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# WHO WE ARE

# **WE ARE PSS:**

For over 40 years, PSS has crafted breakthrough solutions that can safeguard worksites and save lives. We are powered by dedicated, creative people and fueled by continuous innovation.

Our focus is on the right-of-way — that point in time and place where motorists, workers, and pedestrians intersect and interact. Our goal is to design products and services that provide safe travels so that everyone can return home safely at the end of the day.

We don't just talk about Innovations for Safety® — we live it. We believe that audacious ideas and hard work produce outstanding results.

Our important work on, around, and through the right-of-way will result in real solutions for real people. Through continuous innovation and with consultation, education, and training, we work to save lives today, tomorrow, and for decades to come.











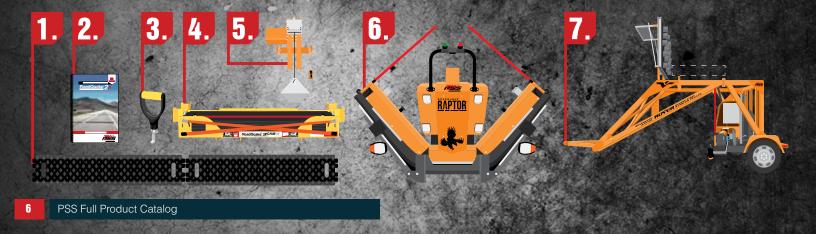


# ROADQUAKE™ SAFETY SYSTEM

# **ROADQUAKE™ SAFETY SYSTEM:**

- RoadQuake<sup>™</sup> Temporary Portable Rumble Strip (RQ2F): RQ2F is the fundamental component of RoadQuake Safety System. Designed to reduce accidents and save lives, RQ2F alerts drivers to changing road conditions.
- RoadQuake Best Practices Guide provides users with deployment, retrieval, and maintenance practices to achieve optimal performance of RQ2F.
- RoadQuake T-Handle reduces the potential for superficial injury caused by manually lifting and carrying RQ2F.

- CRIB<sup>™</sup> Carriers helps workers deploy and retrieve RQ2F. Reduces workers' time in live traffic.
- 5. RoadQuake<sup>™</sup> Retrieval System pulls RQ2F into CRIB with little manual effort. Reduces workers' exposure to live traffic and reduces manual exertion, possible injury.
- 6. RAPTOR™ Rumble Strip Handling Machine transports, deploys, retrieves, and realigns RQ2F in work zones. Keeps workers off the road and safer.
- **7. RAPTOR Rover™** operational trailer for RAPTOR that mounts to half-ton or greater trucks.



### **DEPLOYMENT AND RETRIEVAL METHODS:**

RoadQuake<sup>™</sup> TPRS may be deployed and retrieved manually, or by using the RoadQuake handling equipment for faster, easier, and safer use.

- 1. Manual RoadQuake handling using **T-Handle**.
- RoadQuake 2F CRIB<sup>™</sup> Cargo Carrier transports RoadQuake and can assist in the deployment and retrieval of RQ2F.
- RoadQuake Retrieval System pulls RQ2F from the road and back into CRIB.\*
- 4. RoadQuake RAPTOR<sup>™</sup> Rumble Strip Handling Machine transports, deploys, realigns, and retrieves RQ2F while keeping workers safely off the road.
- 5. RAPTOR Rover<sup>™</sup> Rumble Strip Handling Trailer is designed to carry RAPTOR behind any pick-up truck, half-ton or larger.











<sup>\*</sup>CRIB and Retrieval System sold separately.

# ROADQUAKE™ 2F APPLICATIONS

# **ROADQUAKE TPRS APPLICATIONS:**

In 2008, PSS introduced our first commercially viable RoadQuake Temporary Portable Rumble Strip.

Since then, users have deployed RQ2F arrays in thousands of work zones. Collectively, those strips have experienced well in excess of 5 billion vehicle hits, from motorcycles and sub-compacts to farm equipment and 80,000 lb. semi-trailers.

Field evidence overwhelmingly demonstrates that RQ2F effectively alerts distracted drivers, possibly reducing crashes and saving lives in work zones.

On any given day RoadQuake is used in two-lane, two-way flagging operations across the country. This application is now an accepted safety countermeasure by Departments of Transportation.



### **EXPANDED RQ2F APPLICATIONS:**

With RAPTOR Rumble Strip Handling Machine, we can now recommend RQ2F in work zones beyond two-lane, two-way flagging applications. With RAPTOR, users can effectively deploy RQ2F in high-speed, high volume, multilane closures. Other life saving applications such as moving or mobile operations can now be considered.

RQ2F and our specialized handling equipment can help further protect workers, and reduce exposure to live traffic.

Please visit **pss-innovations.com/our-team** to contact your PSS Regional Manager for a product demonstration.



# **ROADQUAKE™ 2F FEATURES**



### TEMPORARY:

- » Ideal for short duration work zones where daily installation and removal is required.
- » Will not damage roadway surface

# **DURABLE:**

- Three to five year life under typical conditions.
- Suitable for use in the rain and in temperatures as low as 0° F (-18° C) and as high as 180° F (82° C).
- For use in posted speed limits up to 80 MPH.
- » Three-year prorated limited warranty

### **EASE OF INSTALLATION:**

- » No installation equipment needed. A crew of two can install an array in minutes
- » Does not require glue or fastners.
- » Quick installation and removal.



# **ADDITIONAL ROADQUAKE 2F FEATURES:**

- » RoadQuake 2F generates the similar level of sound and vibration as milled-in shoulder and centerline rumble strips.
- Covers the entire width of a lane when unfolded.
- » Folds to 66" length. Weighs 105 lbs.
- Molded handles for installation and handling.
- The non-slip textured surface helps to keep RoadQuake 2F TPRS in place.
- » Bevels on leading and trailing edges allow motorcycles to traverse the RQ2F safer.
- » Meets Section 6F.87 of the MUTCD, 2009 Edition.
- In addition to the color black, white and orange strips are available for usage in the United States. Other colors such as yellow are available to our customers outside the United States.
- » Molded-in red stripe and "This Side Down" label on the bottom-side of strips indicate orientation for correct installation.

