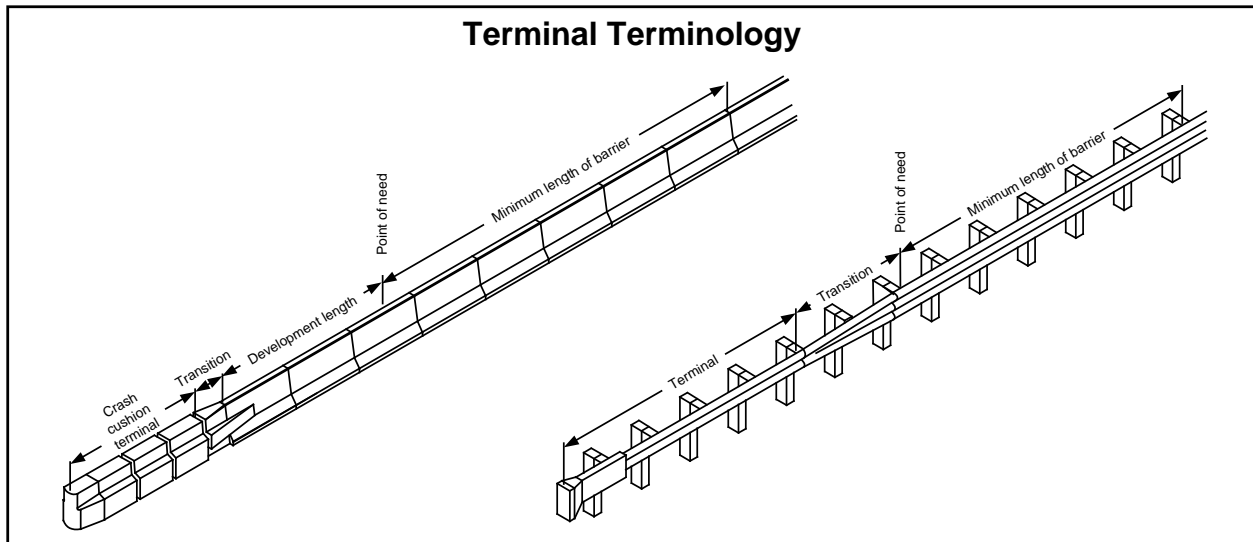
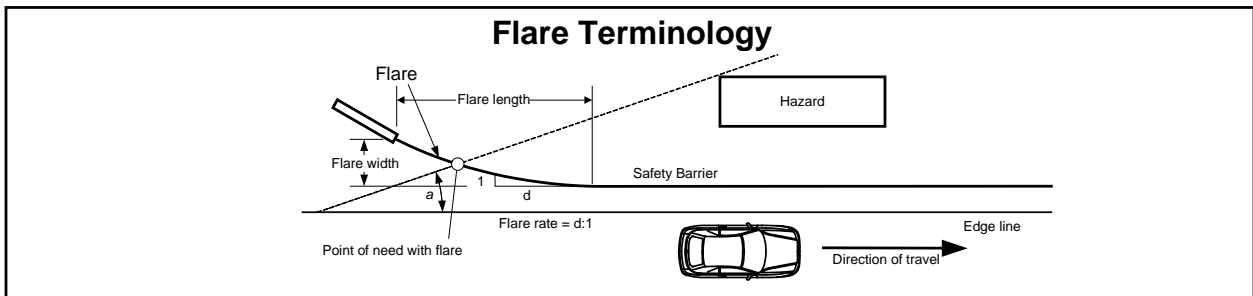
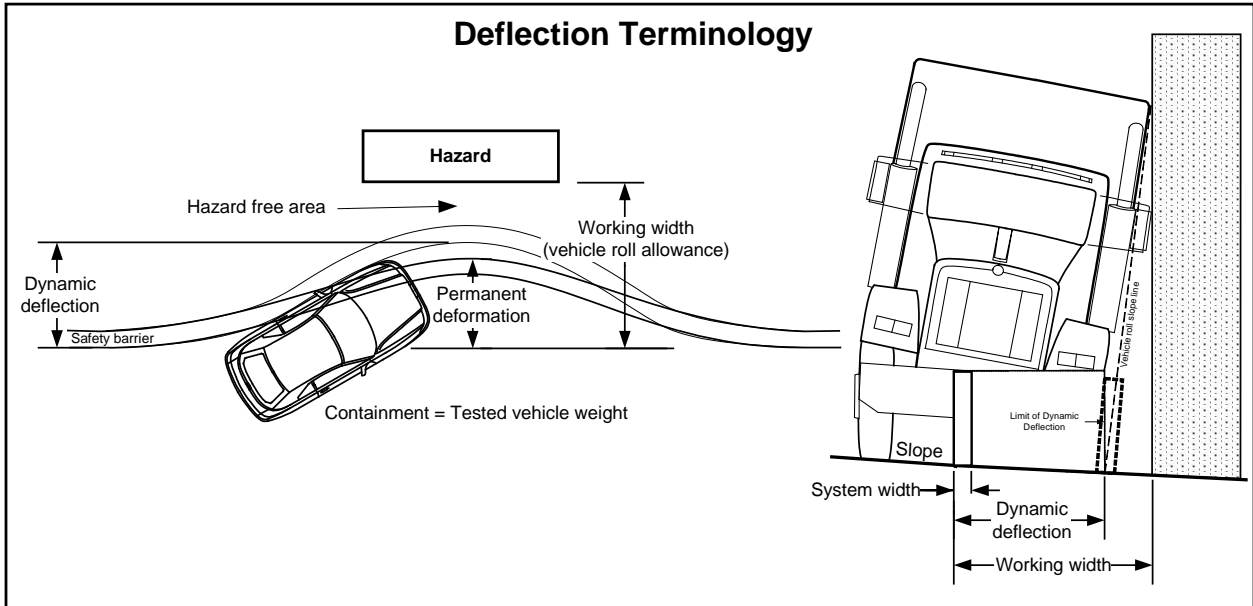
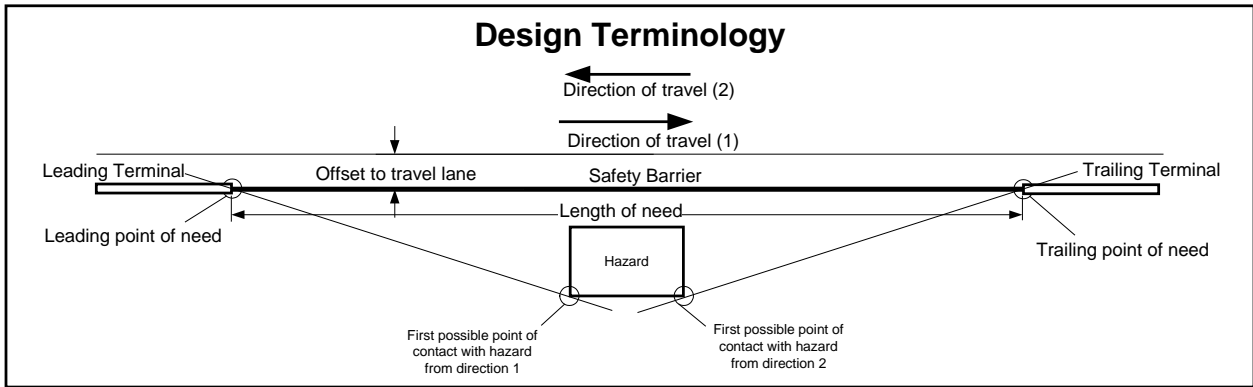
Status	Accepted – May be used on the classified road network. These acceptance conditions take precedence over any instructions in the Product Manual.
Variants accepted	<ul style="list-style-type: none"> • 3.66 metre T-LOK 350 F-TYPE Concrete Safety Barrier - Temporary. • 5.40 metre T-LOK 350 F-TYPE Concrete Safety Barrier - Temporary.
Variants NOT accepted	<ul style="list-style-type: none"> • 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)	80 km/h.	
Tested containment (kg)	2,000 kg at 100 km/h and 25°.	
Adopted dynamic deflection (Nominal 2 tonne vehicle)	100 km/h	Not applicable.
	80 km/h	0.8 metres.
	70 km/h	0.6 metres.
	50 km/h	0.3 metres.
	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 the interface between the terminal and the barrier.	
Development length	Not applicable.	
Minimum length of barrier between terminals	20 metres.	
System width (m)	0.61 metres.	

