

# REBLOC 80SAH\_12 CONCRETE SAFETY BARRIER - TEMPORARY

## REVISION REGISTER

Revision	Description	Date
1	Issued for use.	30/01/2023
1A	Supplier changed, installation manual updated, accepted terminals updated, transition added and pavement conditions updated.	20/03/2026

REBLOC 80SAH\_12 is a freestanding temporary concrete barrier (12 metre units) that must be anchored at each end. REBLOC 80SAH\_12 consists of steel reinforced concrete barrier units using protruding couplings and without intermediate ground attachment.

REBLOC 80SAH\_4 is a freestanding temporary concrete barrier (4 metre units). It is approved for use by Main Roads WA, with conditions under a separate design sheet.

REBLOC 80SAH\_12\_8B is a temporary concrete barrier, where each 12 metre unit (the same units as REBLOC 80SAH\_12) is anchored. It is approved for use by Main Roads WA, with conditions under a separate design sheet.

### Drawings:

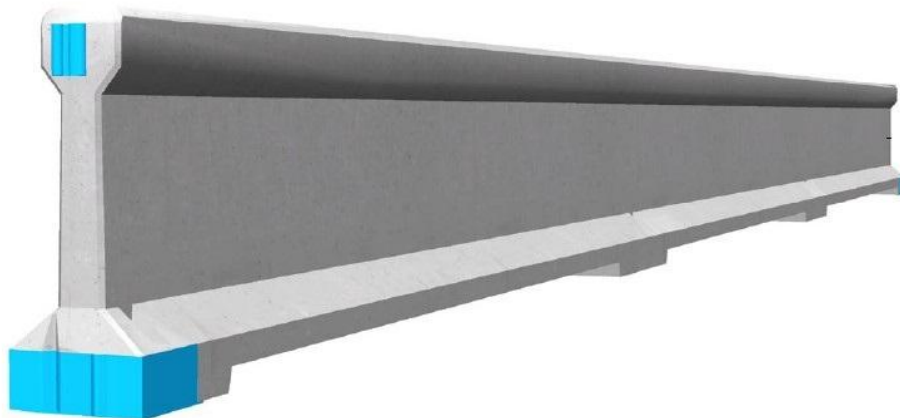
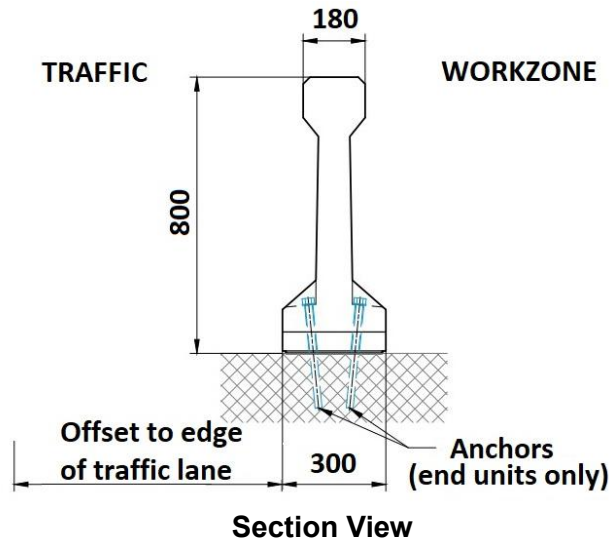
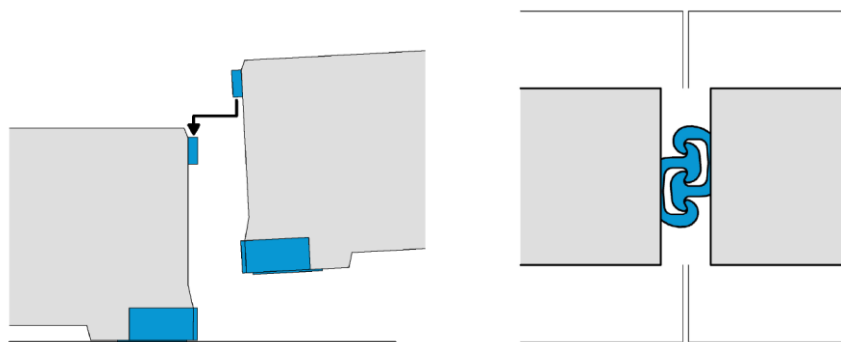


Image of 12 m long REBLOC 80SAH\_12 unit

# REBLOC 80SAH\_12 CONCRETE SAFETY BARRIER - TEMPORARY



Photograph of REBLOC 80SAH\_12 Units



Images of REBLOC 80SAH\_12 Joints

**Ownership:**  
REBLOC GmbH

**Supplier:**  
Onsite Rental Group  
Unit 6, 170 Burnside Road  
Stapylton, QLD 4208  
Email: Warwick.weeks@onsite.com.au

**Test Level:** Crash tested to MASH TL 3 and MASH TL 4.

Test Level	Test Description	Deflection	Working Width
MASH – TL 3	2270 kg vehicle at 100 km/h 25° impact angle	1.31 m	1.56 m
MASH – TL 4	10000 kg vehicle at 90 km/h 15° impact angle	1.70 m	3.23 m

Note that while the REBLOC 80SAH\_12 Concrete Safety Barrier has passed crash testing to MASH TL 3 and TL 4, the barrier system when connected to approved terminals is not accepted at 100 km/h.

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## Configuration:

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

## Design Considerations:

- Design to be in accordance with the document “Installation Instructions REBLOC® Precast Concrete Safety Barrier – REBLOC 80SAH\_12 (TL3 / TL4)” – Version 2.6, dated 11/2025.
- 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 - 0.5 m.
- 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 10% or flatter clear of objects and grade changes to allow an errant vehicle to hit the barrier at an appropriate height.
- When designing a REBLOC 80SAH\_12 barrier the flare rates used shall be those for a rigid barrier, to minimise impact angles.

## Minimum Length:

Lengths as crash tested (excluding terminals):

MASH TL 3 – minimum length = 108 m

MASH TL 4 – minimum length = 156 m

## 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 REBLOC 80SAH\_12 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.

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- The REBLOC 80SAH\_12 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. Quadguard M10 CZ 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 REBLOC 80SAH\_12 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.

### **Point of Redirection:**

The point of redirection for MASH TL 3 conditions shall be the interface between the barrier and the end treatment.

The point of redirection for MASH TL 4 conditions shall be 70.5 m from the leading end of the REBLOC 80SAH\_12 barrier and 85.5 m from the trailing end of the REBLOC 80SAH\_12 barrier.

### **Limitations:**

- The use of REBLOC 80SAH\_12 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 REBLOC 80SAH\_12 barrier can be installed on is 260 m.
- To be used where pavement consists of:
  - Minimum 200 mm thick reinforced or unreinforced concrete,
  - Minimum 250 mm thick deep lift asphalt or
  - Minimum 150 mm thick asphalt over 150 mm basecourse.

For pavements not meeting these requirements design advice shall be sought from the Supplier.

- Anchoring details consist of 300 mm long Excalibur HSB 20/300 screwbolts.
- May be connected to REBLOC 80SAH\_12\_8B barrier with the accepted transition. If connected, the full barrier run is only considered to be MASH TL 3.

### **Installation and Maintenance Requirements:**

In accordance with the document "Installation Instructions REBLOC® Precast Concrete Safety Barrier – REBLOC 80SAH\_12 (TL3 / TL4)" – Version 2.6, dated 11/2025.

### **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 22/7665.