Patents: http://bit.ly/3cHVTp8

# ROADQUAKE™ RAPTOR™

### **RAPTOR TPRS HANDLING MACHINE:**

RAPTOR is an automated handling machine that transports, deploys, realigns, and retrieves RoadQuake 2F in work zones while keeping your workers off the road.

The machine eliminates the need for workers to manually lift RQ2F and deploys a three strip array in less than 90 seconds.

### **RAPTOR IMPROVES WORK ZONE SAFETY:**

RoadQuake allows for expanded application of RQ2F, making it ideal for most short-duration, moving, and mobile work zones.

RAPTOR mounts to the front of the vehicle. The back of the vehicle is free for other safety equipment like a Truck or Trailer Mounted Attenuator (TMA) and/or a flashing arrow board.











# **FUNCTIONS OF RAPTOR:**

In operation mode, these images demonstrate the deployment of RQ2F.

- 1. The Magnet Bar pulls out one RQ2F from the tray.
- 2. The Magnet Bar moves up and out from the tray.
- 3. The Magnet Bar lowers the RQ2F to the deployment location in the roadway.
- 4. The Magnet Bar releases the RQ2F onto the road surface.

Repeat process until installation is complete.

Patents: http://bit.ly/3cHVTp8









<sup>\*</sup>To understand all of the functions of RAPTOR, please review the RAPTOR Instruction Manual.

# RAPTOR ROVER

# RAPTOR ROVER RUMBLE STRIP HANDLING TRAILER:

The introduction of RAPTOR Rumble Strip Handling Machine revolutionized the deployment, realignment, and retrieval of RoadQuake 2F Temporary Portable Rumble Strips (TPRS). By keeping workers out of live traffic, the use of RoadQuake TPRS was easier and safer than ever before.

PSS now introduces the RAPTOR Rover to expand fleet compatibility. Instead of requiring a 3,000 lb front-end capacity truck, RAPTOR Rover allows for a pick-up truck (half-ton or greater) to transport, deploy, and retrieve RoadQuake 2F.

RAPTOR Rover is designed specifically for the transport of RAPTOR and mounts to the back of the operating vehicle rather than the front. RAPTORs mounted on Rover use the same remote control and monitor feed functions as the original RAPTOR.

With RAPTOR Rover, more work vehicles are now compatible for automated TPRS use, protecting your crew and making their work more efficient.





This product is a prototype and is subject to design changes.

# RAPTOR ROVER DIMENSIONS

# RAPTOR ROVER DIMENSIONS (SIDE VIEW):



Folded Arrow Board option can add > 1' of height. Raised Arrow Board option can add > 5' of height.

# **RAPTOR ROVER SPECIFICATIONS:**

- » Designed exlusively for the transport, deployment and retrieval of RoadQuake2F TPRS.
- There is no change to RAPTOR functions.
- » Single Axel Capacity: ~7,000 lbs
- Towing weight: ~4,960 lbs (including loaded RAPTOR)

# **RAPTOR ROVER DIMENSIONS (REAR VIEW):**



- >> Tongue weight: ~800 lbs
- » On-board battery bank
- Batteries may be charged by solar panel or trailer plug
- Arrow Board optional

# **CRIB™ CARRIERS**



**QUANTITY AND TYPE OF** 

**QUIK-DETACH** 

One Black Quik-Detach

# ROADQUAKE<sup>™</sup> 2F CRIB<sup>™</sup> FEATURES:

CRIB is a fully integrated cargo carrier designed specifically for the safe transport, deployment, removal, storage, and safekeeping of RQ2F.

### **CRIB Carrier Sizes:**

- » CRIB-6 holds six RQ2F
- » CRIB-9 holds nine RQ2F
- » CRIB-12 holds twelve RQ2F

Each CRIB carries a multiple of three strips, enough for the deployment and retrieval of up to four, three-strip arrays.

- Shortens workers' time in traffic to deploy and retrieve strips, compared to manual handling.
- » Deployment and removal of RQ2F can be a one-person job.
- » CRIB mounts to exterior of the vehicle. Strips do not consume space in vehicle.
- Easier to place RQ2F in alignment with the deployment location.
- » CRIB eliminates the inverted installation of RQ2F

CRIB-9 One Blue Quik-Detach CRIB-12 30" on center Two Black Quik-Detach 30" on center

CRIB MOUNTING WITH QUIK-DETACH:

PRODUCT NAME

AND IMAGE

CRIB-6

Patents: http://bit.ly/3cHVTp8

# **CRIB™ SPECIFICATIONS**

|                                 | CRIB-6  | CRIB-9                       | CRIB-12                      |
|---------------------------------|---|------------------------------|------------------------------|
| Dimensions (WxHxL)              | 19 5/8" x 15" x 74 1/4"   | 19 5/8" x 19 9/16" x 74 1/4" | 19 5/8" x 24 5/16" x 74 1/4" |
| TPRS Capacity                   | 6   | 9                            | 12                           |
| Weight (Empty)                  | 92 lbs (41 kg)  | 111 lbs (50 kg)              | 133 lbs (60 kg)              |
| TPRS Weight                     | 630 lbs (286 kg)  | 945 lbs (429 kg)             | 1,260 lbs (572 kg)           |
| Total Weight (TPRS & Carrier)   | 722 lbs (327 kg)  | 1,056 lbs (479 kg)           | 1,393 lbs (632 kg)           |
| Mounting / Receiver             | Class IV or V   | Class V, or Custom by User   | Custom by User               |
| Pintle Mount                    | Included (2")   | Included (2 1/2")            | Not Included                 |
| Quik-Detach                     | 1 Each Included (Black)   | 1 Each Included (Blue)       | 2 Each Included (Black)      |
| Roadquake <sup>™</sup> T-Handle | 2 Each Included   | 2 Each Included              | 2 Each Included              |
| Guide Markers                   | 36" Included (91 cm)  | 48" Included (122 cm)        | 48" Included (122 cm)        |
| Breakaway Pin Kit (1 TPRS)      | 1 Each Included   | 1 Each Included              | 1 Each Included              |
| NOTICE:                         | UNDERSTAND THE CAPACITIES AND CAPABILITIES OF YOUR VEHICLE PRIOR TO MOUNTING CRIB |                              |                              |

# **CRIB™ FEATURES**

### **CRIB FEATURES:**

- Guide Fins\*: The fins guide RQ2F in and out of CRIB for easier handling.
  - » CRIB-6: stack a max. of four loaded CRIB-6.
  - » CRIB-9: stack a max. of three CRIB-9.
  - » CRIB-12: stack a max. of two CRIB-12.
- **2. Guide Markers:** Provides visual queues when the vehicle is traveling in reverse.
- T-Handle Holder: CRIB stores and transports two RoadQuake T-Handles, which allow for easier manual lifting of RQ2F.
- **4. Quik-Detach Mounting System:** Expidites the removal and installation of the CRIB Carrier.
- Retractable Ratchet Straps: Straps extend from attached housing to secure RQ2F strips during transport.

