

# HIGHWAY PRODUCTS THE BRANDS YOU TRUST, THE SAFETY YOU NEED



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# THE BRANDS YOU TRUST, THE SAFETY YOU NEED

www.nationalhighway.com



2 Fowser Road, Millville, NJ as GSHP (1987-2001)



1740 E. Oak Road, Vineland, NJ as GSHP (2001-2018)



301 Riverside Drive, Millville, NJ as GSHP (2018-2023)



301 Riverside Drive, Millville, NJ as NHP (Est. 2023)



NATIONAL HIGHWAY PRODUCTS, INC.

THE BRANDS YOU TRUST, THE SAFETY YOU NEED

To Our Customers and Friends  $\sim$ 

As it is on the road, so it is in life. As we follow the signs to travel the streets to our destinations; so we follow the signs to travel the paths to life's destinations. The commonality between the two journeys is a "sign". Signs lead us in directions. Perhaps it was inevitable, therefore, that after 36 years in business as a traffic "sign" fabricator, Garden State Highway Products, Inc., under the ownership of Sharon and Bob Green, would inevitably be purchased by us, their two children, Stacia and Robert. All the "signs" have always present to lead us to where we are today and to direct us to our vision of our new company ~ National Highway Products, Inc.

We are thus proud to present the first edition of National Highway Products, Inc.'s (NHP, Inc.) product catalog. While 2023 may be NHP, Inc.'s "first" year in business, we are proud and humbled to be building our new company on the traditions and foundation of Garden State Highway Products, Inc. (GSHP, Inc.). In 1987, our parents started GSHP, Inc. in a tiny 7500 sq. ft. shop on Fowser Road in Millville, New Jersey. By 2001, the plant was moved to a 31,500 sq. ft. facility in Vineland and in 2018 it was relocated to our present 140,000 sq, ft. building in Millville. All this growth and these expansions were thanks to you, our loyal customers. As our parents wrote in their last catalog, "You have propelled us from hand lettering traffic and construction signs to our present-day utilization of state-of-the-art digital printers. Your faithful patronage put GSHP, Inc.'s name on the map ... Additionally, your loyalty and dedication have allowed us to expand to be able to gain the technology to produce and to procure the products needed to meet your ever-changing traffic safety challenges." NHP, Inc. is proud to continue to carry on the legacy GSHP, Inc. has built and to spread our reach even further on that map.

The following pages present our products in detail ~ signs and traffic safety items. If you do not see something that you may need or if you have any questions, please inquire via our toll-free number, FAX service, email or "Live Chat" through our new website www.nationalhighway.com. Our professional and knowledgeable sales account executives and sales support staff are always happy to assist you.

While we say farewell to GSHP, Inc., we say hello to NHP, Inc. While we are eagerly establishing and building our new company, we remain faithful stewards of the inherent qualities that GSHP, Inc. established ~ service, quality, and customer appreciation. While our vision is to continue to grow our new company, we will never lose sight of who brought us to today and who will be directing our future. We are committed to always serving our customers with humbleness and gratitude. So, to both GSHP, Inc.'s old customers and friends as well as to NHP, Inc.'s new ones, we say "Welcome. We hope that you join us as we follow the signs to our new direction." And while "your safety will always be our business"; we will also always offer you "The brands you trust, (and) the safety you need."

Best Regards,

Stacia M. Green and Robert M. Green Vice-President and President

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#### Who is National Highway Products, Inc.? | NHP

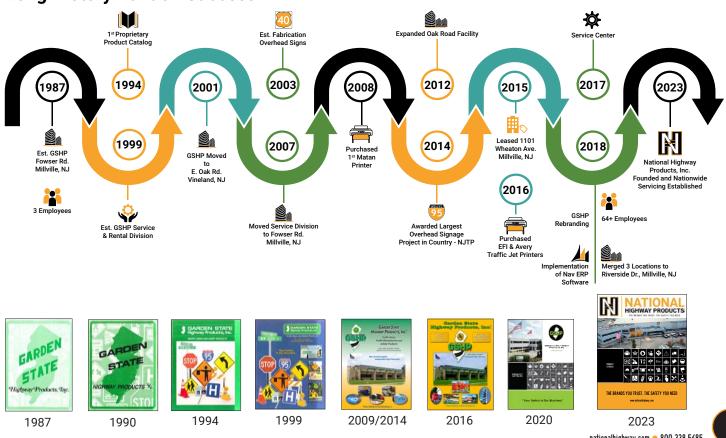


National Highway Products, Inc. - The Brands You Trust, The Safety You Need

Mounting an internet search for the history of traffic signs produces fascinating information. Did you know that the first known use of traffic signs dates to the time of The Roman Empire? As the Romans looked to expand their empire, they found that building a system of easy navigable roads allowed them to move their armies, people, and goods more easily. While the Romans implemented what we would consider 'mile markers' in modern times; it was not until the Middle Ages that directional distance signs appeared and were installed. The ever-increasing number of people riding bicycles in the early 1800s propelled us into the 'modern' era of regulatory and warning road signs. The advent of the car pushed us in the 1920s and 1930s into the necessity of standardizing traffic signs; hence, the production and publication of the Manual on Uniform Traffic Control Devices (MUTCD).

While the above paragraph is merely a very condensed version of the evolution of the traffic sign, National Highway Products, Inc. is proud to be part of this progression. As noted in GSHP, Inc.'s previous catalogs, NHP, Inc. appreciates and recognizes the sometimes-challenging job that traffic personnel encounter in keeping people and infrastructure safe. As stated therein, "From the smallest village and backroad, to the largest city and interstate highway, roadside traffic signs and traffic control products must be in place, doing their jobs to insure public safety." As a traffic, street, and specialty sign fabricator, we specialize in producing either to MUTCD specifications or to our customer's specific needs. As a traffic safety products' distributor, NHP, Inc. continuously invests a lot of time and energy into researching and offering those products that the company believes are the best in the industry.

On the topic of 'time', the timeline below illustrates NHP, Inc.'s history linked to GSHP, Inc.'s history linked to the traffic sign history of ancient and modern times. We can thank the roads safely travelled that have transported us to today and beyond. NHP, Inc. looks forward to many more 'times' serving our customers and vendors as the industry continues to grow and our transportation network-served continues to expand. So, who is NHP, Inc.? We are the same GSHP, Inc. faces but with a 'National' vision.



## Long History Built on Success

## Why Work With National Highway Products, Inc.? Key Benefits

## **Experience and Expertise**

- > 30+ year history in the traffic safety business with a strong track record
- Servicing hundreds of leading Government, Federal and Public Safety companies



When you work with NHP, Inc., you are working with a company that...

> 3M Company recognizes as a 3M Certified Sign Fabricator

> Avery Dennison recognizes as an Avery Certified Digital Traffic Converter

> Uses Orafol quality vinyls and products

> Is partnered with some of the finest traffic safety products' manufacturers in the industry

Is a member of the American Traffic Safety and Services Association (ATSSA) (a longtime one including GSHP, Inc.'s membership)

 Is a member of Associated Builders and Contractors (ABC) New Jersey Chapter

Is ever vigilant in producing, searching for and providing the safest products on the market

... all these reasons and more make NHP, Inc. a great sign and traffic safety partner!

