



ADA-Compliant Devices Product Guide

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# WHO WE ARE

## WE ARE PSS:

For over 30 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.



# ADA-COMPLIANT DEVICES

## INNOVATIONS IN PEDESTRIAN SAFETY:

In late 2007, PSS participated in the “Detectable Pedestrian Channelization” Workshop, an event co-sponsored by Maryland DOT, FHWA, and the U.S. Access Board. At the workshop, evaluators, blind or low-vision volunteers, reviewed commercially available pedestrian delineation devices exhibited by invited manufacturers.

Evaluators reviewed the detectable features of the devices. Orientation and mobility specialists recorded their comments and answers to a nine-question survey.

According to the final workshop report, evaluators’ findings were mixed. For example, while generally satisfied with the devices, evaluators were concerned that some could entrap cane tips.

The report further states that “...the exchange of information between evaluators and manufacturers was the most helpful outcome of the day. Few manufacturers or highway engineers [understood]...the techniques or orientation and mobility – that is, independent travel without vision cues – and all valued the opportunity to observe and question.”

About one year after the workshop, we introduced SafetyRail Barricade, our first ADA-Compliant, temporary traffic control device. SafetyWall Channelizer and BoardWalk RAMP followed shortly thereafter.

Many engineers and designers have replaced non-compliant sidewalk closure devices (Figure 1) with compliant ones, such as SafetyWall Channelizer and BoardWalk RAMP (Figure 2).



## BUILDING ACCESSIBLE WORK ZONES:

Because of our experience at the 2007 workshop, PSS launched a line of new devices designed to better protect all pedestrians who traverse through sidewalk work zones.

Our devices incorporate essential ADA-Compliant features that better protect and safely guide pedestrians with limited vision or mobility issues.

Accessible, as in accessible work zones, describes a sidewalk work zone that features a temporary pedestrian access route. This route is an alternate pathway around the closed sidewalk. Pathway devices provide accessibility, and safely guide pedestrians through the alternate pathway, unimpeded, to their destination.

Devices that interlock without gaps in between are defined as continuous and detectable. Interlocking devices provide pedestrians with a continuous edge. Pedestrians, especially those with low vision, can safely follow, or detect, the interlocked devices. Those pedestrians can tap the bottom detectable edge with a long cane or trail a hand over the smooth, detectable top of channelizers or ramp handrails to safely traverse through the work zone.

For more information about ADA-Compliant, temporary pedestrian pathways, contact us for our guide, "Building Accessible, Detectable Work Zones: An Introduction".



# 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:

- » Allows for any slope of 1" rise for 12" run.
- » Modular Edge Support Castings provide guidance for canes and walking devices. Castings accommodate handrails, which provide detectable guidance.
- » Modular Edge Support Castings accommodate handrail assemblies.
- » PSS-supplied lumber has a slip-resistant surface.
- » Suspended design allows for normal street drainage.
- » Approach Plates are 48" W x 18" L and feature slip-resistant surface. 48" width is wheelchair friendly.

## MODULAR FEATURES:

- » Modular sections connect for ramp length needed. No hardware required. Ramp rated at 800 lb. 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. The lumber PSS provides features slip-resistant coating.
- » Metal Approach Plates, 48" W x 18" L, feature slip-resistant grip tape.



US Patents Nos. 9,534,394



# 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.

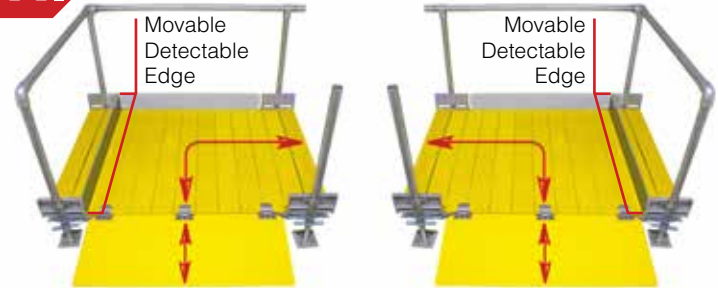
Platform measures 4' x 5' and is wheelchair friendly.

Four adjustable Screw Jacks support Platform, and can accommodate curb heights from 2" to 14". For RAMPs exceeding nine sections use a Midway Support, as shown on Page 10.

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. RAMP and Platform are installed at either end of the sidewalk work zone.