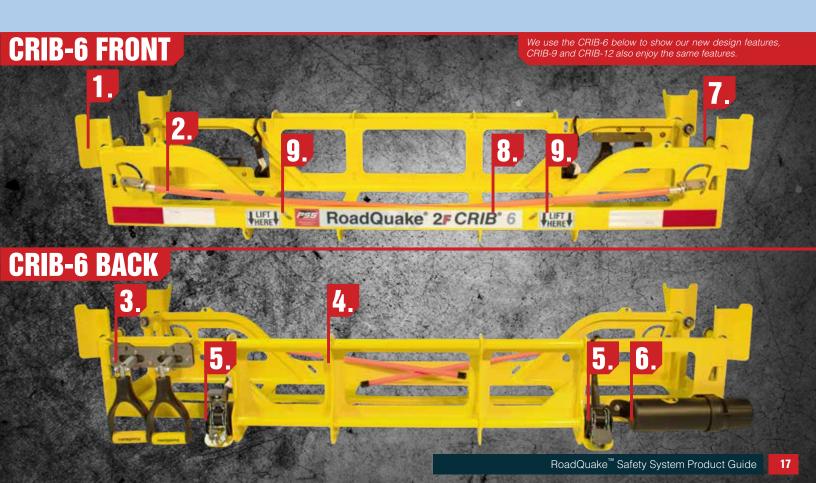
- **6. Literature Canister:** Water-tight canister holds a print copy of our RQ2F Best Practices Guide and a Breakaway Pin Connection Replacement Kit. A Best Practices and pin kit with each CRIB shipment.
- 7. Roller Bearings: Allow for easier retrieval and deployment of RQ2F in and out of the CRIB.
- QR Code: Scanning the link on the front label directs to a dedicated web page instructing on appropriate RQ2F spacing.
- "Lift Here" Labels: Decals on the front of CRIB indicating proper fork placement for forklift transport.





<sup>\*</sup>New CRIB models do not stack with older models.

<sup>\*\*</sup>Quik Detach for CRIB-6 (black) works for CRIB-6 and CRIB-9. Quik Detach for CRIB-9 (blue) works for CRIB-6. CRIB-9. and CRIB-12.



# ROADQUAKE™2F RETRIEVAL SYSTEM

### **RETRIEVAL SYSTEM FEATURES:**

The Retrieval System removes RoadQuake 2F™ Temporary Portable Rumble Strips (RQ2F) from the roadway with minor worker exposure or effort. Retrieval System incorporates a winch to aid in the removal of RQ2F.

- Features a powerful 4.1 HP, 12 V electric motor that pulls a 105 lb. RQ2F into CRIB in less than ten seconds.
- » Reduces workers' exposure to live traffic. Also reduces manual handling and exertion.
- » Removal of RQ2F can be a one-person operation.
- Attaches quickly to either end of CRIB for retrieval of strips from either driver or passenger side.
- » Power pack unit is a self-contained, charging electrical system. Charges from a 12-Volt automotive system. Maintains charge when plugged into running host vehicle. Power pack unit is weather-resistant.
- » For use with CRIB-6, CRIB-9, and CRIB-12.

RoadQuake™ 2F Retrieval System is designed to only retrieve PSS RoadQuake 2F Temporary Portable Rumble Strips from the roadway.

Patents: http://bit.ly/3cHVTp8





# **RETRIEVAL SYSTEM COMPONENTS:**

- Retrieval Plate
- 2. Retrieval Winch
- **3**. Retrieval Rope (30 Feet)
- 4. Power Pack Unit
- 5. Power Pack Charger
- 6. Back-up Wired Controller
- 7. Wireless Remote Controller
- 8. Roller Bracket Assembly (Two Each)
- 9. Roller Bracket Clamps (Four Each)
- 10. Durable Pelican™ Case







# **BOARDWALK RAMP**

# TEMPORARY PEDESTRIAN MODULAR RAMP:

BoardWalk RAMP provides accessible, detectable, and safe guidance where temporary access routes cross curbs at locations other than permanent sidewalk crossings. BoardWalk RAMP is installed perpendicular to the curb.

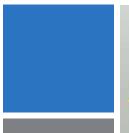
BoardWalk RAMP replaces curb transitions and temporary ramps that are non-compliant.

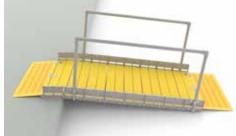
# **ADA-COMPLIANT FEATURES:**

- » Provides 1" rise for 12" run.
- » Modular Edge Support Castings provide guidance for canes and walkers. Castings accommodate handrails, which provide detectable guidance.
- » Modular Edge Support Castings accommodate handrail assemblies
- » Provided lumber has a slip-resistant surface.
- » Innovative design allows for normal water drainage.
- » Approach Plates are 48" W x 18" L and feature slipresistant surface. 48" width is wheelchair friendly.

### **MODULAR FEATURES:**

- Modular sections connect for ramp length needed. No hardware required. Ramp rated at 800 lbs. capacity for 48" maximum width. Sections weigh 30 lbs.
- » Modular cast-iron Edge Support Castings measure 8" x 12". Designed for 2" x 6" lumber.
- » Metal Approach Plates feature slip-resistant tape.









# **BOARDWALK PLATFORM**

### **BOARDWALK BI-DIRECTIONAL PLATFORM:**

BoardWalk Bi-Directional Platform is designed for use with BoardWalk RAMP when the alternate pedestrian pathway is parallel to the curb or sidewalk.

# **PLATFORM FEATURES:**

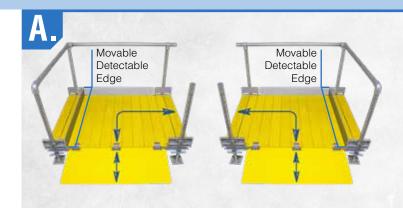
Platform features the same components as BoardWalk RAMP. See previous page.

