

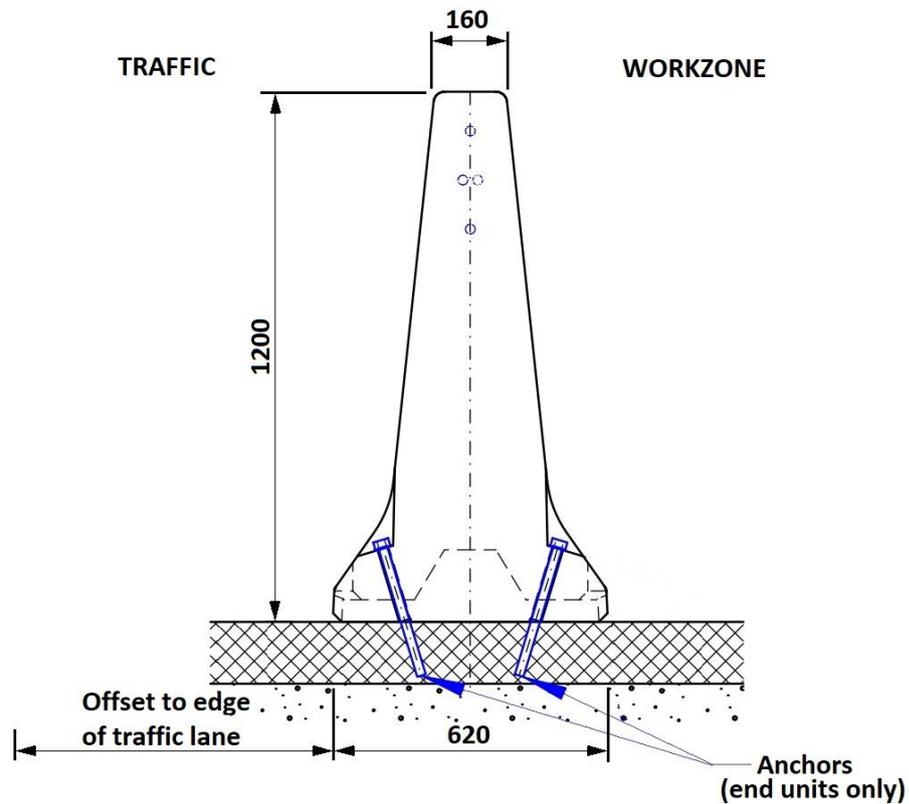
# REBLOC 120FA\_6\_SF CONCRETE SAFETY BARRIER - TEMPORARY

## REVISION REGISTER

Revision	Description	Date
1	Issued for use.	30/01/2023

REBLOC 120FA\_6\_SF is a freestanding temporary concrete barrier (6 metre units) that must be anchored at each end. REBLOC 120FA\_6\_SF consists of steel reinforced concrete barrier units using protruding couplings and without intermediate ground attachment.

### Drawings:



Section View

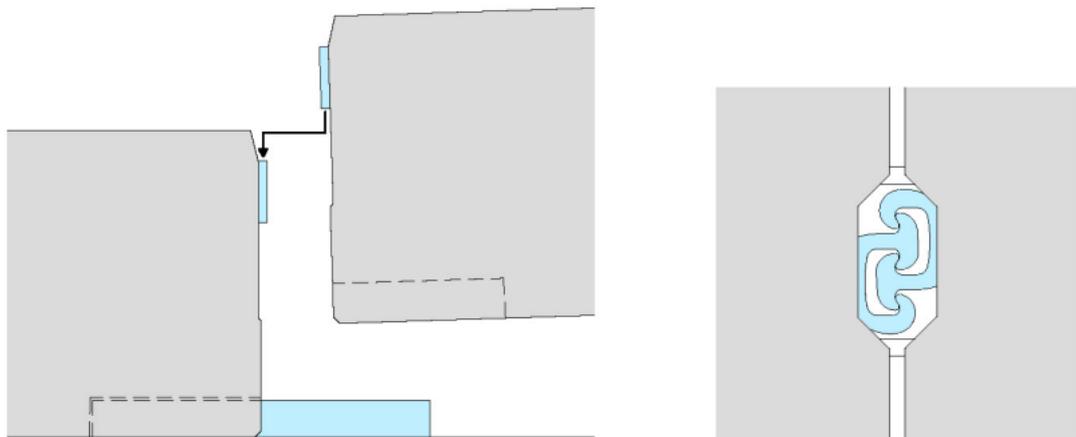


Image of 6 m long REBLOC 120FA\_6\_SF unit

# REBLOC 120FA\_6\_SF CONCRETE SAFETY BARRIER - TEMPORARY



**Photograph of REBLOC 120FA\_6\_SF Units**



**Images of REBLOC 120FA\_6\_SF Joints**

**Ownership:**  
REBLOC GmbH

**Supplier:**  
Hill & Smith Pty Ltd T/A HS Roads  
Unit 6, 170 Burnside Road  
Ormeau, QLD 4208  
Email: [sales@hsroads.com.au](mailto:sales@hsroads.com.au)

**Test Level:** Crash tested to MASH TL 3 and MASH TL 5.

Test Level	Test Description	Deflection	Working Width
MASH – TL 3	2270 kg vehicle at 100 km/h 25° impact angle	0.40 m	1.00 m
MASH – TL 5	36000 kg vehicle at 80 km/h 15° impact angle	1.58 m	2.29 m

## REBLOC 120FA\_6\_SF CONCRETE SAFETY BARRIER - TEMPORARY

Note that while the REBLOC 120FA\_6\_SF Concrete Safety Barrier has passed crash testing to MASH TL 3 and TL 5, the barrier system when connected to approved terminals is not accepted at 100km/h.

### 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 120FA\_6\_SF" - Version 1.0, dated 10/2021.
- 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 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 120FA\_6\_SF 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 = 102 m

MASH TL 5 – minimum length = 102 m

### Terminals permitted:

#### 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 120FA\_6\_SF 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.

## **REBLOC 120FA\_6\_SF CONCRETE SAFETY BARRIER - TEMPORARY**

The point of redirection for MASH TL 5 conditions shall be 48.3 m from the leading end of the REBLOC 120FA\_6\_SF barrier and 53.7 m from the trailing end of the REBLOC 120FA\_6\_SF barrier.

### **Limitations:**

- The use of REBLOC 120FA\_6\_SF 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 120FA\_6\_SF barrier can be installed on is 150 m.
- To be used where pavement consists of:
  - Minimum 140 mm thick reinforced or unreinforced concrete,
  - Minimum 140 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.

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

In accordance with the document "Installation Instructions REBLOC® Precast Concrete Safety Barrier – REBLOC 120FA\_6\_SF" - Version 1.0, dated 10/2021.

### **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 22/7640.