**A.**



**B.**



# BOARDWALK RAMP AND PLATFORM

## 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

With those questions answered, use the chart 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*

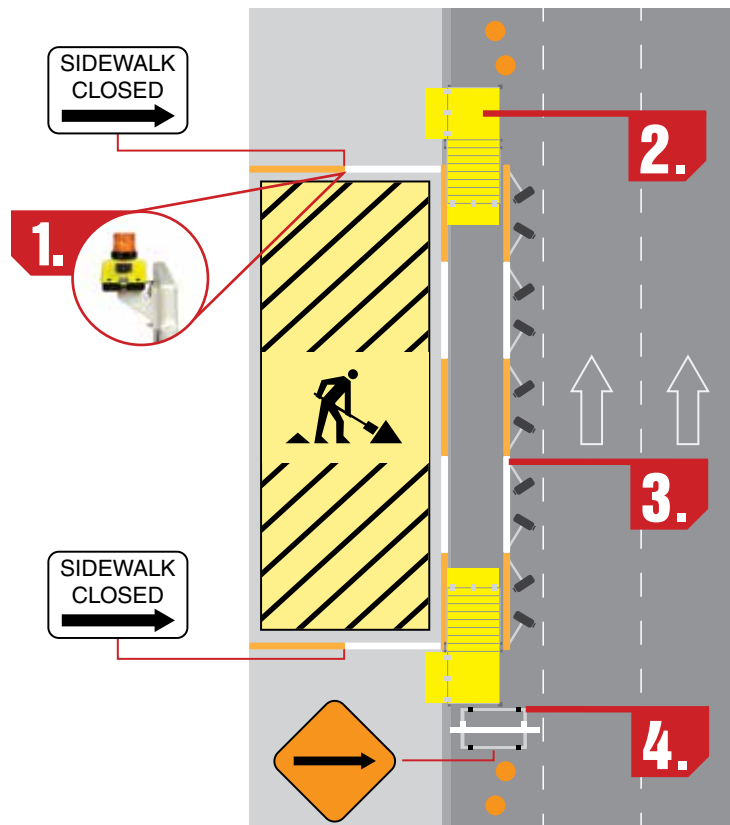
\* Midway supports required for RAMPs longer than 9 sections.



## SIDEWALK CLOSURE COMPONENTS:

In typical mid-block sidewalk work zone 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.

1. SafetyWall® Barricade: Used here, SafetyWall, an interlocking device, serves as a sidewalk closure barricade and features signage and an Audible Information Device (AID). The "Sidewalk Closed" sign directs pedestrians with vision to use the temporary pathway. The AID broadcasts audible directions to pedestrians with limited vision.
2. BoardWalk RAMP and Platform, located at both ends of the pathway, provides an accessible, detectable, continuous curb transition for pedestrians, especially those with limited vision or mobility issues.
3. Used here, SafetyWall serves as a longitudinal channelizer and provides accessible, detectable, continuous guidance. SafetyWall also separates pedestrians from both the construction side and the travel lane. BoardWalk RAMP and Platform then returns pedestrians to the sidewalk.
4. LaneGard 3® Folding Type III Barricade advises vehicular traffic that the curb lane is closed.



# BOARDWALK BRIDGE

## BOARDWALK BRIDGE FEATURES:

PSS BoardWalk Temporary Pedestrian Modular RAMP with Platform provides ADA-Compliant temporary pathways over curbs in sidewalk work zones.

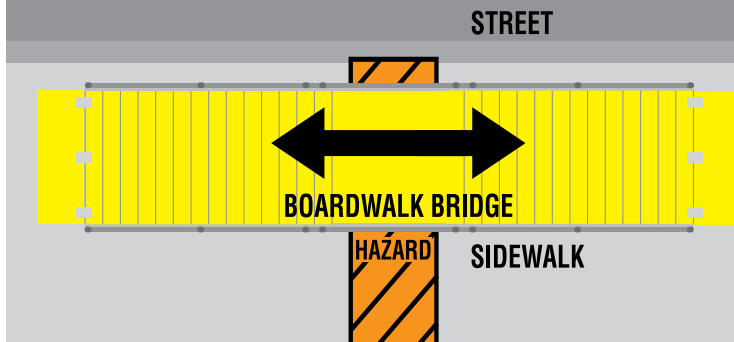
Because of its modular design, we can create BoardWalk RAMP and Platform in several configurations while maintaining the ADA slope requirement of 1:12.