Platform measures 4' x 5' and is wheelchair friendly.

Four adjustable Screw Jacks support the Platform, and can accommodate curb heights from 2" to 14". For RAMPs exceeding nine sections use a Midway Support, as shown on Page 24.

The Platform is easily converted from left-turning to right-turning orientation. To change the guiding direction, attach the Moveable Detectable Edge and the horizontal handrail to the corresponding side of the platform. See Figure A.

Figure B shows BoardWalk RAMP with Bi-Directional Platforms installed in the curb lane parallel to the sidewalk. The curb lane serves as the temporary pedestrian pathway. The RAMP and the Platform are installed at either end of the sidewalk closure.





# **BOARDWALK SYSTEM**

### **RAMP HEIGHT SPECIFICATIONS:**

The correct ramp slope is a 1:12 ratio.

The number of modular ramp sections determines the slope of BoardWalk RAMP. The number of sections differs when using BoardWalk RAMP or BoardWalk RAMP and Platform. The number of sections required is not the same.

To determine the correct number of ramp sections for either BoardWalk RAMP or RAMP with Platform:

- Which orientation of ramp do you require?
- What is the height of the curb at the installation site?





Perpendicular to Curb

Parallel to Curb

Refer to the chart on this page to determine the number of sections required per ramp orientation.

| To maintain a 1:12 ratio, how many RAMP sections are needed? |               |          |  |  |
|--|---------------|----------|--|--|
| Curb Height (In.)  | Perpendicular | Parallel |  |  |
| 1  | 3             | N/A      |  |  |
| 2  | 4             | 3        |  |  |
| 3  | 5             | 3        |  |  |
| 4  | 6             | 3        |  |  |
| 5  | 7             | 4        |  |  |
| 6  | 8             | 5        |  |  |
| 7  | 9             | 6        |  |  |
| 8  | 10*           | 7        |  |  |
| 9  | 11*           | 8        |  |  |
| 10   | 12*           | 9        |  |  |
| 11   | 13*           | 10*      |  |  |
| 12   | 14*           | 11*      |  |  |
| 13   | 15*           | 12*      |  |  |

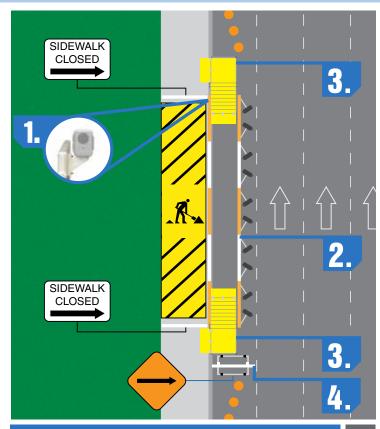
<sup>\*</sup> Midway supports required for RAMPs longer than 9 sections.

# **BOARDWALK SYSTEM**

# **SIDEWALK CLOSURE COMPONENTS:**

In typical mid-block sidewalk closures, the curb lane is closed to vehicular traffic and used as a temporary pedestrian pathway. Pedestrians leave the sidewalk at one end, traverse the temporary pathway around the closure, and return to the sidewalk.

- SafetyWall sidewalk closure features a "Sidewalk Closed" sign and a Parakeet Audible Information Device (AID). The "Sidewalk Closed" sign directs pedestrians with vision to use the temporary pathway, while Parakeet broadcasts audible directions to pedestrians that are visually impaired.
- SafetyWall provides accessible, detectable, continuous guidance and separates pedestrians from the sidewalk construction and the traffic lane. BoardWalk System then returns pedestrians to the sidewalk.
- BoardWalk System, located at both ends of the pathway, provides an accessible, detectable, continuous curb transition for pedestrians, especially those that are BVI
- 4. LaneGard 3<sup>™</sup> Folding Type III Barricade advises vehicular traffic that the curb lane is closed. (See section X to learn more about our barricades.)



# RAPIDRAMP THE EXPRESS ADA RAMP

### **RAPIDRAMP: THE EXPRESS ADA RAMP**

Designed for up to a 6" curb\*, RapidRamp can be deployed quickly and easily.

The RapidRamp is a portable, ADA-Compliant ramp engineered with a lightweight design that reduces installation and removal time. Consisting of six sections that easily interlock, **with no hardware required**, RapidRamp stores conveniently in truck beds and most vans.

RapidRamp delivers an immediate solution to overcome vertical challenges, including accessibility around short-duration job sites and transportation of heavy loads with a cart or dolly.

The RapidRamp is designed to deliver a firm, stable, and slip-resistant pathway over curb transitions.

RapidRamp is rated to a 1,000 lb. capacity, greatly increasing its practical applications. For shorter curbs, RapidRamp can be installed with fewer than six sections.





# RAPIDRAMP THE EXPRESS ADA RAMP

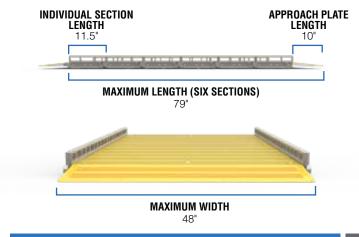




# **RAPIDRAMP BENEFITS**

- » Ramp consists of six sections with slip-resistant surfaces
- » Rated to support a load of 1,000 lbs.
- » Ramp mid-sections weigh approximately 22 lbs.
- » End-sections (with the approach lip) weighs 55 lbs.
- » Sections are 48" wide

# **RAPIDRAMP DIMENSIONS**



# SAFETYWALL™ PEDESTRIAN BARRICADE

# SAFETYWALL™ ADA-COMPLIANT BARRICADE:

**Dimensions:** 3" W x 36.25" H x 74" L

Weight: 35 lbs

**Material:** Made with high-density polyethylene with UV stabilizers to provide years of reliable service life. The foldable steel legs deliver increased stability with ballast.

SafetyWall is a continuous, interlocking device ideal for creating accessible work zones. Our barricade meets ADA guidelines and MUTCD 2009 Edition as a sidewalk closure barricade or longitudinal channelizer. SafetyWall provides the same level of pedestrian guidance as concrete or water-filled barrier, but is easier to transport, install, and remove.