## **Markets Served**



# Wide Range of Services



## National Highway Products, Inc. | Product Portfolio



## Signs & Materials Everything you need to get the job done



# Welcome to Delaware Endless Discoveries

## Jack A. Markell, Governor

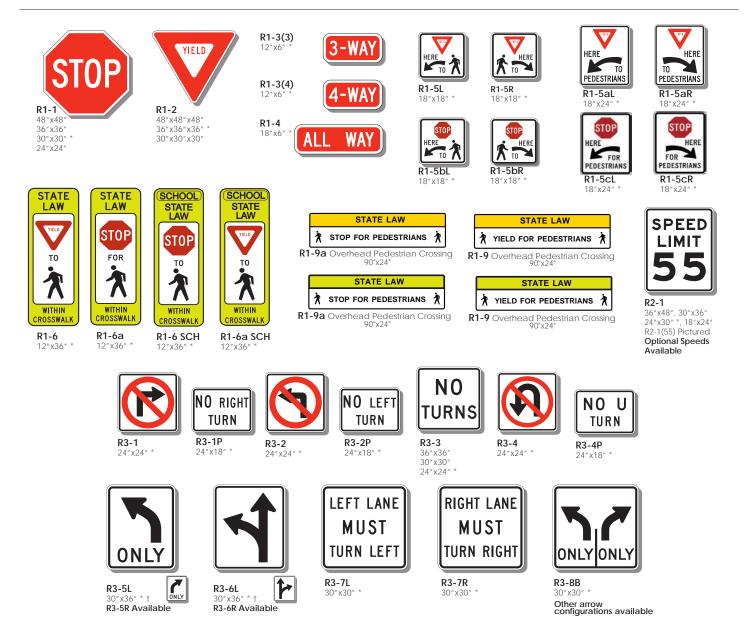
40

## Signs & Sign Materials | Regulatory



#### MUTCD traffic signs prevent congestion and accidents on roadways.

National Highway Products, Inc. is proud of its full selection of MUTCD traffic signs for all of your road, parking and street sign needs. All of our traffic signs meet MUTCD requirements and are available in many sizes and reflectivity options.



Other configurations available | \* Size indicated is the standard size recommended in the MUTCD
 These signs should be mounted overhead
 Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night.

## **Regulatory | Signs & Sign Materials**



R3-8T 48″x30″



R3-17a 30"x12"



R3-17b 30"x12"



DO NOT

ENTER

ONE WAY

YIELD TO,

ONE WAY

R5-1

24" x24" 30″x30″ \*

36″ x36″ 48" x48"

R6-1R

36" x12

R6-1L

36" x12'

R9-9A

24"x24" \*

LANE ONLY R3-9a

R3-9b

CENTER



30" x42"

HOV 2+

LANE

 $\bigcirc$ 



R4-7 24″x30″ ' 18" x24"



R4-7P 24"x18" \*



R5-2 24"x24" \*



R5-2P 24″x18″



R8-8 24″x30″ \*

SIDEWALK

CLOSED

R9-9

NO

CROSSING

R9-3a 12"x18"

SIDEWALK CLOSED

USE OTHER SIDE

Left Arrow Available

R9-10

24"x12'

48" x24'





XING R9-3aP 18"x12" \*



R9-11

R4-8 24″x30″ \*

18" x24' **KEEP** LEFT

R4-8P 24" x18"



R5-6 24"x24" \*



R5-6P 24"x18" \*



R9-3bL 18"x12"



R9-3bR 18" x12"



Other configurations available | \* Size indicated is the standard size recommended in the MUTCD
 † These signs should be mounted overhead

Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night.

R9-9B



R4-7a

24″x30″ \*

18"x24" (Min.)

NO

RUCK

R5-2a

24" x24"

HOV

30" x42"

R3-17 30" x24"





R4-7b 24″x30″ \* 18"x24" (Min.)



R5-3 24"x24" \*







9









ΟΝΕ

R6-2R

24″x30″

18″x24″

STATE LAW

YIELD TO

PEDESTRIANS

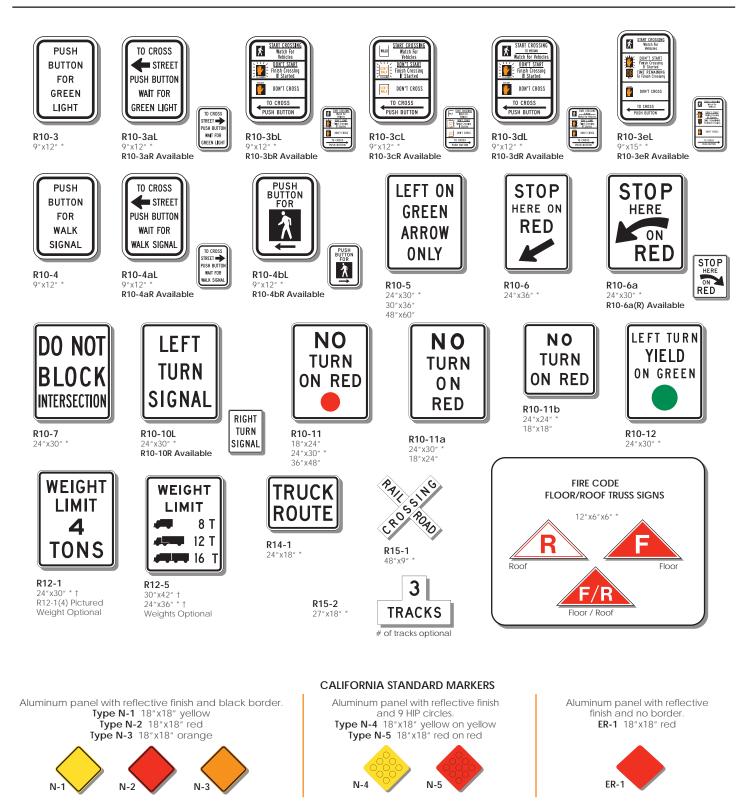
IN CROSSWALK

R6-2L Available

ONE WAY

R5-1A 36"x24" \* 30" x18"

## Signs & Sign Materials | Regulatory



NOTE: All types of background and circle sheetings are available - see pages 28 and 29. Background type of reflective sheeting is always less reflective than the nine circle type reflective sheeting is to enhance the visibility of the circles.

♦ Other configurations available | \* Size indicated is the standard size recommended in the MUTCD | † These signs should be mounted overhead Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night.

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## Warning | Signs & Sign Materials



• Other configurations available | \* Size indicated is the standard size recommended in the MUTCD | † These signs should be mounted overhead Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night. All Warning Signs on this page used in construction areas are available in Black and Orange.

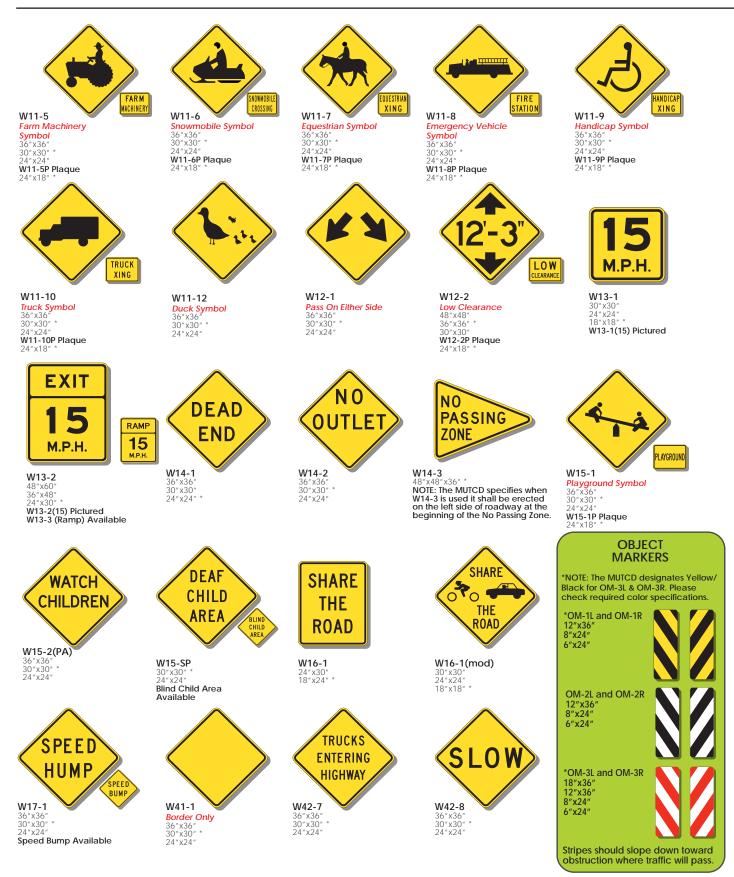
## Signs & Sign Materials | Warning



♦ Other configurations available | \* Size indicated is the standard size recommended in the MUTCD | † These signs should be mounted overhead Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night. All Warning Signs on this page used in construction areas are available in Black and Orange.

