



# The innovative Steel Guardrail Barrier that provides superior motorist safety



EZY-GUARD 4 Roadside Safety Barrrier







## MASH Compliant Roadside Safety Barrier

**Ezy-Guard 4** is the next generation steel guardrail barrier. **Ezy-Guard 4** provides MASH TL3 and NCHRP-350 TL4 containment. The superior design offers rapid installation, improved motorist safety and more metres of barrier for your dollar.

Ezy-Guard 4 rails and Z-posts are manufactured from hot-rolled steel in accordance with AS/NZS 1594. The product is hot dip galvanised in accordance with AS/NZS 4680, leaving no surface untreated.

The Z-post profile shields post edges from vulnerable road users and provides sectional strength when driving through difficult ground conditions.







## **FEATURES**

#### • Fully Compliant to MASH TL3 and NCHRP-350 TL4

The MASH TL3 compliance demonstrates the systems ability to contain and redirect the 2,270kg pick-up truck travelling at 100km/h and 25 degrees impact.

#### • Rapid Installation & Repair

**Ezy-Guard 4** has fewer components to facilitate rapid installation.No blocking pieces or rail stiffeners are required. With a Z-post embedment depth of only 870mm, installation time is reduced providing significant cost savings. Fewer components to purchase also results in savings on freight costs.

#### • Soft Ride-Down Decelerations

An Ezy-Carriage is used to secure the w-beam rails to the Z-posts eliminating the requirement for blocking pieces and rail stiffening plates. This unique connection provides a soft ride-down for the occupants and smooth vehicle containment and redirection.

#### • Consideration for Vulnerable Road Users

**Ezy-Guard 4** features supporting Z-posts which contain smooth, rounded post edges and corners. In addition, the innovative design of Ezy-Guard 4 shields the top of the supporting Z-posts by positioning the top of the rail above the posts. This eliminates a dangerous snag point and is a significant safety benefit compared to existing safety barrier designs.

**Ezy-Guard 4** is fully crash tested and approved with Ingal MPR motorcyclist protection systems.

#### • Narrow Width

**Ezy-Guard 4** has a system width of only 200mm, conserving valuable formation width.

• Installation in Rock, Asphalt or Concrete Mowing Strips The design of the Z-post makes them suitable for installation in rock, asphalt or concrete mowing strips.

#### • Quality Materials and Manufacture

All rails, posts and carriages are hot-dipped galvanised to provide corrosion-resistance and durability.





## CRASH TEST DETAILS

**Ezy-Guard 4** Ezy-Guard 4 has been fully crash tested and evaluated according to the specifications for Test Level 3 (TL3) of the AASHTO Manual for Assessing Safety Hardware (MASH). The system has also been crash tested in accordance with NCHRP-350 Test Level 4, this is the containment of an 8000kg truck impacting the rail at 80km/h and 15°.

The MASH specification is an update to and supersedes NCHRP Report 350 for the purpose of evaluating new safety hardware devices. The MASH TL3 crash test matrix requires the following impacts;

- 1100kg car travelling at 100km/h and 25 degrees.
- 2270kg pick-up travelling at 100km/h and 25 degrees.

The MASH TL3 test condition represents a 13% to 18% increase in impact energy when compared to the superseded NCHRP 350 Test Level 3.

Specifications	
Ezy-Guard 4C Z-Post Length	1,650mm
Ezy-Guard 4 Z-Post Mass	12.5kg
Ezy-Guard 4 System Mass	18.6kg per metre
Rail Height Above Ground	787mm
Z-Post Height Above Ground	777mm
Post Spacing	1,905mm
Ezy-Guard 4 System Width	200mm
MASH TL3 Crash Test Deflection	1.65m
Surface Treatment	Galvanised to AS/NZS 4680





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## MASH Compliant Roadside Safety Barrier

## BENEFITS FOR VULNERABLE ROAD USERS

Vulnerable road users include motorcyclists, pedestrians, cyclists and other road users. **Ezy-Guard 4** has been designed to provide consideration to vulnerable road users as follows:

#### • Rounded Post Corners

The Z-post contains smooth, rounded post edges and corners mitigating the risk and severity of fractures and/or contusions.

#### • Energy Absorbing, Ductile Z-Posts

The Z-posts are designed to yield by bending near ground level. This bending action absorbs impact energy reducing the potential for post fracturing. A fractured or split guardrail post presents a significant laceration hazard to vulnerable road users.

The **Ezy-Guard 4** design does not contain any elements that become projectiles and there are no aggressive edges.

#### • Shielded Posts

The innovative design of **Ezy-Guard 4** shields the top of the supporting Z-posts by positioning the top of the rail above the posts. This eliminates dangerous snag points, reducing the potential for the barrier to dismount motorcyclists or cyclists. This is a significant safety benefit compared to traditional guardrail and cable barrier systems.





#### AUTHORISED RESELLER