SafetyWall accepts retroreflective sheeting, meeting all ASTM D4956-19 specifications, on one or both sides.



### **SAFETYWALL™ FEATURES:**

- SafetyWall provides continuous guidance. Hand-Trailing top is smooth, safer for hand guidance.
- 2. Accepts Audible Information Devices, Warning Lights.
- SafetyWall is an interlocking device. Assembles quickly.
   No tools required. A two-person crew can easily create an accessible work zone in minutes.
- Centrally located carry handle allows for easy transport of one or two SafetyWall units.
- The nesting feature provides for convenient stacking and storage.
- 6. Continuous bottom for guidance with cane. Gap between bottom of unit and ground is less than 2", reducing potential for trapping cane tips.
- Common vertical plane eliminates obstacles in the walkway for safer, continuous guidance.
- Legs fold in for easy storage. Recessed bottom edge allows for easy deployment of both legs.

Patents: http://bit.ly/3cHVTp8

# SAFETYWALL™ PEDESTRIAN BARRICADE



(MASH) Test Level: 3

# SAFETYRAIL™ PEDESTRIAN BARRICADE

# SAFETYRAIL™ADA-COMPLIANT BARRICADE:

SafetyRail is a continuous, interlocking device designed for creating accessible work zones. This device adheres to ADA guidelines and MUTCD 2009 Edition as a sidewalk closure barricade and longitudinal channelizer.

# **SAFETYRAIL FEATURES:**

- 1. Audible Information Device or Warning Light Mount.
- SafetyRail provides continuous hand guidance using the Wave™ Guide Rail.
- Oversized fill hole for internal sand ballast.
- Top and bottom bushings hold Wave Guide Rail in place. No installation tools required.
- Molded-in lug for easy stacking also located by the fill hole and the molded handle.
- **6.** Common vertical plane eliminates obstacles in the walkway for safer, continuous guidance.
- Molded handle for easy transport.
- 8. Support for optional ballast.
- Measures 1.5" from ground, reducing potential for trapping cane tips.

9 FHWA ELIGIBILITY LETTER: Letter: WZ-359 Tested to Manual for Assessing Safety Hardware (MASH) Test Level: 3

Patents: http://bit.ly/3cHVT8

# SAFETYRAIL™ PEDESTRIAN BARRICADE

# **SAFETYRAIL FEATURES:**

**Dimensions**: 3.25" W x 38" H x 24" L at base **Weight:** 7 lbs empty or up to 25 lbs of ballast

Material: High-density polyethylene and UV inhibitors

### **PSS WAVE GUIDE RAIL:**

Made from high-density polyethylene with UV inhibitors and is a vailable in four-foot or six-foot lengths. Encapsulated ends eliminate cane or hand snagging hazards.

Wave Guide Rail accepts retroreflective sheeting, meeting all ASTM D4956-19 specifications, on one or both sides.





SafetyRail is designed for use with PSS Wave™ Guide Rail. The upper Wave Guide Rail is smooth, continuous, and safe for trailing of the hand. The lower Wave Guide Rail measures 1.5" from the ground, reducing potential for trapped cane tips. Wave "notch" design keeps guide rails securely in bushings.

# PARAKEET A.I.D.

### **PARAKEET BENEFITS:**

When work zones disrupt normal pedestrian pathways such as sidewalks, visual directions for alternative paths do not adequately communicate information to visually impaired pedestrians. Parakeet™ enhances accessibility for blind individuals by offering information in a format specifically designed to cater to their needs.

The Parakeet is an Audible Information Device (AID) designed for custom messaging with a built-in speaker and microphone.

When roads and sidewalks are closed, Parakeet allows for up to 60-seconds of pre-recorded instructions to the alternate path for visually impaired pedestrians.

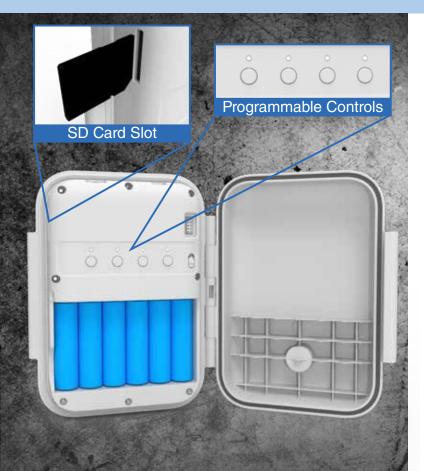
The device's speaker is motion activated, responding to pedestrians as they approach. This motion detection is customizable, allowing for longer or shorter fields of detection as needed. Additionally, the built-in microphone automatically adjusts its decibel level based on surrounding noise throughout the day.





Patents: http://bit.ly/3cHVT8

# PARAKEET A.I.D.



# **PARAKEET FEATURES & BENEFITS:**

- » Motion detection
- » Automatic decibel adjustment
- » Up to 60-second recording
- » Mounts to a standard traffic control devices
- » Rechargable batteries
- » Water resistent housing
- » Tamper resistant casing



# 



# CRASHGARD™ SAND BARREL SYSTEM

# **CRASHGARD™ FEATURES:**

CrashGard™ Sand Barrel System is a non-redirective, gating sand barrel, or crash cushion.

### **DURABLE:**

CrashGard is blow-molded from high molecular, high-density polyethylene plastic (HLMI/HDPE) that produces a stronger sand barrel. UV stabilizers maximize product life. Color-stable pigments resist fading. CrashGard withstands minor impacts during routine handling:

- » Filling or dumping sand.
- » Loading or unloading a truck.
- » Nesting for storage and transport.

# PRACTICAL:

Designed for easy transport:

- » Barrels nest easily for convenient storage.
- » Squared bottom accepts forklifts.
- » Tiered top accepts CrashGard Hoist.

Designed for 4" and 6" wide retroreflective sheeting.

Retroreflective sheeting meets all state and federal specifications and is available in Engineer, Hi-Intensity, and Fluorescent grades.



### **UNIVERSAL:**

One CrashGard Sand Barrel accommodates all weight requirements:

With insert: 200, 400, 700, or 1,400 lbs.

» Without insert: 2,100 lbs.

One barrel eliminates the need to stock different sizes of barrels, accommodates all weight requirements, and reduces inventory costs and confusion.

CrashGard is designed for use in posted speed limits from 25-75 mph. Contact us for other speeds.