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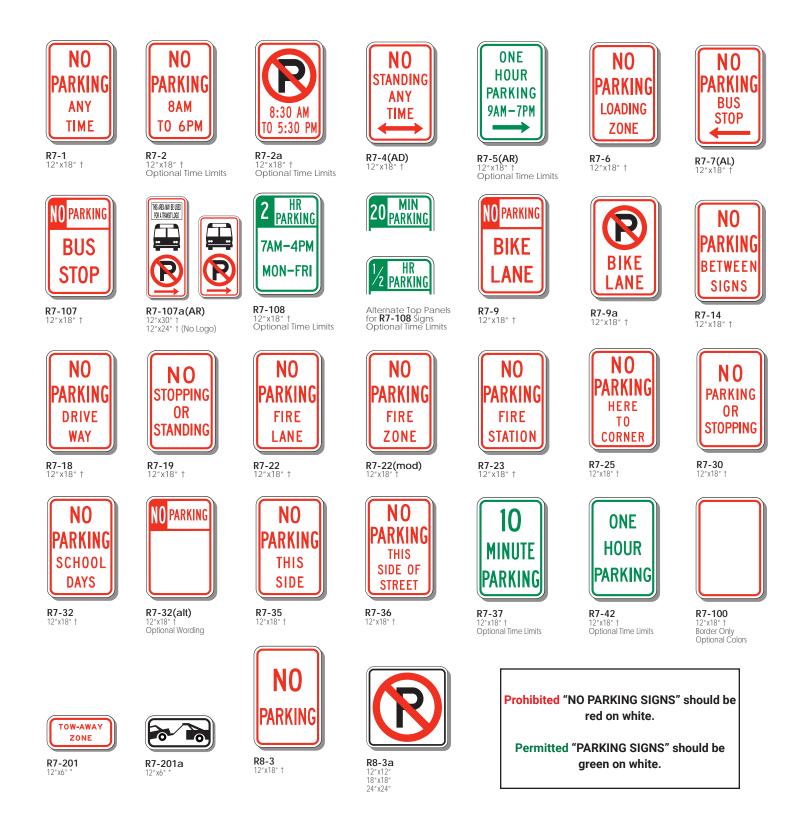
## Warning | Signs & Sign Materials



• Other configurations available | \* Size indicated is the standard size recommended in the MUTCD | † These signs should be mounted overhead Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night. All Warning Signs on this page used in construction areas are available in Black and Orange.

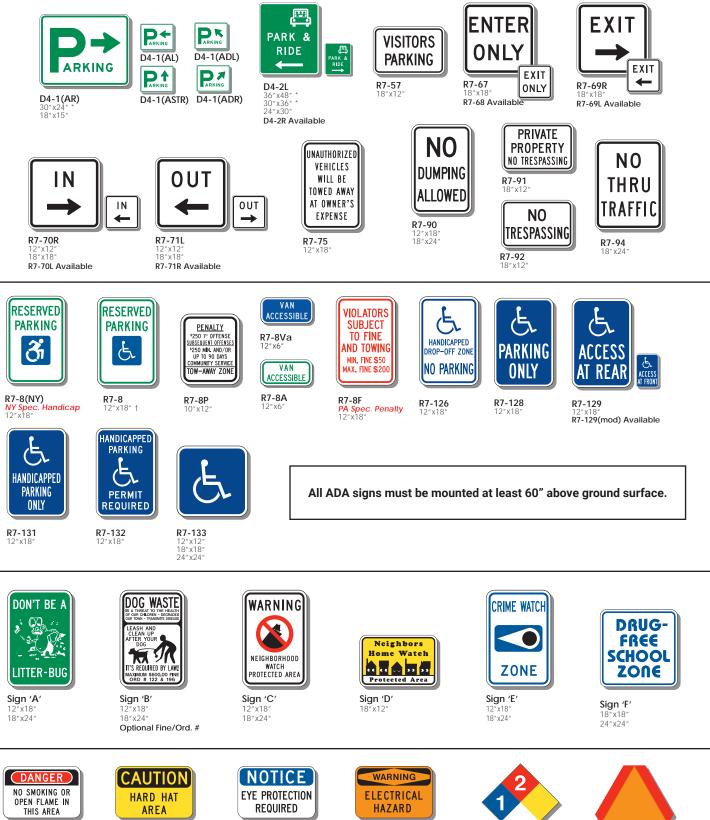
### Arrows on Parking Signs

If no arrow is specified, the legend will be centered in the space (e.g., R7-1). To order a sign with an arrow applied or a space for an arrow to be applied later, specify the sign number followed by (AR) "right arrow", (AL) "left arrow", (AD) "double arrow", or (AS) for "space for arrow".



• Other configurations available | \* Size indicated is the standard size recommended in the MUTCD | † Available with left, right or double arrows. Parking signs can be printed or lettered with special legends per your order. Specify legend and arrows (if applicable) when ordering. Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night.

## Off-Street, Handicap, Neighborhood Watch, Utility | Signs & Sign Materials



**GS-DANGER** 18"x12' 24"x18" **Optional Wording** 

**GS-CAUTION** 18" x12 24" x18" **Optional Wording** 

**GS-NOTICE** 

**Optional Wording** 

18" x12

24" x18"

