

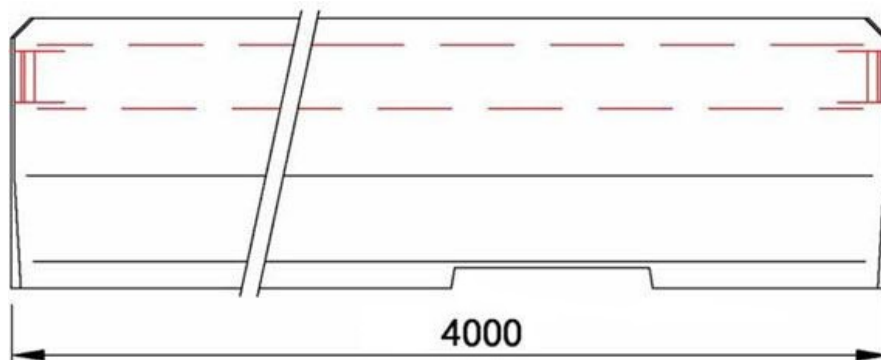
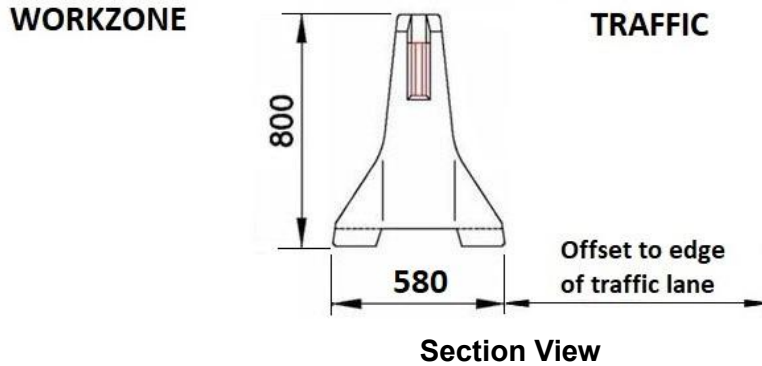
DB80 K150 CONCRETE SAFETY BARRIER - TEMPORARY

REVISION REGISTER

Revision	Description	Date
1	Issued for use.	16/01/2020
1A	Acceptance for connection to Quadguard CZ, TAU-II and SMART crash cushions added.	22/10/2020
1B	Update terminals, conditions and manual.	9/08/2021
1C	Supplier details updated	10/10/2024
1D	Installation Manual updated, TAU-XR terminal added, NCHRP 350 rated terminals removed, Safelink transition added, Zero Debris Concrete units added, and use of 2 m long units clarified.	20/03/2026

DB80 K150 is a freestanding temporary concrete barrier (2, 4 and 6 metre long units) consisting of Type F shape steel reinforced concrete barrier units with a tension bar coupling system, joint rotation limiting wedges and without intermediate ground attachment.

Drawings:



DB80 K150 CONCRETE SAFETY BARRIER - TEMPORARY



Section and Joint Photographs



Photographs of joint wedges

Ownership:

Delta Bloc International GmbH
www.deltabloc.com

Supplier:

Jaybro Group Pty Ltd
29 Penelope Crescent
Arndell Park, NSW 2148
Ph 1300 885 364
www.jaybro.com.au

Test Level: Approved to MASH TL3.

Test Level	Test Description	Deflection	Working Width
MASH - TL3	2270 kg vehicle at 100 km/h 25° impact angle	1.44 m	1.94 m

Note that while the DB80 K150 Concrete Safety Barrier – Temporary has passed crash testing to MASH TL 3, the barrier system when connected to approved terminals are not accepted at 100 km/h

Configuration:

- Units must be interconnected using patented couplings and requires a sufficient length to resist impact.

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Design Considerations:

- Design to be in accordance with the DB80 K-150 Portable Concrete Barrier Installation Manual Version 2025/01.
- The barrier is designed to resist loadings by deflection, so the units should be free to move. The barrier shall not be placed onto a mortar or a concrete blinding as this may overload the connections between the units.
- It is recommended that the barrier should as a minimum be offset from the edge of traffic lane by:
 - traffic speed 40 km/h or less - 0.2 m;
 - traffic speed 41 to 60 km/h - 0.3 m;
 - traffic speed 61 to 80 km/h - 0.5m.
- Barrier length must be sufficient to protect the hazard.
- Kerbing is not to be placed in front of the barrier.
- Kerbing should not be placed behind the barrier within the deflection limits of the system.
- Barrier shall not be placed on top of kerbing as this negates the effects of the profile.
- The approach to the barrier should be a trafficable running surface at a slope of 7% or flatter clear of objects and grade changes to allow an errant vehicle to hit the barrier at an appropriate height.
- When designing a DB80 K150 barrier the flare rates used shall be those for a rigid barrier, to minimise impact angles.

Minimum Length:

60 m excluding terminals.

Terminals permitted:

1. SMART crash cushion

- The installation is restricted to a posted speed of 80 km/h or less.
- 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 DB80 K150 barrier units adjacent to the crash cushion 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.

2. TAU-M & TAU-XR crash cushions

- The installation is restricted to a posted speed of 80 km/h or less.
- 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 DB80 K150 barrier units adjacent to the crash cushion 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.

3. ABSORB-M

- The installation is restricted to a design speed of 80km/h or less (i.e. posted at 70 km/h or less).

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- The ABSORB-M transition to DB80 K150 Barrier must be used to connect the terminal to the barrier.
- Permitted as a terminal on a flare.

4. SLED End Terminal

- The installation is restricted to a design speed of 80km/h or less (i.e. posted at 70 km/h or less).
- The SLED transition to DB80 K150 Barrier must be used to connect the terminal to the barrier.
- Permitted as a terminal on a flare.

The following terminals are no longer accepted.

- Quadguard CZ
- TAU-II crash cushion
- ABSORB 350

Point of Redirection:

The point of redirection shall be at the nose of the pinned crash cushion, at both ends; or if the trailing end doesn't form a hazard and does not include a pinned crash cushion, then 32.5 m upstream of the trailing end.

If an ABSORB-M or SLED End Terminal is used then the point of redirection shall be 29.2 m from the leading or trailing end, not including the terminals.

Limitations:

- The use of DB80 K150 barrier is limited to work site situations and units shall be interconnected using the patented coupling.
- Objects should not be placed on top of the barrier as they are designed to move under impact. "Gawk" screens are not acceptable.
- The minimum radius that the DB80 K150 barrier can be installed on is 80 m using 4 m units, and 120 m using the 6 m units.
- The use of 2 m units is restricted to tight radius curves and emergency openings. Where 2 m units are used the posted speed should be restricted to a design speed of 60 km/h or less (posted at 50 km/h or less) – Refer Austroads Technical Advice SBTA-23-002.
- Zero Debris Concrete units are available. These are not permitted to be connected to standard DB80 K150 units.
- May be connected to DB80 T150S units using the Safelink transition. If connected, the full barrier run is only considered to be MASH TL 3.

Installation and Maintenance Requirements:

In accordance with the DB80 K-150 Portable Concrete Barrier Installation Manual Version 2025/01.

Parts to be Replaced after Impact:

Units may need to be repaired after impact or replaced depending on the extent of damage.

Parts Typically Re-Useable after Impact:

Undamaged units.

References:

Refer to Main Roads file 09/518.