See CrashGard Manual for recommended design arrays by speed limit.



### CRASHGARD HOIST SAND BARREL LIFT RING:

CrashGard Hoist provides safer and easier transport of CrashGard Sand Barrel System.

- Transport of barrels can be a one-person operation.
- Operates with a simple scissor action.
- » Made of welded steel. Weighs 140 lbs.
- » Powder-coated paint helps deter corrosion.



# CRASHGARD™ FHWA LETTERS

### **FHWA LETTERS:**

In March, 2007, the Federal Highway Administration (FHWA), issued PSS Acceptance Letter CC-97 for CrashGard™ Sand Barrel System. CC-97 acknowledges that CrashGard passed NCHRP-350 Crash Tests. The letter confirms that CrashGard meets the criteria of NCHRP-350 Test Level 3 for non-redirective, gating crash cushions.

In March 2009, FHWA issued CC-97-A, an amendment to the original letter. The amendment accepts the use of CrashGard in "mixed array" configurations.

AASHTO Manual for Assessing Safety Hardware (MASH), test requirements supersede NCHRP-350 test requirements. Crash cushions are required to comply with MASH test guidelines by December 31, 2018.

FHWA issued Eligibility Letter CC-145 for CrashGard in September 2018. In CC-145 FHWA agrees CrashGard meets MASH test and evaluation requirements. CC-145 also states FHWA finds CrashGard eligible "for reimbursement under the Federal-Aid Highway Program."





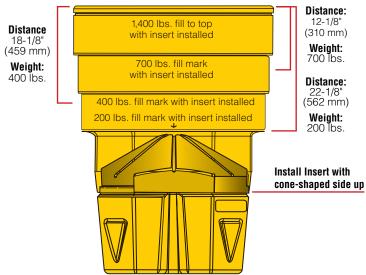


# MASH SAND-FILL MEASUREMENTS

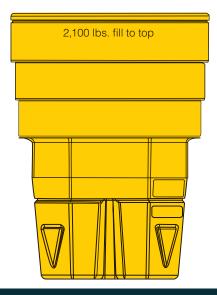
### **MASH REQUIREMENTS:**

Barrels shipped after April 1, 2019 show a "1,400 lbs. fill to top with insert installed" mark at the top of the barrel.

To Meet MASH requirements:



The 2,100 lbs. barrel does not require an Insert to meet MASH requirements. Fill with sand to the "2,100 lbs. fill to top" mark.



MASH: Install Insert for 200, 400, 700, 1,400 lbs. Fill to marks.

MASH: No Insert for 2,100 lbs. Fill to top.

# LIFEGARD II™ TRAFFIC DRUM ( C)



### LIFEGARD II™ DRUM FEATURES:

- Manufactured from high-density polyethylene plastic with UV inhibitors. Molded handle accommodates Type A and C warning lights.
- Intermittent Stacking Rims prevent drums from locking when stacked and protect sheeting.
  - Anti-Roll Feature: A flat section of the flange (not shown) slows drum rolling if impacted.
- 3. Designed for up to five bands of retroreflective sheeting. Sheeting available in 4" and 6" widths. Sheeting meets all state and federal specifications and is available in Engineer, Hi-Intensity, and Fluorescent grades.
- Designed for use with rubber tire collar ballast. Internal rubber base, 25 or 40 lbs, also available. Ballast made from 100% recycled material.
- 5. "Hot Stamp" ink permeates plastic and resists damage during normal use. (Stencil ink lays on surface, does not permeate plastic.) Add your company logo to the bottom of LifeGard II or 42" Navigator to better identify your product and reduce possible theft.

Patents: http://bit.ly/3cHVTp8

# **NAVIGATOR™ CHANNELIZERS**



### NAVIGATOR™ CHANNELIZER FEATURES:

- Manufactured from low-density polyethylene plastic with UV inhibitors. The handle also serves as a "roping-off" mount.
- Molded handle accepts Types A and C warning lights and audible information devices.
- 3. 42" Navigator accommodates up to five bands of 4" or 6" sheeting, 28" Navigator (see insert) up to three bands. Retroreflective sheeting meets all state and federal specifications and is available in Engineer, Hi-Intensity, and Fluorescent grades.
- 4. "Hot Stamp" ink permeates plastic and resists damage during normal use. (Stencil ink lays on surface, does not permeate plastic.) Add your company logo to the bottom of LifeGard II or 42" Navigator to better identify your product and reduce possible theft.
- Navigator shown with hexagonal base. Available in 10 or 16 lb. weights. 30 lb. base available. Manufactured from 100% recycled material.

Patents: http://bit.ly/3cHVTp8





SECTION



# BARRICADES & WAVET CENTERBOARD

# **LANEGARD3™ FOLDING TYPE III**

### LANEGARD3™ FEATURES:

LaneGard's one-piece design folds for storage and transport and unfolds for use, taking only seconds for set up and tear down. Weighing only 17 lbs without centerboards, one person can easily fold and unfold LaneGard 3 for transport and deployment.

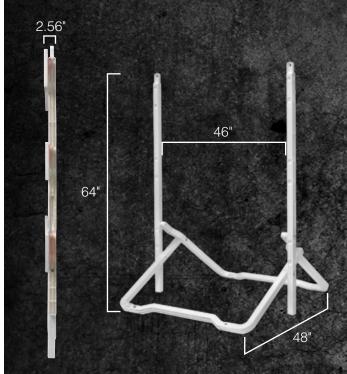
LaneGard3 is designed for use with PSS Wave<sup>™</sup> Centerboards. Available in 4', 6', and 8' lengths. Retroreflective sheeting is available in Engineer, Hi-Intensity, and Diamond Grades. Retroreflective sheeting meets all state and federal specifications. Wave accepts sheeting on one or both sides. See page 44 for more details.

Patents: http://bit.ly/3cHVTp8



# **LANEGARD3™ FOLDING SPECIFICATIONS:**

When folded, LaneGard measures less than 3" thick, including PSS Wave Centerboards.



# LANEGARDS" UPRIGHT FEATURES:

Once assembled, always assembled, LaneGard3 folds for transport and storage and unfolds for use with PSS Wave Centerboards attached. Measures less than 3" thick when folded.