**GS-WARNING** 18"x12 24" x18" **Optional Wording** 

OSHA

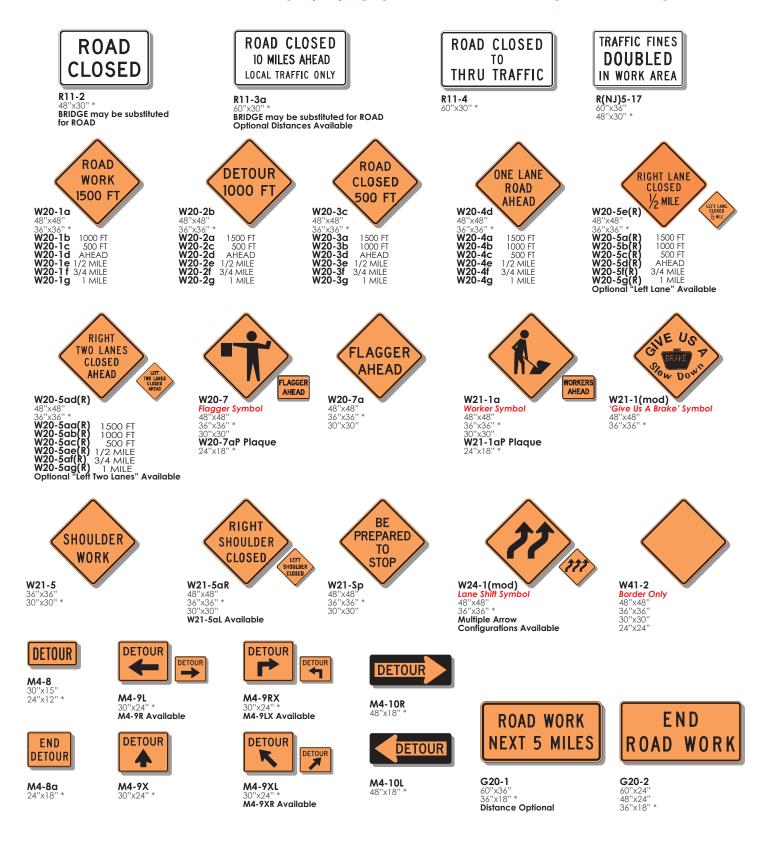
12"x12

18″x18″

24"x24" Optional Numbers



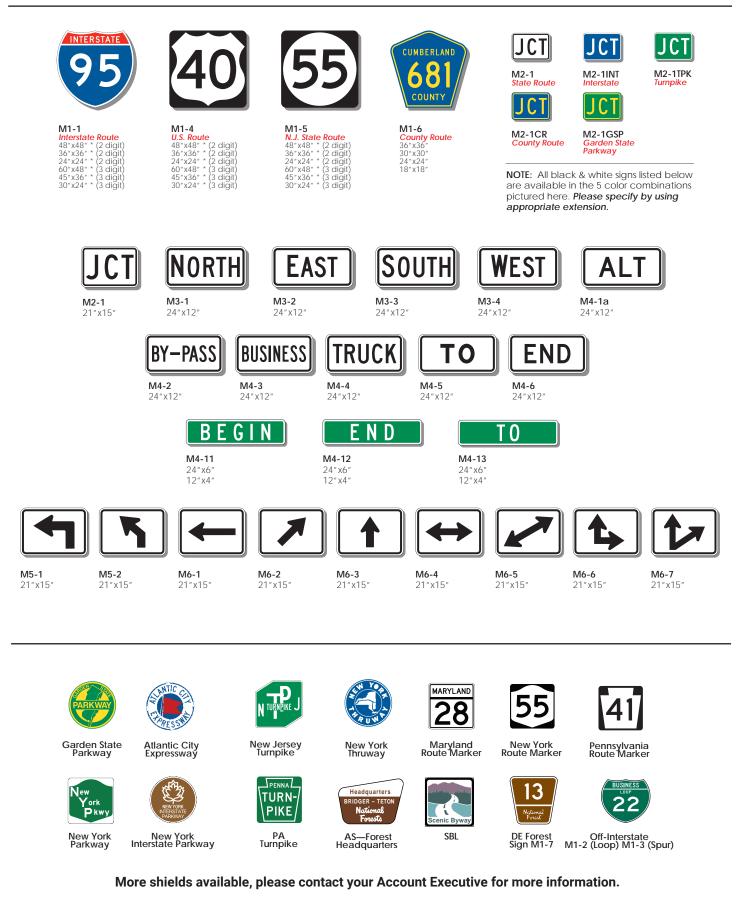
Other configurations available | \* Size indicated is the standard size recommended in the MUTCD | † Available with left, right, or double arrows. Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night.



PLEASE NOTE: Colors shown in catalog may vary. Signage available in Fluorescent Orange or Standard Orange.

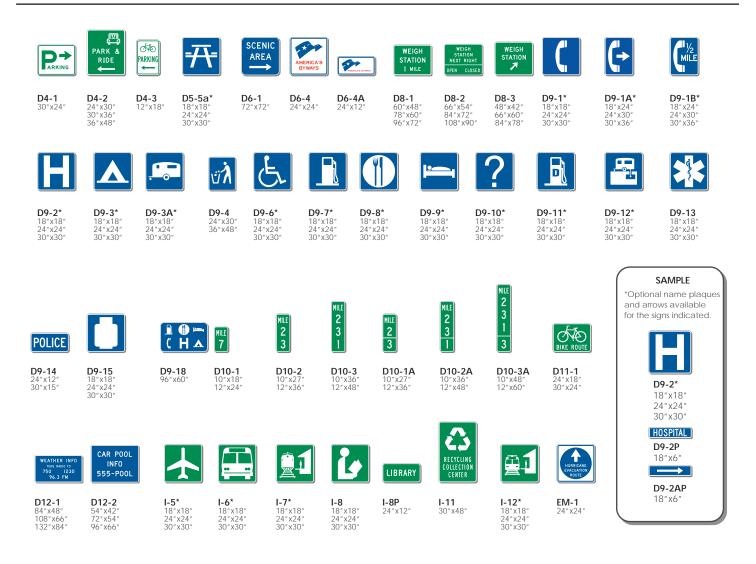
Other configurations available | \* Size indicated is the standard size recommended in the MUTCD Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night.

## Route Markers, Trailblazers | Signs & Sign Materials



♦ Other configurations available | \* Size indicated is the standard size recommended in the MUTCD Note: The MUTCD specifies that all signs on this page shall be reflectorized to show the same color day or night.

## Signs & Sign Materials | Guide, Recreation





RG-010 RG-020 RG-030 RG-040 RG-050 RG-060 RG-070 RG-080 RG-090 RG-100 RG-110 RG-120 RG-130 RG-140 RG-150 RG-160 RG-170 RG-180 RG-190 RG-200 RG-240 RG-260 RM-010 RM-020 RM-030 RM-040



RM-050 RM-060 RM-070 RM-080 RM-090 RM-100 RM-110 RM-120 RM-130 RM-140 RM-150 RM-160 RM-170 RM-200 RM-210 RM-220 RA-010 RA-020 RA-030 RA-040 RA-050 RA-060 RA-070 RA-080 RA-090 RA-100



RW-030 RW-040 RW-050 RW-060 RW-070 RW-080 RW-090 RW-100 RW-110 RW-120 RW-130 RW-140 RW-160 RW-170 RW-190 RW-210 RS-010 RS-020 RS-030 RS-040 RS-050 RS-060 RS-070 RS-080 RS-070 RS-080

\*Recreation signs come in the following sizes: 24"x24", 18"x18" & 12"x12"

## School, Playground | Signs & Sign Materials



**W9-11** 18"x24"\*





**W9-13** 18"x24"



18"x24"\* W9-14(20) Pictured Optional Speed Limit



W9-11 thru W9-14 - Optional "WATCH", "SLOW", or "CAUTION" Header, please specify.

NOTE: Not all MUTCD signs are listed in this catalog. If there is something that you need and you do not see it, please contact an Account Executive. Please call 800.338.5685 or email sales@nationalhighway.com.

## Signs & Sign Materials | Street Name



#### Street name signs are an integral part of a community's identity.

Your street sign program is a great place to begin if you want to beautify your community and make it a safer and easier place in which to drive! To be distinctive, street signs are made to order. These signs can be single sided or double sided, with standard colors being white characters on a green background, white on blue or black on white. Other colors are available.

Both flat and extruded signs are available in 6" and 9" heights with lengths varying from 18" to 54" depending on the amount of text needed. Flat signs are also available in 8" height. Custom metro sizes also available.



Flat Blade 6", 8" or 9" x Variable Length

#### Flat Blade Street Name Sign Features

- > MUTCD compliant street name signs
- > .080, .100, or .125 gauge thick aluminum
- > Type 1, Type 4, Type 9 and Type 11 reflective sheeting
- Flat signs available in 6" height with 4" letters and 8" or 9" height with 6" letters
- > Optional prefix and suffix size letters 2", 3" or 4" minimum height



ΠΤΕπιπητική

Extruded Blade 6" or 9" x Variable Length

#### **Extruded Blade Street Name Sign Features**

- > MUTCD compliant street name signs
- > Extruded blade is .091 gauge with thicker edges
- > Type 1, Type 4, Type 9 and Type 11 reflective sheeting
- > Extruded signs available in 6" height with 4" letters or 9" height with 6" letters
- Optional prefix and suffix size letters 2", 3" or 4" minimum height

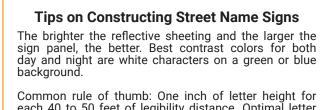
Street name signs are printed on the highest-grade material to ensure that they do not chip, rust, or fade season after season.

**NOTE:** You should always refer to your local DOT guidelines and municipal requirements when installing traffic control signs and devices.

## Note: One 4-way unit for two intersecting streets requires:

- > Two double-faced street name signs
- > One cap to fit appropriate post
- > One 90° cross to separate signs
- > One compliant post break-away system

## See page 32 for post specifications and see page 46 for street sign brackets.



each 40 to 50 feet of legibility distance. Optimal letter height is 6" or more. Letter fonts vary by stroke width and letter width from Series B (thinnest) to Series E modified (thicker and wider). Standard specifications call for Series B name and Series C suffix.

## Mast Arm | Signs & Sign Materials



#### Guiding motorists and keeping traffic flowing.

Guide motorists and keep traffic flowing through your community with street name signs mounted on mast arms poles. Whether on a foggy, rainy night, through a blinding snow storm or during a bright, beautiful day - larger, brighter overhead street name signs offer optimal visibility and enhanced safety.

Like other street name signs, mast arm signs are fabricated to order and to FHWA specifications. For maximum effectiveness, 18" height by variable length with Type 1, Type 4, Type 9 or Type 11 reflective sheeting is recommended.



Mast arm signs need brackets to attach them to the mast arm. These brackets are featured below and can also be found in our hardware section. The GS-OH-AD adjustable length, GS-OH-FX fixed length and GS-OH-OFS offset safety swing arm brackets all have 6061-T6 oil impregnated bronze bearings, stainless steel springs and hardware for long term durability. Detailed specifications on these brackets are available on request.