BoardWalk Bridge satisfies a new application: it provides a temporary pathway over an obstruction that is perpendicular to the sidewalk and street.

For the application shown in the graphic, Figure A, BoardWalk Bridge is installed on the sidewalk, parallel to it, and over the hazard. The height of the hazard and the ADA slope requirement determine BoardWalk Bridge's length. Figure B shows Midway supports, which are required for RAMPs longer than nine sections.

To discuss your custom BoardWalk Bridge application, please contact us at **800.662.6338**.

**A.**



**B.**

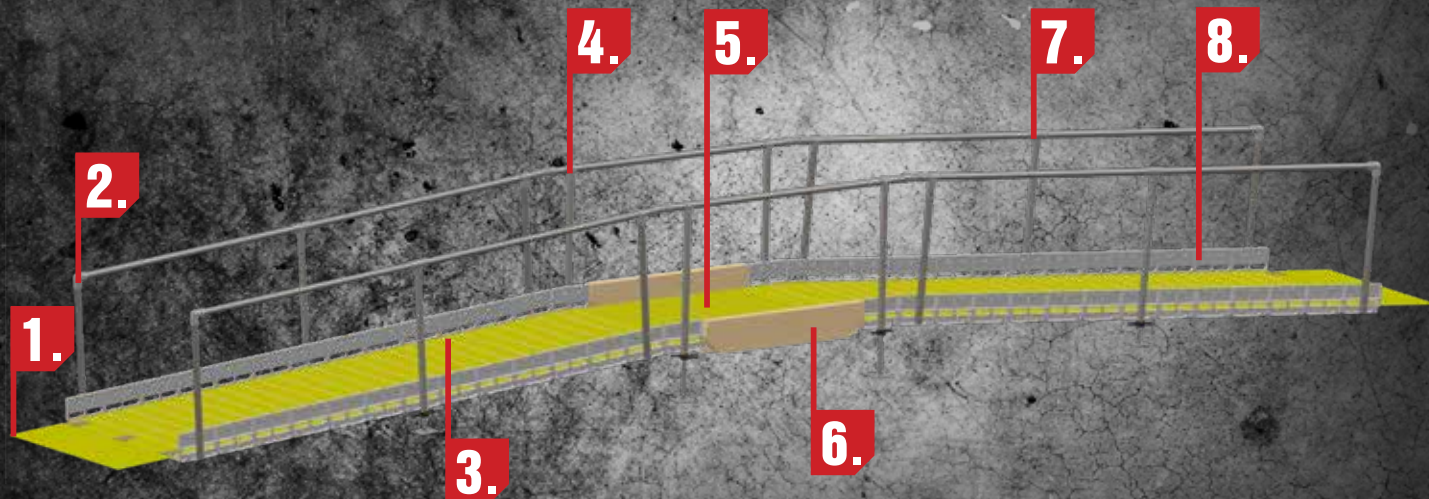


## BOARDWALK BRIDGE COMPONENTS:

All components, except Numbers 5 and 6, are used on both sides of BoardWalk Bridge.

1. Approach Plate
2. Handrail Upright
3. BoardWalk RAMP Sections

4. Jack Screw Upright
5. BoardWalk Platform
6. Platform Detectable Edge
7. Midway Support
8. Modular Edge Support Castings



# 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 plastic with UV stabilizers. Steel legs.

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

Retroreflective sheeting meets all state and federal specifications and is available in Engineer, Hi-Intensity, and Diamond grades. Made from high-density polyethylene plastic with UV-stabilizers. SafetyWall accepts sheeting on one or both sides.

## SAFETYWALL® FEATURES:

1. SafetyWall provides continuous guidance. Hand-Trailing top is smooth, safer for hand guidance.
2. Accepts Audible Information Devices, Warning Lights.
3. SafetyWall is an interlocking device. Assembles quickly. No tools required. A one to two-person crew can easily create an accessible work zone in minutes.
4. Centrally located carry handle allows for easy carry of one or two SafetyWall units.
5. SafetyWall stacks for easy transportation 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.
7. Common vertical plane eliminates obstacles in the walkway for safer, continuous guidance.
8. Legs fold in for easy storage. Recessed bottom edge allows for use of pry bar to deploy both legs.