- Molded-in Warning Light Mount accepts LED Types A and C warning lights.
- Molded through-holes recessed for flushmounted hardware.
- Use sandbags or PSS tire collars for additiona ballast.
- Anti-Skid Feet can provide additional stability Two per crossbar.

# **FHWA LETTER:**

Letter: WZ-336 Tested to Manual for Assessing Safety Hardware (MASH) Test Level: 3



# ANCHOR™ MAST™ TYPE III BARRICADE

# ANCHOR" MAST" FEATURES:

Anchor Mast Type III Barricade consists of Anchor Mast Upright, Anchor Base, and Wave Centerboard.

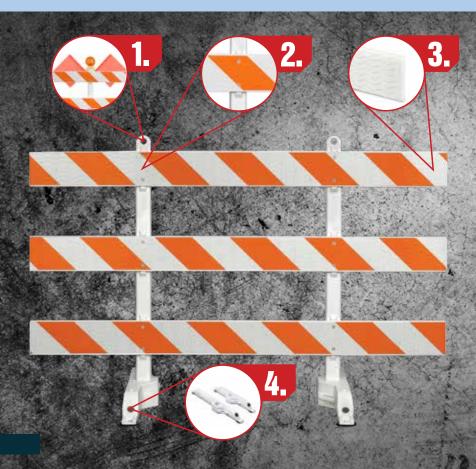
Manufactured from high-density polyethylene plastic with UV stabilizers.

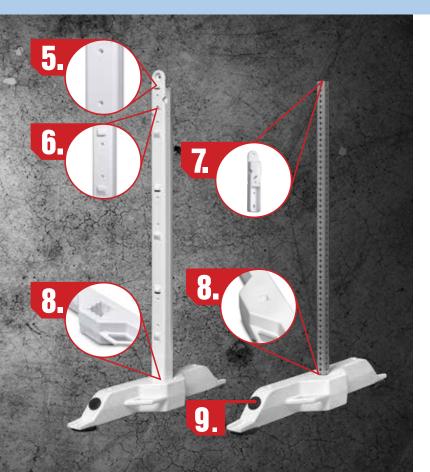
- Mast Upright features molded-in warning light mount for Type A and C warning lights. Mounting holes hold two flags, front and back.
- Mast Upright's molded through-holes add strength and support; attachment of Wave Centerboards is faster.
- Wave Centerboards available in 4', 6', 8' lengths. Retroreflective sheeting is available in Engineer, Hi-Intensity, and Diamond Grades. Retroreflective sheeting meets all state and federal specifications. Wave accepts sheeting on one or both sides.
- 4. Anchor Base available in two lengths 48", 60".

# **FHWA LETTER:**

Letter: WZ-244

Patents: http://bit.lv/3cHVTp8





### MAST™ UPRIGHT FEATURES:

- Molded through-holes are recessed for flush-mounted hardware which protects sheeting.
- Raised Centerboard Locators make installation of Wave Centerboards easier and faster.

# **LIGHT AND FLAG MOUNT FEATURES:**

7. Light and Flag Mount (LFM) accessory (sold separately) attaches to perforated stainless steel tube (PSST) uprights. Accepts one or two flags and one warning light. Manufactured from high-density polyethylene plastic with UV stabilizers. PSS does not offer PSST uprights for sale.

### ANCHOR™ BASE FEATURES:

- **8.** Available in two styles: for plastic uprights or PSST uprights. Anchor Base for plastic uprights features a 4" x 4" mount. Anchor Base for PSST uprights features a 1 3/4" x 1 3/4" mount. "Press-fit" installation means no tools required to attach uprights. Includes molded-in carrying handle.
- Features molded in fill-hole and cap to fill with sand. Anchor 48" holds 45 lbs, Anchor 60" holds 60 lbs.
  - Rubber anti-skid pad on the underside of the base helps increase traction and decrease movement.

# F&A FRAME™ BARRICADE



# **F&A FRAME™ BARRICADE FEATURES:**

F&A Frame Barricade functions as a Type I or Type II barricade. F&A Frame is manufactured from high-density polyethylene plastic with UV inhibitors.

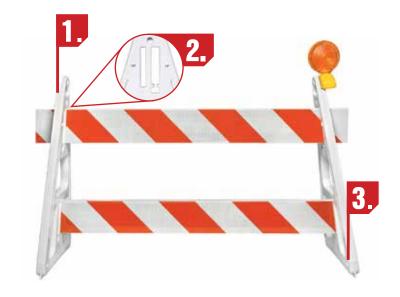
PSS Wave<sup>™</sup> centerboard is ideal for use with F&A Frame. See page 44 for more on Wave Centerboards.

Other features include molded ridges that add strength and durability and an oversized sand-fill hole that allows for added ballast.

Patents: http://bit.ly/3cHVTp8



- Molded-in, ergonomic handle accepts Types A and C warning lights.
- In addition to Wave centerboards, also accepts plastic, I-beam, or wood centerboards.
- 3. Molded, heavy gauge feet add balance and durability.



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# **MVP<sup>™</sup> VERTICAL PANEL FEATURES:**

MVP serves as a channelizer to direct traffic or as a barricade to divide lanes. MVP is manufactured from high-density polyethylene plastic with UV inhibitors.

MVP's recessed panel protects the retroreflective sheeting. Retroreflective sheeting meets all state and federal specifications and is available in Engineer, Hi-Intensity, and Diamond grades.

- Molded handle accepts Types A and C warning lights.
- Recessed Panel is 12" wide. Available in 24" or 36" lengths. 12" x 36" panel shown. Panel can be removed for reuse.
- **3.** Stacks for compact transport and storage.
- Features molded foot step for easy press-fit assembly into base.
- Base weighs 45 lbs Manufactured from 100% recycled material.



# **WAVE™ CENTERBOARD**

# WAVE™ CENTERBOARD FEATURES:

Wave Centerboard is blow-molded from UV-stabilized, high density polyethylene plastic with a reinforced structure.

Wave design (See Figure B):

- » Strengthens and stiffens the centerboard
- » Reduces sagging and warping
- » Greatly improves reboundability

Closed ends prevent dirt and moisture from collecting and blocks insects from building nests.

Retroreflective sheeting meets all state and federal specifications and is available in Engineer, Hi-Intensity, and Diamond grades.