The utilization of the brackets shown below allows for the level mounting of traffic and street signs on either straight or curved traffic pole mast arm.

For straight mast arm pole, two GS-OH-FX fixed brackets are required. For curved mast arm pole, one GS-OH-FX fixed bracket and one GS-OH-ADJ adjustable bracket are required.

The GS-OH-OFS offset safety swing arm bracket is designed for use in those intersections where the sign being attached to a straight mast arm pole is at an offset angle to the flow of traffic. The adjustability of this bracket makes it ideal for positioning the sign in any intersection.



## Signs & Sign Materials | Interstate Overhead



#### Interstate overhead signs keep you informed as to where you are going.

National Highway Products, Inc.'s (NHP, Inc.) new state-of-the-art facility is stocked with all the equipment, inventory and experienced personnel needed to fabricate interstate overhead signs in accordance with state and/or federal FHWA regulations.

We can manufacture any interstate overhead sign to order. Whether using incremental flat sheets or extruded panels, direct apply or demountable copy, these guide sign panels are cleaned, sheeted and assembled to customer supplied specifications. The completed interstate overhead sign is then loaded on to a custom-made trailer for delivery to the customer's site.

Required material certifications and samples are available upon request. Blank aluminum panels, that have been chemically treated, are available for purchase. We also stock the fasteners and hardware needed for sign attachment.

NHP, Inc. also manufacturers interstate mileage signs to state and federal FHWA regulations. As ever, these interstate signs further enhance what NHP, Inc. is all about - "One Stop Shopping".



## Pictured above are some of the interstate overhead signs that NHP, Inc. has fabricated and shipped to customers.

#### Interstate Mileage Signs



Hardware

See hardware section for full line of hardware products.



1. 3/8"x3/4" S.S. Hex Bolt

- 2. 3/8" S.S. Hex Nut
- 3. 3/8" S.S. Hex Nut w/ Nylon Insert
- 4. Aluminum Post Clip
- 5. S.S. Flat Washer
- 6. 1-3/4" S.S. Rectangular Head Bolt

## **Custom Signs | Signs & Sign Materials**



#### Signs for every occasion.

Let your imagination go – windows, walls, floors and doors, even vehicles make great places for signs! We offer a vast array of sign options that can make your vision a reality. We'll help you design, print and fabricate your signs. Signage offers an exciting world of possibilities for your business or traffic needs. Custom signs come in an exciting array of formats, materials, fabrications, and creative installations. The combinations are truly limitless. Whether you need custom signs for the exterior or interior of your business, or both, look to National Highway Products, Inc. to improve the visibility of your business.

- > Our art department will polish your design, and send you a proof. We offer hourly rates for graphic design services or we will provide you with a free proof upon confirmed order.
- > Our custom signs come in endless configurations.
- > All custom signs can be ordered in reflective or non-reflective materials and in a variety of substrates.

Options for customizing many of these signs include the use of different sign materials or the addition of custom verbiage or data imprinting. Meeting your application specifics, National Highway Products, Inc. provides signs in any quantity for high-impact results. Choose from a selection of sign materials, color printing, fonts, sizes, and configurations.

#### Aluminum • Plywood • Fiberglass • Plastic • Coroplast • Cardboard



### Custom • Window Graphics • Magnetic Signs • Vehicle & Fleet Graphics Novelty Signs • Floor Decals • Vinyl Decals

To remain on the cutting edge of sign fabrication, a company must stay ahead of the latest technological advancements. Investment in state-of-the-art sign making equipment allows National Highway Products, Inc. to provide its customers with photographic image quality signs. With the addition of seven high-tech digital printers to its art department, National Highway Products, Inc., continues to be a leader in the sign fabrication arena.

#### **Custom Indoor and Outdoor Signs**

The possibilities for sign placements are endless, many people think about signs for the exterior of their business and forget about the inside possibilities.

#### **Custom Printed Window Graphics**

We offer high definition, full color printing of all kinds of window signage and graphics. Custom printed full color window graphics are a great way to promote your business or organization by making use of valuable window real estate.

#### **Magnetic Signs**

Make a huge impression for a low cost. Place magnets on your car or truck to transform your vehicle into a mobile billboard.

#### **Mobile Vehicle - Fleet Graphics**

Fleet wraps offer a unified look for your business by essentially acting as a highly visible traveling billboard. Fleet wraps have proven to be a successful marketing and advertising tool.

#### **Showroom Floor Decals**

An innovative way to display your design, photo, brand or logo ad at your customer's feet.

#### **Vinyl Decals**

Opaque and clear vinyl decals are ideal for your custom message on store windows, vehicles or any smooth surfaces.

#### **Novelty Signs**

Novelty signs are okay to put on your wall but should never be used on streets or roads. They make great holiday gifts, funny workplace signs and are perfect for college students, home or office uses.

#### Sign Faces

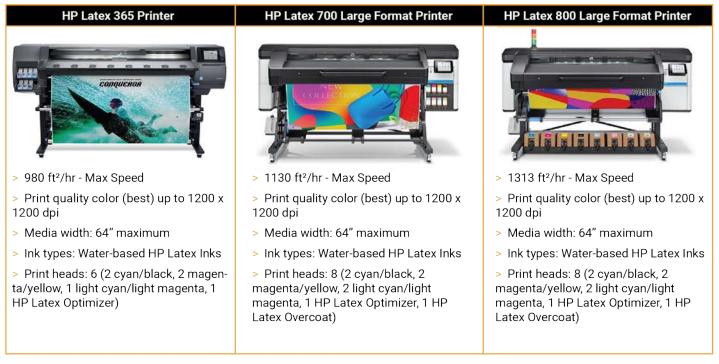
Sign faces are a pressure sensitive face that you simply peel off and apply over existing signs or sign blanks. Make your old signs look like new again. Update your existing signs to meet the new MUTCD standards with affordable sign faces.

#### **Die Cut Letters & Numbers**

All numbers and letters are precision die-cut and comply with all FHWA size and standards. Letters and numbers are sold in packages of 25 and are available in white, yellow, orange, red, green, blue, and brown. These colors are available in all of our reflective sheeting types. Non-reflective vinyl letters and numbers are available in black or white.

#### **HP Large Format Printers**

Exceed client expectations with production speeds ideal for handling urgent jobs. Print multiple media types including banners, selfadhesive vinyls, films, fabrics, papers, wall coverings, canvas, synthetics, mesh and textiles.



## A Glimpse into NHP's Graphic Room | Signs & Sign Materials

#### Modernize your sign shop with this simple, clean, and cost-effective print system.

The TrafficJet" Xpert printer is built on a proven platform including an integrated dryer for fast print speeds up to 162 ft²/hour. True Traffic Color™ spot inks and included software automates sign making, simplifying the printing of specification compliant traffic control, wayfinding, and custom signage.



#### Eco-friendly printing system for the production of road traffic signs.

The ORALITE® ECO Traffic Printer is the eco-friendly printing system for the production of road traffic signs - both for temporary and permanent applications. The system consists of the OKI ColorPainter M-64s and the Greenguard Gold certified OKI low odor eco solvent SX inks. In combination with ORAFOL's printing profiles especially developed for the traffic sign application the ORALITE® ECO Traffic Printer addresses the diverse requirements of the outdoor signage industry.

#### **Technical Details**

> 508 nozzles/head

Maximum resolution: 900 x 900 dpi

3-way built-in heaters (Pre, Print, After)

> Colour: 7 (CMYK, Lc, Lm, Gy)

#### Versatile Production

Eco-Solvent SX ink with Greengard certification

Media: Retroreflective sheeting, vinyl, banner, paper, backlit, technical textiles

Perfect for yard, directional and interior signage

Combines high quality, high density and high durability with fast print speeds



Exclusively engineered for traffic signage

Color Painter M-64s

OO yds

CLOSED

∘∭

Average

speed

cameras



Maximum print width 64"



Software: Onyx RIP (Version 12.2) included



<sup>11.5</sup> to 218 ft<sup>2</sup>/h approx. 23 - 29.5 ft²/h for printing traffic signs



## Signs & Sign Materials | Standard Aluminum Blanks

#### **Standard Aluminum Blank Signs**

When it comes to quality, dependability and product diversity, NHP, Inc. has a proven track record in the traffic control industry. Aluminum sign blanks are manufactured per the current MUTCD's standards. Blanks are 5052-H38 alloy, punched with standard rounded corners and 3/8" holes for mounting, and gauges include .040, .063", .080", .091, .100" and .125". Mill finished blanks are shipped ready to be sheeted or faced. Specify on order if you do not require radius corners or holes. Custom sizes and shapes available.