System conditions	<ol style="list-style-type: none"> 1. Installation without a terminal listed below is NOT permitted. 2. Flaring across the clear zone without a terminal listed below is NOT permitted. 3. 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.
Terminal conditions	<ol style="list-style-type: none"> 1. QUADGUARD CZ <ul style="list-style-type: none"> • Permitted for use with T-LOK 350 F-TYPE Concrete Safety Barrier - Temporary. • May only be installed where reverse impacts are highly improbable and a risk assessment has been completed and steps undertaken to mitigate any risks identified. • Terminal must be anchored by pins in accordance with the installation instructions in the Product Manual. • The T-LOK 350 F-TYPE Concrete Safety Barrier - Temporary adjacent to the Quadguard CZ must be anchored to the pavement as required by the Product Manual. • An accepted transition must be used to connect the terminal to the barrier.

	<ul style="list-style-type: none"> • A terminal must be fitted to both ends of the barrier. • Permitted as a terminal on a flare. • See QUADGUARD CZ acceptance document for conditions of use. 						
Gore area use	Permitted – consider speed and deflection limitations.						
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)	3.2 metres.						
Flare rate (See Explanation of Terms diagram)	<table border="1"> <thead> <tr> <th>Speed</th> <th>Flare rate – Non-rigid barrier</th> </tr> </thead> <tbody> <tr> <td>80 km/h</td> <td>11:1</td> </tr> <tr> <td>70 km/h</td> <td>10:1</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Flare may be required on both leading and trailing ends of the barrier. • Must have a crash cushion terminal from the list above that is accepted for use on a flare. • Flare rates shown apply inside the shyline. Refer to Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers Table 6.5 for other situations. 	Speed	Flare rate – Non-rigid barrier	80 km/h	11:1	70 km/h	10:1
Speed	Flare rate – Non-rigid barrier						
80 km/h	11:1						
70 km/h	10:1						
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 T-LOK 350 F-TYPE Concrete Safety Barrier - Temporary 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	0.8 metres minimum distance between the edge of the barrier and the edge of an excavation. (Being the adopted dynamic deflection).						
Slope limit	Side slope limit: 20 Horizontal to 1 Vertical (5%). Longitudinal slope limit: Not specified						
Foundation pavement conditions	Concrete	Permitted.					
	Deep lift Asphaltic Concrete	Permitted.					
	Asphaltic concrete over granular pavement	Permitted.					
	Flush seal over granular pavement	Permitted.					
	Unsealed compacted formation	Permitted.					
	Natural surface	Not permitted.					
	Foundation pavement conditions must be smooth and free of snag points, kerbs or obstructions that may interfere with deflection of the barrier.						
Attachments and screens	Visual screens, debris screens, platforms for workers and other non-product hardware must not be attached to the product.						

	<p>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.</p> <p>Screens must not have horizontal members that present a risk of impaling errant vehicles that impact the product.</p>
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	<p>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:</p> <ul style="list-style-type: none"> • Name of the product. • Model or version details of the product, if applicable. • Manufacturer or distributor name. • Batch number, if applicable. • Serial number, if applicable. • Date of manufacture. <p>Traceability details must easily visible but unobtrusive and not be in a form that becomes prominent advertising. No advertising shall be displayed on the installation.</p> <p>Traceability must be in a form that will not be erased with use.</p>
Notes	<p>Acceptance is based on drawings SR0303016 Rev. C, SR0303017 Rev. D and the Product Manual supplied by the Proponent, dated August 2013. This acceptance will cease if there is any change in the product design or specifications.</p> <p>Only the Product Manual authorised by the Proponent shall be used in any marketing of the product.</p> <p>Acceptance of the T-LOK 350 F-TYPE Concrete Safety Barrier - Temporary does not place any obligation on the Road Agency, or its contractors, to purchase or use the product.</p> <p>The Austroads Safety Barrier Assessment Panel may periodically re-assess the T-LOK 350 F-TYPE Concrete Safety Barrier - Temporary. 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.</p>



Safety Barrier terminology.vsd

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