Wave is available in 4', 6', and 8' lengths. Accepts sheeting on one or both sides

Ideal for use with Anchor Mast, LaneGard 3 Type III Barricades, SafetyRail Pedestrian Barricade, and F&A Frame Barricade



Figure A: Designed with Anchor Mast Upright for a close-tolerance barricade system.

**B.** 



Figure B: Molded through-holes add strength and support. Recessed holes accommodate flush-mounted hardware, which protects installers and sheeting.

FHWA Acceptance Letters WZ-173 and 244

# EXTERNAL BALLAST OPTIONS ( )



Ballast made from 100% recycled material.

### RUBBER TIRE COLLAR FEATURES:

Weight: 22-25 lbs

Color: Black, no paints or markings of any color

Inside Diameter: 21 75"

Outside diameter: 35" - 36.5"

Rubber Tire Collar provides significant ballast for drums,

barricades, and other traffic control devices.

Makes positive contact with road when installed on drums.

Cut from 22.5" truck tires, 100% recycled material.

### PLASTIC SAND BAG FEATURES:

Weight: Holds up to 25 lbs of sand

Color: Safety Orange Dimensions: 14" W x 26" L

Plastic sand bags provide significant ballast for drums, barricades, and other traffic control devices.

Made of 850 lb. weight denier polypropylene plastic with

UV stabilizers.







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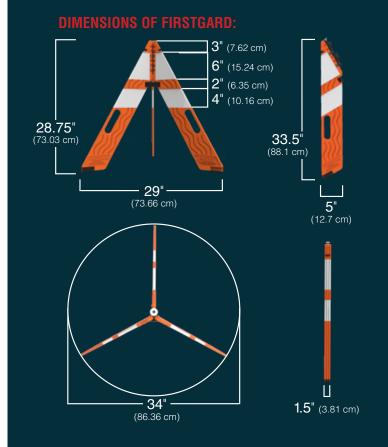
# FIRSTGARD FOLDING CONE



### **FIRSTGARD BENEFITS:**

FirstGard is a patented, foldable traffic cone that can be deployed nearly instantly. Lightweight but heavy enough to remain stable, FirstGard is designed to be transport-friendly, folding to just 1.5" wide, enabling the storage of multiple units while requiring minimal storage space. This innovation in channelizing devices will provide law enforcement, fire services, and emergency management teams with increased conspicuity and visibility while in conformity to the MUTCD.





# **STANDGARD™ BASE**



# **PROVIDES A HOME BASE FOR WORKERS:**

StandGard™ Base Temporary Portable Standing Assistant provides a tangible home base for workers who stand adjacent to traffic, such as flaggers. When workers are in a predictable, consistent location it is easier for drivers to see them quickly.

StandGard can also reduce or deter a natural tendency among workers to "drift" away from their stationary positions and close to the work zone site. With StandGard, workers have a designated standing location with an appropriate, predetermined buffer space between a worker and the work zone. StandGard creates a recognizable location at which a worker should remain. Workers are safer adjacent to live traffic as drivers can more readily see them.



### PROTECT FROM EXCESSIVE TEMPERATURES:

For those who work outdoors, extreme temperatures can pose a hazard. Outdoor workers, especially those who remain in a stationary position for hours, can lose significant body heat in cold weather and overheat in hot weather.

StandGard™ Base Temporary Portable Standing Assistant reduces the transference of heat between workers and street, sidewalk, or parking lot surfaces. With an R-Value that exceeds six, StandGard reduces the transference of heat by up to 84% when compared to shoes alone. With StandGard Base, feet remain cooler in hot weather and warmer in cold up to six times longer.



# NITELITET II REFLECTIVE SAFETY FENCE

# NITELITE II™ APPLICATIONS:

Day or night, NiteLite II Reflective Fence protects pedestrians and drivers with continuous visual delineation. Ideal for work zones, crowd control, and constuction sites.

- » Satisfies lowa DOT safety closure specifications for road closures.
- » Delineates fixed objects, such as utility poles, that are located close to pedestrian or vehicular traffic.
- Delineates excavations within traffic lanes or close to the edge of the road.
- » Directs foot traffic after sporting events, concerts, and other high-traffic occurrences.

### **NITELITE II FEATURES:**

- Features three, 1"-wide, retroreflective high-intensity prismatic (HIP) stripes.
- » Made of orange UV-protected polyethylene plastic.
- » Standard roll: 4' x 50'. Weighs: 25 lbs.
- » Reusable, lightweight, and easy to install.
- » Rolls easily for storage.





# QUIK-MARK™ OBJECT MARKER

# **QUIK-MARK™ FEATURES:**

Quik-Mark Object Marker delineates temporary or permanent barriers and other objects near the roadway.

- Consists of a durable, flexible, high-density polyethylene plastic reflective panel that mounts on a high-impact plastic "L"-shaped bracket.
- Standard panel sizes are 6" W x 12" H and 8" W x 12" H reflective area. Other sizes available. Quik-Mark accepts sheeting on one or both sides.
- » Retroreflective sheeting meets all state and federal specifications. Available in Hi-Intensity and Fluorescent grades.
- Standard sheeting colors are orange, white and yellow. Red available upon request.









# QUIKGARD™ GUARDRAIL DELINEATOR

# **QUIKGARD™ FEATURES:**

QuikGard Guardrail Delineator is ideal for entrance/exit ramps, work zones, low-visibility areas, high speed roads.

- "Patented Notch" provides vertical and horizontal alignment for fast, easy installation.
- » Manufactured from durable, flexible, high-density polyethylene plastic with UV stabilizers.
- » Retroreflective sheeting meets all state and federal specifications. Available in Hi-Intensity and Fluorescent grades. Available in white, yellow, and red. Accepts sheeting on one or both sides.









# BAM™ BARRIER DELINEATOR FEATURES:

BAM Barrier Delineator is designed for top-mounted or sidemounted applications for permanent or temporary barriers.

- » Unique, flexible hinge design can reduce replacement costs. Available with retroreflective sheeting or acrylic reflective lens.
- » BAM accepts sheeting or lenses on one or both sides. Retroreflective sheeting provides 11.5 square inches of reflective area. Acrylic lens provides 8.9 square inches.
- Standard sheeting colors are white and yellow. Other colors available. Acrylic lens colors include amber, red, blue, or clear.
- » Retroreflective sheeting meets all state and federal specifications. Available in Hi-Intensity and Fluorescent grades.