*US Patent No. D665,689.*







# SAFETYRAIL™ PEDESTRIAN BARRICADE

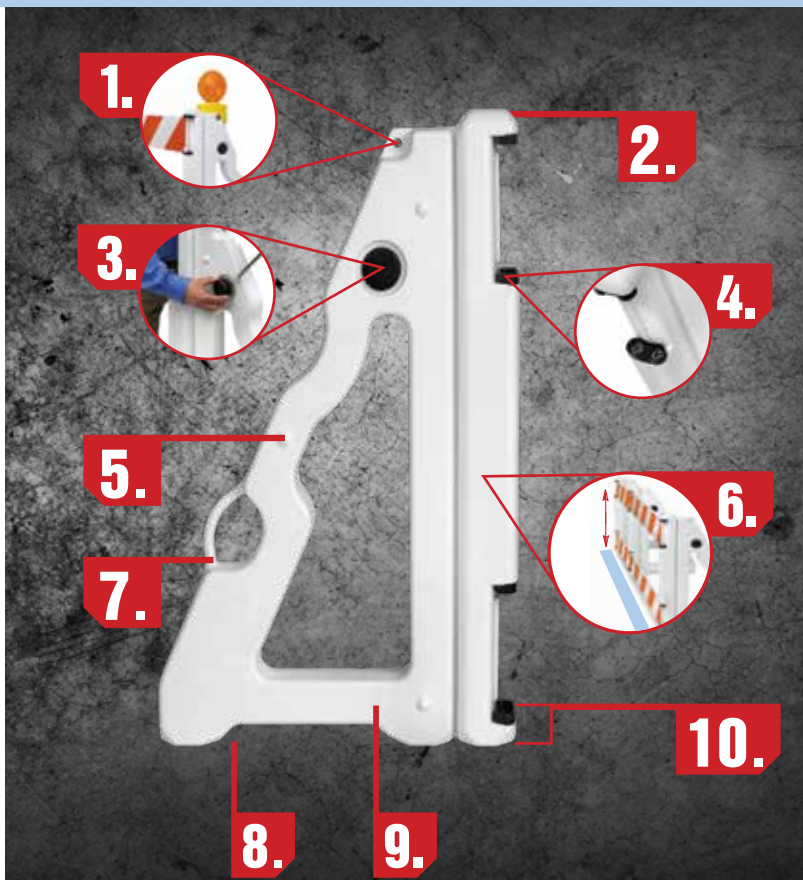
## SAFETYRAIL™ ADA-COMPLIANT BARRICADE:

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

## SAFETYRAIL™ FEATURES:

1. Audible Information Device or Warning Light Mount.
2. SafetyRail provides continuous hand guidance. Top is smooth for transition to Wave® Guide Rail.
3. Oversized fill hole for internal sand ballast.
4. Top and bottom guide rail bushings hold guide rails in place. No installation tools required.
5. Molded-in lug for easy stacking also located by the fill hole and the ergonomic handle.
6. Common vertical plane eliminates obstacles in the walkway for safer, continuous guidance.
7. Ergonomic handle for easy transport.
8. Relief in the bottom to clear terrain.
9. Support for optional sand bags.
10. Measures 1.5" from ground, reducing potential for trapping cane tips.

*US Patents Nos. 8,302,937; 7,536,973 B2.*





## SAFETYRAIL FEATURES:

**Dimensions:** 3.25" W x 38" H x 24" L at base

**Weight:** 7 lbs empty or up to 25 lbs with sand

**Material:** High-density polyethylene plastic, UV inhibitors

**FHWA Letters:** SafetyRail: WZ-359, Wave Panel: WZ-173

**Wave Guide Rail:** 0.8" x 7.5" x 48" or 72"

High-density polyethylene plastic, UV inhibitors

## PSS WAVE GUIDE RAIL:

Available in four-foot or six-foot lengths. Encapsulated ends eliminate cane or hand snagging hazards.

Retroreflective sheeting meets all state and federal specifications and is available in Engineer, Hi-Intensity, and Diamond grades. Wave accepts sheeting on one or both sides.



SafetyRail is designed for use with PSS Wave® Guide Rail. Upper Rail is smooth, continuous, and safer for the hand. Lower Wave Guiderrail measures 1.5" from the ground which reduces potential for trapped cane tips. Wave "Notch" design (see insert) keeps guide rails securely in bushings.

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