#### **Refurbished Blanks**

National Highway Products, Inc. is pleased to offer you the ability to refurbish and/or reface old aluminum blanks. Recycling aluminum blanks controls and reduces signage costs. Please contact a sales representative for further details.

RECTANGLES		SHAPES			SQUARES & DIAMONDS		
GAUGE"x W"xH"	WEIGHT/LBS.	/	$\overline{}$	$\langle \cdot \rangle$		GAUGE"x SIZE"	WEIGHT/LBS
	-						
.063x6x24	.89					.080x12 SQ	1.13
.063x12x18	1.33		• ]			.080x18 SQ	2.54
.080x6x18	.84 1.13					.080x24 SQ	4.52
.080x6x24 .080x6x30	1.13	GAUGE"x	SIZE"	WEIGHT/LE	3S.	.080x30 SQ	7.06
.080x6x36	1.69	.080x24 C	CT	3.73		.080x36 SQ	10.16
.080x6x36	1.09	.080x24 C		5.85		.080x24 DIA	4.52
.080x6x42	.56	.080x36 C		8.40		.080x30 DIA .080x36 DIA	7.06 10.16
.080x12x6	1.69	.080x30 C		5.59		.080x36 DIA	18.06
.080x12x18	3.38	.080x36 C		8.05		.000X40 DIA	10.00
.080x12x30	.84	.080x30 T		3.08			
.080x18x12	1.69	.080x36 T		4.44			D STREET
.080x18x24	3.39	.080x30 PENT		5.27			BLANK
.080x10x24	2.47	.080x36 F		7.50			
.080x24x6	1.13	.080x301 EN1		3.25		Cros	s section of an
.080x24x8	1.51	.080x24 CNM		3.60			ided blade.
.080x24x10	1.88					4	
.080x24x12	2.26					t	
.080x24x18	3.39						1
.080x24x30	5.64		FLAT STREE	<b>FNAME BLANK</b>		GAUGE"xW"xH"	WEIGHT/LBS
.080x24x36	6.77					.091x18x6	1.40
.080x30x24	5.64					.091x20x6	1.55
.080x30x36	8.47					.091x24x6	1.86
.080x36x12	3.39					.091x30x6	2.33
.080x48x24	9.03	GAUGE"xW"xH"	WEIGHT	GAUGE"	WEIGHT	.091x36x6	2.79
.080x48x30	11.29		/LBS.	x W"xH"	/LBS.	.091x42x6	3.26
.080x60x24	11.26	.080x18x6	.85	.080x18x8	1.13	.091x48x6	3.72
.080x60x30	14.07	.080x20x6	.94	.080x20x8	1.26	.091x18x9	1.89
		.080x24x6	1.13	.080x24x8	1.51	.091x24x9	2.52
here are three main c	•	.080x30x6	1.41	.080x30x8	1.88	.091x30x9	3.16
assembling a rigid s	ign:	.080x36x6	1.69	.080x36x8	2.26	.091x36x9	3.79
Blanks - Aluminum,	Plywood	.080x42x6	1.98	.080x42x8	2.64	.091x42x9	4.42
Fiberglass, Plastic,		.080x48x6	2.29	.080x48x8	3.01	.091x48x9	5.05
Cardboard	Coropiast of	GAUGE"xW"xH"	WEIGHT/LBS	Price includes hol	es,	Standard street	name blanks
Doll Coodo Doflas	tivo or Non	.080x18x9	1.27	rounded corners and have no punched		have no punched holes. Specify punching with your	
Roll Goods - Reflect Reflective Sheeting		.080x20x9	1.41				
	(see pages	.080x24x9	1.69				
28-29)		.080x30x9	2.12	noies uniess spec	illea.)		
Die-Cut Letters and Numbers		.080x36x9	2.54	]			
Die-Cut Letters and			2.96				
Die-Cut Letters and (see page 24)							
	ao 24)	.080x48x9	3.39				

## **Extruded Panels & Miscellaneous Sign Substrates | Signs & Sign Materials**

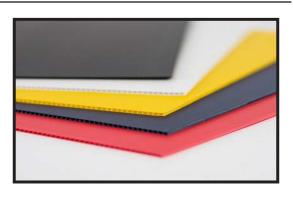
#### **Extruded Panels**

National Highway Products, Inc. offers 6063-T6 conversion coated aluminum extrusions in a vast array of prepunched sizes. Standard sizes range from 2'-32', but panels are available in up to 50' lengths (shipping restrictions may apply on any panel larger than 32'). Please contact your Account Executive for current stock sizes.



#### Coroplast

- > Fluted Polypropylene Corrugated Plastic
- > Perfect for yard, directional and interior signage
- > Available in: 2 MIL, 3 MIL, 4 MIL, 5 MIL, 6 MIL, 8 MIL, 10 MIL
- > Minimums for specific colors and sizes will be enforced
- > Can be routed, die cut or hand cut to create different shapes
- Sold in 4'x8' sheets or can be cut down to any size depending on quantity



#### Foam Board

Foam board is made with a polystyrene foam. Available in several thicknesses ranging from 1/16"-1/2".



#### Sintra

Sintra is a dense PVC plastic material for indoor use. It is produced in several thicknesses and is used for standard substrates and may be cut into many shapes for texts or logos. It is available in 1MIL to 19MIL thickness but most common sizes are 3MIL and 6MIL.



## Signs & Sign Materials | 3M<sup>®</sup> Roll Goods



#### A. 3M<sup>T</sup> Advanced Engineer Grade Prismatic Sheeting Series 7930 Type 1

- > Commercial signs
- > Non-critical signs

#### B. 3M<sup>™</sup> High Intensity Prismatic (HIP) Series 3930 Type 3/4

- > Traffic control signs
- > Work zone
- > Devices and delineators

#### C. 3M<sup>T</sup> Diamond Grade<sup>T</sup> VIP Reflective Sheeting Series 3990 Type 9

- > Guide signs
- > Regulatory signs
- > Rural roads
- > Traffic control devices
- > Urban roads
- > Warning signs

#### D. 3M<sup>™</sup> Diamond Grade<sup>™</sup> VIP Fluorescent Sheeting Series 3980 Type 9

- > Critical action signs
- > Regulatory signs
- > Rural roads
- > Traffic control devices
- > Urban roads

#### E. 3M<sup>T</sup> Diamond Grade<sup>T</sup> DG<sup>3</sup> Reflective Sheeting Series 4000 Type 11

- > Guide signs
- > Regulatory signs
- > Rural roads
- > Traffic control devices
- > Traffic signs
- > Urban roads
- > Warning signs

# **B**M

## Certified **Sign Fabricator**

#### F. 3M<sup>®</sup> Diamond Grade<sup>®</sup> DG<sup>®</sup> Fluorescent **Reflective Sheeting Series 4080 Type 11**

- > Rural roads
- > Traffic control devices
- > Urban roads
- > Warning signs
- G. 3M<sup>™</sup> LDP Diamond Grade<sup>™</sup> Fluorescent Work Zone Sheeting Series 3924S Type 8
  - > Construction work zones
- H. 3M<sup>™</sup> Diamond Grade<sup>™</sup> DG<sup>3</sup> Pre-striped Barricade Sheeting Series 444 Type 11 > Barricades
- I. 3M<sup>T</sup> Flexible Prismatic Pre-Striped Barricade Sheeting Series 3300 Type 4 > Barricades
- J. 3M<sup>®</sup> Electrocut<sup>®</sup> Transparent Film 1170 Series
  - > Traffic control signs
  - > Applied over 3M<sup>™</sup> reflective sheeting
  - > Backgrounds, copy and logos

