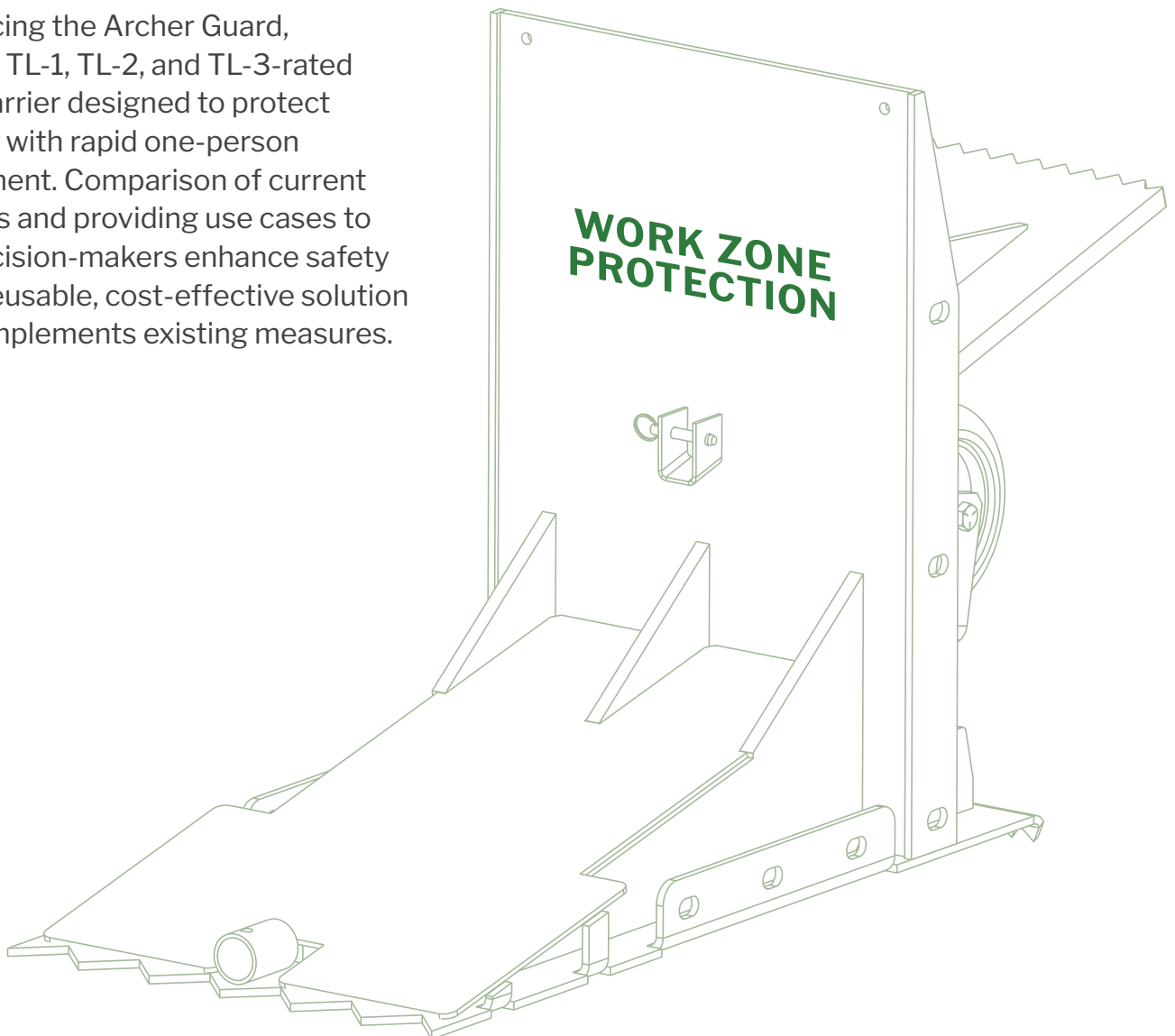


Archer Guard: Rapid Scalable Protection for Safer Work Zones

Introducing the Archer Guard, a MASH TL-1, TL-2, and TL-3-rated crash barrier designed to protect workers with rapid one-person deployment. Comparison of current methods and providing use cases to help decision-makers enhance safety with a reusable, cost-effective solution that complements existing measures.



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Introduction

Work zones require a combination of safety measures to protect workers and drivers. Current industry practices rely on Truck-Mounted Attenuators (TMAs), temporary concrete barriers, and passive traffic control devices such as cones and signage. For active, short-term construction zones and mobile operations, TMAs and passive traffic control devices are particularly effective where lane shifts and traffic redirection are necessary. However, these strategies present challenges in long-term or unmanned work zones because cost, deployment effort, and practical limitations reduce their effectiveness.

The Archer Guard is a MASH TL-1, TL-2, and TL-3-rated mobile barrier solution explicitly designed to protect workers in work zones. This easily deployed, unmanned safety system is a cost-effective solution that can be used in conjunction with, or as a complement to, TMAs when TMAs are too expensive, needed at other locations, or unsuitable for a project.



Current Solutions and Their Limitations



Truck-Mounted Attenuator (TMA)

Truck-mounted attenuators (TMAs) are crash cushions attached to the rear of a vehicle. They are installed on trucks to absorb the impact of vehicles colliding with them, thereby protecting workers and other road users. Because they require a dedicated vehicle, driver, and incumbent operational costs, they are expensive, making them cost-prohibitive for extended closures. Because drivers can maneuver around them, they don't provide 100% positive protection.



