RIDERPRO CONTINUOUS MOTORCYCLIST PROTECTION SYSTEM

REVISION REGISTER

Revision	Description	Date
1	Issued for use.	4/04/2022
1 A	Bracket for connection to Sentry W-	15/12/2023
	Beam modified. Supplier details	
	updated. Manual reference updated.	

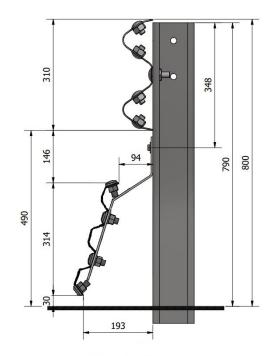
The RiderPro Continuous Motorcyclist Protection System (CMPS) is a safety device aimed at reducing the crash severity for errant motorcyclists impacting the posts of a W-Beam guardrail system. RiderPro is the Australasian name for the Italian product "Motorail". It is accepted for use by Main Roads WA, when connected to Sentry W-Beam or Sentry TL4 Thrie Beam, under the following conditions:

Photographs:

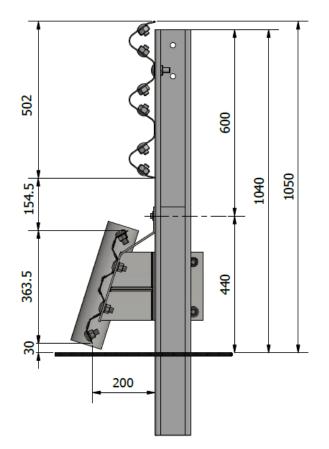


Rear view of RiderPro connected to Sentry W-Beam

Drawing:



Cross section of RiderPro connected to Sentry W-Beam



Cross section of RiderPro connected to Sentry TL4 Thrie Beam (End Terminal and Mounting Bracket shown)

Supplier: Safe Direction Pty Ltd Unit 2, 5 Simpson Close, Smeaton Grange, NSW 2567 Ph: (02) 4648 0394 https://www.safedirection.com.au/

Test Level:

- This system is tested with a sliding dummy impacting the rail at 60km/h at an angle of 30° and falls within the EN1317-8 Impact Severity Level I.
- The addition of the RiderPro Rail does not adversely affect the performance of the Sentry W-Beam system.

Configuration:

- RiderPro consists of a continuous horizontal steel rail mounted onto brackets below W-Beam or Thrie Beam rail at each post location. The RiderPro rail sections are spliced with bolts, washers and nuts. The rail splices are to be lapped in the direction of the adjacent traffic (i.e. the same way as the W-Beam barrier).
- The length of each RiderPro rail section is 4.32 m.

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Design Considerations:

- When connected to Sentry W-Beam, the design to be in accordance with the RiderPro Motorcycle Protection for ACP Sentry Barrier W Beam System -Product and Installation Manual, IM 035 Rev 01 – dated 31 January 2022.
- When connected to Sentry TL4 Thrie Beam, the design to be in accordance with the RiderPro Motorcycle Protection for ACP Sentry Barrier TL4 Thrie Beam System Product and Installation Manual, IM 001 Rev 01 dated 15 February 2021.
- The End Terminal must be fitted to both ends of the RiderPro rail.
- The gap between the bottom of the rail and the ground level should be 30mm.
- RiderPro may only be installed on Sentry W-Beam barrier or Sentry TL4 Thrie Beam barrier.
- The system should not be attached to the components of any end treatment.
- The cross slope shall be not greater than 10% for the area in front and below the system and this area should be free of humps or hollows.
- The batter hinge point should be a minimum of 600mm from the back of the posts.
- The system should not be installed behind or on top of kerbing.
- The End Terminals must not be within a curve.

Terminal Permitted

• The End Terminals must be fitted to both ends of the rail.

Limitations:

• The system has only been tested on straight sections, the performance on curved sections is unknown.

Installation and Maintenance:

 In accordance with the RiderPro Motorcycle Protection for ACP Sentry Barrier W Beam System - Product and Installation Manual, IM 035 Rev 01 – dated 31 January 2022 and the RiderPro Motorcycle Protection for ACP Sentry Barrier TL4 Thrie Beam System - Product and Installation Manual, IM 001 Rev 01 – dated 15 February 2021.

Parts to be Replaced after Impact:

• All damaged or deformed components must be replaced. Repaired components must not be used.

Parts Typically Re-Useable after Impact:

Undamaged components.

Reference:

• Main Roads WA file 22/2356