Safety Barrier Technical Conditions for Use

DB80 K150 Concrete Safety Barrier - Temporary

Issue Date: 20 July 2021 | **Supplier:** Jaybro Group

These conditions take precedence over any instructions in the Product Manual.

This document is a summary of the Austroads Safety Barrier Assessment Panel's assessment of the technical performance of the product against AS/NZS 3845 Parts 1 or 2 only. It does not consider procurement practices by individual Road Agencies.

The Austroads Safety Assessment Panel may at any time, withdraw or modify this Technical Conditions for Use without notice.

These acceptance conditions should be read in conjunction with the Product Manual and Austroads Guide to Road Design Part 6: Roadside Design, Safety and Barriers.

Acceptance of this product does not place any obligation on the Northern Territory Government or its contractors, to purchase or use the product.

Status	**Recommended for Acceptance**
Product accepted	DB80 K150 Concrete Safety Barrier – Temporary (2, 4 and 6 metre units) consisting of Type F shape steel reinforced concrete barriers with tension bar coupling system, joint rotation limiting wedges and without intermediate ground attachment. Variants Variants Variants that are NOT listed above are NOT recommended for acceptance.
Accepted speed	100k/h
Product manual reviewed	Revision 02c – 25 June 2021
Product manual	https://www.jaybro.com.au/deltabloc-db80-concrete-safety-barrier-6.html

Design Requirements

Containment Level	Point of Redirection		Tested Article Length (m)	Anchor/Post Spacing (m)	Dynamic Deflection (m)	Working Width (m)	Notes
	Leading (m)	Trailing (m)					
MASH TL3	29.2	29.2	61.17	Freestanding	1.44	1.94	

Approved Connections

An accepted end treatment must be provided at both ends of all barrier installations	
Public Domain Products	
W-Beam Guardrail	Not Permitted
Thrie-Beam Guardrail	Not Permitted
Concrete	Not Permitted

Proprietary Products	
SLED Plastic Water Filled Crash Cushion	• **The installation is restricted to an impact speed limit of 80 km/h or less**. • Refer to SLED Plastic Water Filled Crash Cushion Technical Conditions for Use. • The DB80 K150 to SLED Crash Cushion transition must be used to connect the crash cushion to the barrier. • This is a gating device.
SMART Crash Cushion	• Refer to SMART Crash Cushion Technical Conditions for Use. • The DB80 K150 barrier adjacent to the SMART Crash Cushion must be anchored to the pavement as required by the Product Manual. • The DB80 K150 to Smart Crash Cushion transition must be used to connect the crash cushion to the barrier. • Leading and trailing points of redirection are considered to be 0. • Reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented.
ABSORB-M Crash Cushion	• **The installation is restricted to an impact speed of 80 km/h or less.** • Refer to Absorb-M Crash Cushion Technical Conditions for Use. • The DB80 K150 to Absorb-M Crash Cushion transition must be used to connect the crash cushion to the barrier. • This is a gating device.
UNIVERSAL TAU-M Crash Cushion	• Refer Universal Tau-M Crash Cushion Technical Conditions for Use. • The DB80 K150 to Universal TAU-M Crash Cushion transition must be used to connect the crash cushion to the barrier. • Leading and trailing points of redirection are considered to be 0. • Reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g.: bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented.
LEGACY: UNIVERSAL TAU-II Crash Cushion	• **LEGACY status recommended from 1 January 2021.** • Refer Universal Tau-II Crash Cushion Technical Conditions for Use. • The DB80 K150 barrier adjacent to the Universal Tau-II Crash Cushion must be anchored to the pavement as required by the Product Manual. • The DB80 K150 to Universal TAU-II Crash Cushion transition must be used to connect the crash cushion to the barrier. • Leading and trailing points of redirection are considered to be 0. • Reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented.
LEGACY: QUADGUARD CZ Crash Cushion	• **LEGACY status recommended from 1 January 2021.** • Refer to QUADGUARD CZ Crash Cushion Technical Conditions for Use. • The DB80 K150 Concrete Safety Barrier adjacent to the Quadguard CZ Crash Cushion must be anchored to the pavement as required by the product manual. • The DB80 K150 to Quadguard CZ Crash Cushion transition must be used to connect the crash cushion to the barrier. • Leading and trailing points of redirection are considered to be 0. • Reverse impacts into the transition section can produce a greater occupant severity value than preferred. Where reverse impacts are possible (e.g. bi-directional traffic), a risk assessment must be completed and steps to mitigate the likelihood of reverse impact should be implemented.

LEGACY: ABSORB 350 Plastic Terminal	• **LEGACY status recommended from 1 January 2021.** • **The installation is restricted to an impact speed of 70 km/h or less.** • Refer to ABSORB 350 Terminal Technical Conditions for Use. • The DB80 K150 to AB350 Terminal transition must be used to connect the terminal to the barrier. • This is a gating device

Design Guidance

Minimum installation length	60 metres between crash cushions/terminals (tested article)
System width (m)	0.57
Minimum distance to excavation (m)	1.44 – measured from the face of the barrier on the works side
Slope limit	7%
Systems conditions	1. Use of 2 metre units is restricted to tight radius curves and emergency openings. 2. Installation on top of a kerb is not recommended.
Gore area use	Permitted
Pedestrian area use	Permitted
Cycleway use	Permitted
Frequent impact likely	Permitted
Remote location	Permitted
Median use	Permitted

Foundation Pavement Conditions					
Pavement Type	**Use**	**Max Accepted Impact Speed (km/h)**	**Post/Pin Spacing (m)**	**Post/Pin Type**	**Pavement Construction**
Concrete	Permitted	100	<u>Freestanding</u> Foundation pavement conditions must be smooth and free of snag points, kerbs or obstructions that may interfere with the operation of the product		
Deep lift asphaltic concrete					
Asphaltic concrete over granular pavement					
Flush seal over granular pavement					
Unsealed compacted formation					

Note: Installation in pavement conditions not permitted above have not been justified to the Panel's satisfaction.