

Hire Barriers

Experts in Work-Zone Safety Barrier Solutions

High-Performance Portable Safety Barriers

MASH COMPLIANT



www.ingalcivil.co.nz

HighwayGuard™

TL4 Standard Portable Steel Safety Barrier

Low Deflection • Dependable • Economical to Transport

HighwayGuard™ MASH 16 TL-3 & TL-4 fully tested and compliant at 58m anchor spacing, providing rapid deployment with less anchoring.

The simple barrier system uses a single 6m module with integrated anchoring, drainage and forklift access points. The integral T-top design provides exceptional MASH TL-3 and TL-4 performance without the need for additional components.

The unique patented T-Connector can be left connected to one piece of barrier. Installation only requires another piece of barrier to be connected (in any direction). Any later barrier alterations or maintenance works are quick and simple.

MASH TL4 COMPLIANT

- Complies to NZTA Specification M23 Appendix C.
- Single 6m barrier module can be installed in 6, 12 or 18m lengths
- Optional angled barrier and T-Connector components
- Increased efficiencies in transportation and installation
- Narrow footprint > just 0.54m wide
- Rapid installation with flexible deployment, reconfiguration and removal made easy using the patented T-Connector
- Optional 2.5, 5 and 10° angle T-Connectors and radius sections - smoothly deal with challenging site conditions
- Wheelset option - ability to add wheels for easy barrier mobility.
- Integrated mounting points - quick attachment of screens, fencing, signs or other ancillary traffic equipment



BG800™

High-Performance Portable Steel Safety Barrier

The BG800™ portable steel barrier is the latest in road barrier technology, designed to protect both motorists and construction workers.

The BG800's unique stepped profile has proven to reduce damage to both vehicle and barrier during impact, minimising the need for repair or replacement. During impact, the BG800 provides an extremely shallow exit angle for the vehicle, minimising the risk of secondary accidents.

BG800's galvanised steel structure offers an expected life cycle of 25 years and with its exceptional durability, the need for replacement through handling or impact damage, unlike similar portable barriers, is greatly reduced.

MASH TL3 COMPLIANT

- Optional radius sections, fence panels, wheeled and gate sections
- Male and female connection system for quick installation
- Available in 6 or 12 metre sections
- Lightweight at 90kgs per metre
- Compliant high containment system to MASH TL-3 and NCHRP 350 TL-3 & TL-4
- Compliant to NZTA Specification M23 Appendix C.



QuadGuard® M10 CZ

Relocatable/Temporary Work-Zone QuadGuard

Protection • Security • Dependability



MASH TL3 COMPLIANT

- Compliant to MASH TL-3, AS/NZS 3845:1999
- Complies to NZTA Specification M23 Appendix C
- Only 34 anchors for NCHRP350 TL-3 (100km/h) performance
- 80% Reuseable
- Redirective & non-gating
- Best "Hazard Free Area" of 3m x 11m
- Multiple transitions available
- Fully-tested transition panels

Specifications (Test Level 3 System)

System Length	Effective Length	System Width
6.71m	6.30m	610mm



The QuadGuard® M10 CZ relocatable crash cushion offers the latest technology for shielding hazards 610mm to 915mm wide.

Each QuadGuard® M10 CZ System consists of crushable, energy-absorbing cartridges surrounded by a framework of Energy's exclusive steel Quad-Beam™ panels. These systems redefine NCHRP 350, Test Level 3 performance for redirective, non-gating attenuators.

The QuadGuard® M10 CZ System has successfully passed the complete NCHRP 350, Test Level 3 test matrix. Higher speed units are available.

During head-on design impacts, the QuadGuard® Systems telescope rearward and progressively crush the cartridges to absorb the energy of impact. When design impacted from the side, the QuadGuard® System safely redirects the errant vehicle back toward its original path without gating.

FEATURES AND BENEFITS

EASY TO INSTALL AND RELOCATE

The entire QuadGuard® M10 CZ system can be moved as a single unit. A cleverly designed Monorail Base eliminates the need for anchoring chains and tension cable, resulting in easier installation. Lifting brackets are built in, making for quicker position changes.

VERSATILE

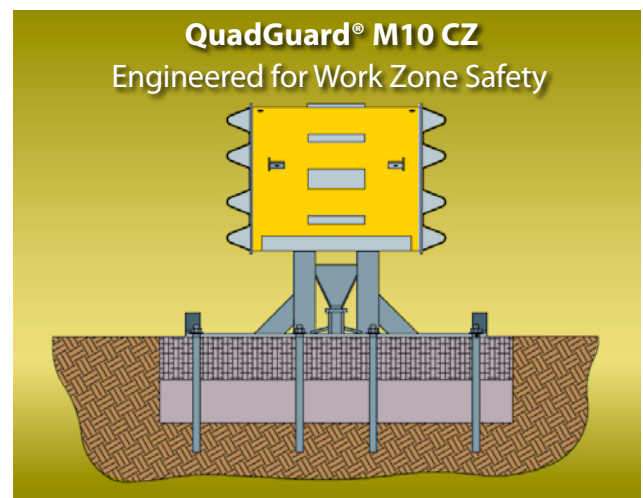
The QuadGuard® M10 CZ is able to shield hazards up to 910mm wide.

ENGINEERED FOR HIGH STRENGTH

Quad-Beam™ panels provide 30% higher beam strength than three beam panels.

DURABLE

High efficiency - 80% reusability after most design impacts.



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CIVIL PRODUCTS
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ArmorZone™

High-Performance Temporary Work-Zone Barrier

MASH TL2 COMPLIANT

The water-filled nature of the ArmorZone™ barrier simplifies its deployment and transportation while increasing safety during the installation process as the empty barriers only weigh 50 kg and are easily handled by two operators.

SAFETY

Provides work-zone protection to temporary construction sites and other roadside activities.

ATTRACTIVE

Economical to transport, fast to install and relocate.

SAFE

Crash tested to MASH TL2 and NCHRP-350 standards for speeds up to 70km/h.

RAPID INSTALLATION

Water filled barrier is rapidly deployed by only 2 personnel. Up to 156m transported per truck.



ArmorCade®

Temporary Delineator

MADE IN NEW ZEALAND

The latest solution for temporary pedestrian, cyclist and vehicular management. ArmorCade is made up of 2.0m long plastic units (MDPE) that join together using integral interlocking lugs to form a continuous delineator. Through innovative design, ArmorCade can be installed straight or with acute radius curves, up to 90 degrees if required.

ADAPTABLE

Innovative design for adaptable use.

EASY TO STORE

Units are stackable so they are easy to store in a small space.

COST SAVINGS

Low cost of procurement.

EASY TO INSTALL

Secure connection can be installed from straight up to a 90° curve.