#### K. 3M<sup>®</sup> Protective Overlay Film 1160i Series

- > With 3M<sup>™</sup> Diamond Grade<sup>™</sup> reflective sheeting
- On signs in areas with high vandalism rates
- > Anti-graffiti & UV protection
- > 1160i includes premask
- > 1160iA does not include premask

#### L. 3M<sup>™</sup> Diamond Grade<sup>™</sup> Conspicuity Markings Series 983

- > For application to sides and rear of large trucks, trailers and other vehicles
- > Highly reflective at wide angles

#### **Performance Levels**

Diamond Grade: 3M<sup>™</sup> Diamond Grade<sup>™</sup> Reflective Sign She higher luminance values than our other sheeting at distances

> High Intensity Prismatic: 3M™ High Intensity Prismatic Ref retroreflectivity for traffic signs, work zone devices, and delin

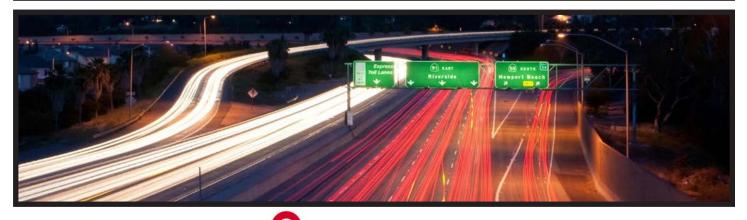
> Engineer Grade: 3M<sup>™</sup> Engineer Grade Reflective Sheeting is designed for production of non-critical traffic signs and devices.

800.338.5685 😐 www.nationalhighway.com

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	WES		
ЕM		COLOR	PART #
	0	White	7930
		Yellow Orange	7931 7934
		White	3930
	Ŏ	Yellow	3931
		Red	3932
•		Orange	3934
		Blue Green	3935 3937
		Brown	3937
	0	White	3990
	Ŏ	Yellow	3991
	•	Blue	3995
		Green	3997
).		Fl. Yellow	3981
		Fl. Yellow Green White	3983 4090
		Yellow	4090
	ĕ	Red	4092
•	Ŏ	Blue	4095
		Green	4097
		Brown	4099
	Ŏ	Fl. Yellow	4081
•		Fl. Yellow Green	4083 4084
		Fl. Orange Fl. Orange	3924S
		White/Orange	444/446
		White/Orange	3334/3336
	0	Clear	1170
	$\bigcirc$	Yellow	1171
		Red	1172
		Orange	1174
		Blue Green	1175 1177
		Opaque Black	1177
		Brown	1170
		Premium Clear	117.5
	0	w/ Paper	1160i
•	-	Premask	
		Premium Clear	1160iA
		Red/White	983-32 983-326
		Red/White Red	983-326
		White	983-72
		Yellow	983-71
			983-71 983-23
	0	Yellow	

## Avery® Roll Goods | Signs & Sign Materials



ITEM		COLOR	PART #
	$\bigcirc$	White	T-1500
		Yellow	T-1500
		Orange	W-1504*
Α.		Blue	
A.			T-1505
	•	Green	T-1507
		Red	T-1508
		Brown	T-1509
	Õ	White	T-2500
	0	Yellow	T-2501
В.		Orange	W-2504*
0.		Blue	T-2505
		Green	T-2507
		Red	T-2508
		White	T-6500
	Õ	Yellow	T-6501
	Ö	Orange	W-6504*
C.		Blue	T-6505
		Green	T-6507
		Red	T-6508
		Brown	T-6509
		White	T-7500
		Yellow	T-7501
		Orange	W-7504*
D		Blue	T-7505
D.		Green	T-7507
		Red	T-7508
	0	Fl. Yellow	T-7511
	0	Fl. Yellow Green	T-7513
		Fl. Orange	W-7514*
	0	White	T-11500
	0	Yellow	T-11501
		Blue	T-11505
E.		Green	T-11507
E.	•	Red	T-11508
		Fl. Yellow	T-11511
	Ŏ	Fl. Yellow Green	T-11513
	ŏ	Fl. Orange	W-11514*
		Clear	OL-2000
	ĕ	Black	OL-2003
		Blue	OL-2005
F.		Green	OL-2003
		Red	OL-2007
		Brown	OL-2008 OL-2009
		Purple	OL-2009 OL-2023
-		Clear	
	0	Clear w/ Paper	OL-1000
G.	0		OL-1000PM
	-	Premask	
Н.		Black	OL-3003
	0	White	V4000-101
		Black	V4000-190
1.	0	Yellow	V4000-250
		Orange	V4000-350
		Red	V4000-450
	•	Blue	V4000-650

## 

- A. Avery Dennison Engineer Grade Beaded T-1500 Series Type 1
  - Rigid, permanent and temporary outdoor signage
  - > Rigid work zone devices

#### B. Avery Dennison Prismatic Engineer Grade T-2500 Series Type 1

- Rigid, permanent and temporary outdoor signage
- > Rigid work zone devices

#### C. Avery Dennison High Intensity Prismatic (HIP) T-6500 Series Type 4

- Rigid, permanent and temporary outdoor signage
- > Rigid work zone devices
- Safety devices that require robust retroreflective performance

#### D. Avery Dennison Maximum Visual Performance T-7500 Series Prismatic Type 8

- Rigid, permanent and temporary outdoor signage
- > Rigid work zone devices
- Safety devices that require superior retroreflective performance

#### **Barricade Sheeting\***

ITEM COLOR SIZE/DIRECTION PART # SERIES 4" L Stripe Orange & White W-1142 W1000 Type 1 Engineer Orange & White 4" R Stripe W-1143 W1000 Orange & White Grade 6" L Stripe W-1144 W1000 Orange & White 6" R Stripe W-1145 W1000 Orange & White 4" L Stripe W-6142 W6100 Orange & White W-6143 4" R Stripe W6100 Type 4 HIP Orange & White 6" L Stripe W-6144 W6100 Orange & White 6" R Stripe W-6145 W6100 Red & White 6" L Stripe W-6148 W6100 Type 4 HIP Red & White W-6149 W6100 6" R Stripe OC Orange & White W11100 4" L Stripe W-11142 Orange & White 4" R Stripe W-11143 W11100 Type 11 OmniCube 00 Orange & White 6" L Stripe W-11144 W11100 Orange & White 6" R Stripe W-11145 W11100

- E. Avery Dennison OmniCube<sup>®</sup> T-11500 Series Full-Cube Prismatic Type 11
  - > Rigid, permanent and temporary outdoor signage
  - > Rigid work zone devices
  - Safety devices that require wide angle retroreflective performance

#### F. Avery Dennison OL-2000 Series Transparent Electronic Cuttable Overlay Film

- Rigid, permanent and temporary outdoor signage
- > Rigid work zone devices

#### G. Avery Dennison OL-1000 Series Anti-Graffiti Protective Overlay Film

 Traffic and custom signs where premium sign protection is a must

#### H. Avery Dennison OL-3000 Series Opaque Overlay Film

> Opaque, flexible, solid color, high gloss film that is ideal for use in manufacturing traffic control and work zone signage

#### I. Avery Dennison V-4000 High Visibility Beaded Reflective Film

> Designed for exceptional conformability to moderate curves and rivets and perfect for vehicle and fleet applications

## Signs & Sign Materials | Squeeze Rollers & Accessories



#### Your basic sign shop needs start here.

All Highway Handyman hand squeeze roll applicators are hand crank driven and are adjustable to provide proper application pressure for sign blanks. The pressure can be adjusted by using the pneumatic air cylinder lift kit that is included in the unit. Hand squeeze roll applicators come in 12", 36", 48" and 60" widths.