Concrete Barriers (Jersey Barriers)

Concrete barriers provide strong protection but demand heavy equipment and significant labor, limiting their flexibility in rapidly changing work environments. Their applicability is for long stretches of work zones or in narrow work zones and bridges because they require considerable clearance to be set up with heavy equipment. They are most effective in long-term, fixed installations.



Traffic Barrels, Cones, and Type III Barricades

Traffic barriers, cones, and Type III barriers effectively direct traffic, but they don't provide 100% positive protection because they lack stopping power. Further, drivers can drive around or move them, negating their effectiveness.

A Layered Solution

What is Archer Guard?

The Archer Guard is a modular, MASH-certified crash cushion system designed to enhance worker safety in construction zones. It consists of three interconnected Archer 1200 barriers linked by six 4-foot (1.2-meter) arrestor cables, creating a controlled impact zone that slows and stops errant vehicles before they reach workers.

How It Works

- **Deployment:** One person can deploy in 8 minutes. No heavy equipment is required.
- **Positive Protection:** One or more units can create a continuous barrier that cannot be driven around.
- **Seamless Integration:** Designed to integrate into buffer zones and restricted workspaces.
- **Active Technology:** Provides a physical deterrent to alert motorists.

Use Cases

The Archer Guard's high-visibility, immovable blockade is ideal for the following applications:

- Highway construction zones
- Bridge closures
- Paving and milling operations
- Nighttime road closures
- Closure of on and off ramps

How Archer Guard Complements TMAs

The Archer Guard is designed to provide supplemental protection for active work zones and ongoing static protection outside of work activity.

- TMAs are best for active work zones that require mobility.
- Archer Guard is optimal for static protection, freeing up TMAs for mobile operations.
- Utilizing both creates a layered, safer, economical solution.



Conclusion: An Effective Work Zone Safety Solution

The Archer Guard is a versatile, reusable safety solution that enhances work zone protection by preventing vehicle intrusions in high-risk areas. Requiring no heavy equipment, it is deployable by a single person in under 8 minutes. It serves as a cost-effective alternative when a TMA is unavailable or impractical. Its MASH-certified crash cushion system absorbs and dissipates impact energy, protecting both workers and drivers. Designed for long-term closures, bridge projects, and static work zones, the Archer Guard helps free up TMAs for mobile applications, ensuring better resource allocation and improved safety outcomes.



Use Case: Off-Ramp Closure in Detroit, MI. Deployed for 90 days with no incidents. No vehicle access. Replaced Type 3 barriers and orange barrels.

Appendix: FAQs

General Questions

What is the Archer Guard?

The Archer Guard is a MASH-certified frontal impact barrier system designed to protect workers in construction zones by preventing vehicle intrusions.

How does the Archer Guard improve work zone safety?

It provides positive protection by forming a physical barrier that absorbs impact, preventing errant vehicles from entering work zones to a controlled, non-lethal stop.

What makes the Archer Guard different from other safety solutions?

Unlike TMAs or temporary barriers, the Archer Guard is unmanned, reusable, and deployable in under 8 minutes, making it cost-effective and highly versatile.

Deployment & Functionality

How quickly can the Archer Guard be deployed?

A single person can deploy the Archer Guard in 8 minutes without requiring heavy equipment.

Can the Archer Guard be used in all types of work zones?

Yes, it is ideal for highway construction, bridge closures, paving operations, and nighttime road closures.

Does the Archer Guard require a power source or hydraulics?

No, it operates without electricity or hydraulics, making it easy to set up and relocate as needed.

Comparison to Other Solutions

How does the Archer Guard compare to a Truck-Mounted Attenuator (TMA)?

The Archer Guard provides static protection where a TMA may be too expensive, unavailable, or not suited for long-term closures.

Why is the Archer Guard better than traffic cones or barrels?

Unlike passive devices, the Archer Guard provides real protection by physically preventing vehicles from entering work zones. Its 700-pound weight ensures it cannot be displaced by a vehicle or manually lifted without the use of the Archer Hauler.

Is the Archer Guard a replacement for concrete barriers?

No, the Archer Guard is not a replacement for concrete barriers. Concrete barriers create a strong boundary along work zones and provide longitudinal protection. The Archer Guard provides frontal impact protection, stopping vehicles before they reach workers. Using both together improves safety, with concrete barriers along the perimeter and the Archer Guard at the front of the work zone.

Cost & Efficiency

How does the Archer Guard help reduce costs?

It eliminates the need for a dedicated driver (as required with TMAs), lowers labor costs, and reduces damage to work vehicles by absorbing impact.

Can the Archer Guard be reused after impact?

Yes, it is durable and designed for multiple deployments, making it a long-term investment in work zone safety.

Does using the Archer Guard improve operational efficiency?

Absolutely. It frees up TMAs for mobile operations while reducing setup time and maintenance needs.

Compliance & Regulations

Is the Archer Guard MASH-certified?

Yes, it is MASH TL-1, TL-2, and TL-3 rated, ensuring compliance with the highest industry safety standards.

Does the Archer Guard meet DOT safety requirements?

Yes, it aligns with DOT-approved safety measures and is widely recognized for work zone compliance.

Where can I learn more or request a quote?

Visit BetterBarriers.com for detailed specifications, pricing, and deployment guidance.



About Meridian Rapid Defense Group

Meridian Rapid Defense Group (MRDG) engineers and manufactures advanced mobile barrier systems that keep people, communities, and places safer. Our flagship Archer 1200 barrier delivers industry-leading impact resistance with unmatched portability, exemplifying our commitment to innovative security solutions. All MRDG products, services, and technologies are certified to the highest safety standards, including the U.S. Department of Homeland Security's SAFETY Act.