#### 12" Hand Squeeze Roll Applicator

- > Weight: 75 lbs
- > Dimensions: 17.5"Lx24"W x20"H
- Maximum sign size: Up to 12"W and 1-1/8" thick



36" Hand Squeeze Roll Applicator

- > Weight: 120 lbs> Dimensions: 41.5"Lx26"W
- x20"H > Maximum sign size: Up to
  - 36"W and 1-/8" thick



**48" Hand Squeeze Roll Applicator** > Weight: 290 lbs

- Main Table: 54"Lx24"Wx20"H
- Extension table: 54"Lx14"Wx4"H
- Maximum sign size: Up to 50"W

and 2-1/4" thick



#### 60" Hand Squeeze Roll Applicator

- > Weight: 390 lbs
- > Main Table: 66"Lx24"W x20"H
- > Extension table: 66"Lx14"Wx4"H
- Maximum sign size: Up to 60"W and 2-1/4" thick



#### **Pre-mask Attachment**

- Used for applying pre-mask sheeting
- Installs easily with common hand tools
- > Fits 36", 48" & 60" and HSRA-60



>

#### Air Cylinder Pneumatic Lift Kit

- > Used for converting a manual lift to a pneumatic lift
- Eliminates the need for time consuming adjustments
- Installs easily with common hand tools
- > 12", 36", 48" & 60" have kit included



#### **Rotating Trim Table**

- > Weight: 25 lbs
- Designed for trimming excess sheeting from blanks
- > Dimensions: 24"x24" at base, 36" tall, top 12" Dia.

## **Posts & Accessories** Make installing your signs and posts safe and easy.



## Posts & Accessories | Sign Posts



Ensure that your traffic and parking signs are clearly visible throughout your parking lot, grounds, and roadways with sign posts and accessories.

National Highway Products, Inc. stocks a wide variety of u-channel, square and round posts. These posts are manufactured from high quality, high tensile steel or aluminum and finished with either weather resistant powder coating or galvanized. We also complement the posts with DOT approved breakaway systems for u-channel, square and round posts.



#### **RIB-BAK® U-Channel Posts**

- Strongest u-channel on the market
- Has 25% more yield strength (80 –100 KSI) than the rail steel used by the competitors
- Fast, easy installation with conventional tools
- > Flush contact points for solid sign attachment
- > Withstand higher wind loads at crucial load bearing points
- > 3/8" holes punched in one inch centers
- Available in 1.12, 1.25 (studded T-post), 1.33, 2, 2.5, 3 and 4 lbs. per linear foot
- > Meet all NCHRP 350 requirements
- > Standard stock colors: powder coated green and galvanized
- Custom color powder coating available upon request, please call for minimum order requirements
- > Yield strength of 80-100 KSI vs. 60-80 other competitors
- Stock Sizes: 3'6", 6', 8', 10', 12', 14', 16', 18'
- > Custom Order Sizes: 2', 3', 4', 5', 7', 9', 11', 13', 20'

#### 

#### Tubular Square Post - Fully Punched Posts

- Ground anchor posts allow for rapid replacement installations when necessary
- > Square tube sections provide superior resistance to wind and other forces over u-channel or round posts
- Four flat surfaces for mounting signs in any direction and at any height without the need for additional hardware
- > FHWA approved
- > Available in various thicknesses
- Hot-dip galvanized conforming to industry standards
- Specialty powder coated colors: yellow, red, blue, white, black
- Stock sizes: 2" x 10' & 12' 14 gauge uprights; 2-1/2" or 2-1/4" x 18", 30", or 36" - 12 gauge sleeves & bases

#### **Qwik-Punch® Posts**

 Qwik-Punch<sup>®</sup> Square Sign Posts are manufactured with 7/16" "knockouts" on all four sides



- > Easy, safe installation
- > Use a slug punch to knock out the holes
- > Convenient sign mounting before installation
- > Superior torsional strength
- > Versatile, four-sided sign mounting at any height
- > Fast, economical replacement of damaged sign posts
- > FHWA approved

#### Penetrator by Ulti-Mate®

- This square post anchor outperforms all other anchor systems
- Compatible with existing square post systems
- Diamond point breaks through compacted, rocky and difficult ground conditions
- > NCHRP 350 Compliant

#### **Round Posts**

.....

- > 2-3/8" Round Post
- > Various sizes and thicknesses available in steel or aluminum
- Conforms with ASTM B-6 high grade and special high grade zinc
- > Chemical composition in accordance with ASTM A-500
- Materials Testing in accordance with ASTM-500 & ASTM E-8
- Round steel posts in other diameters, wall thicknesses and lengths can be special-ordered
- Stock sizes: 2-3/8" O.D. steel 10' & 12' .065 (16 gauge) wall

Please contact an Account Executive for all stock availability of all posts and bases. Call 800.338.5685 or email sales@nationalhighway.com.



## Breakaway Post Systems | Posts & Accessories

#### **Breakaway Post Systems**

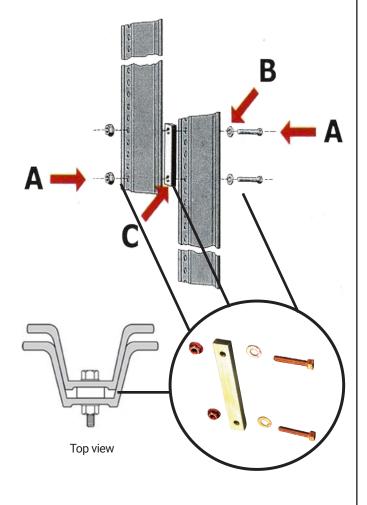
#### Lap-Splice<sup>™</sup> U-Channel Breakaway System

Breakaway Systems are designed to be used for rapid replaceability of damaged signs in all areas but are especially beneficial in high-impact areas. The Lap-Splice Breakaway System securely nests u-channel ground posts (standard 3'6") with top posts and forms a union which is as strong as the posts themselves. The Lap Splice spacer bars have holes drilled for 1st and 5th hole placement, thereby eliminating any possible user error. In just minutes, using either manual or power tools, the post system can easily be driven, from ground level, into even the hardest clay. Altogether your installation crew spends less time by the side of the road, reducing their exposure to traffic-related injury.

- > The simplest, easiest-to-use installation and most economical breakaway sign post system
- A ground mounted breakaway system for any size SP-80 Rib-Bak<sup>®</sup> U-Channel up to 4 lbs.
- > NCHRP 350 Approved

#### Lap-Splice" Spacer bar hardware consists of:

- A: Two 1-1/2" high-performance grade 9 bolts & self-locking flange nuts
- > B: Two grade 9 lock washers
- > C: One 1/2" wide x 3/4" thick x 5" long space bar



#### Slip-Safe<sup>™</sup> for U-Channel Breakaway System

- Durable, safe and reusable breakaway system is the ideal solution for small sign supports in high-impact areas
- Slip-Safe<sup>®</sup> is designed to be installed – and reinstalled – quickly and cost effectively
- Handles sign panels up to 42 sq. ft. using three 4 lbs. /ft. Rib-Bak<sup>®</sup> posts within a 7 ft. span

#### Slip-Safe<sup>®</sup> Supreme U-Channel Breakaway System

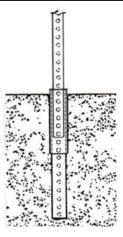
- 360° breakaway system for mid-size sign supports
- Can be installed and reinstalled quickly, easily and cost effectively because it does not require concrete support in strong soil conditions
- Base post is a direct-drive unit composed of two Rib-Baks<sup>®</sup> bolted together, requiring only conventional power tools for installation.





## Ulti-Mate<sup>®</sup> Square Post Sign Support System

- > Approved by the FHWA
- Reliable, economical and easy to install
- > A unique manufacturing method
- > The Ulti-Mate® tubing permits tubular sections of different sizes to telescope into the next larger size for convenient installations, maintenance and reuse
- The square shape also provides torsional stability

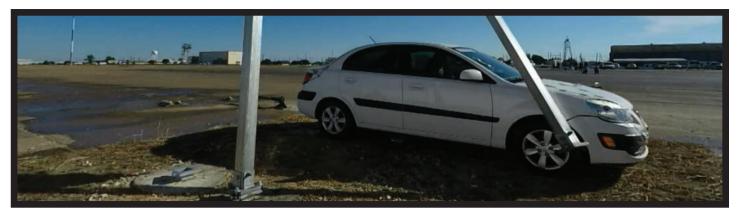


#### Slip-Mate® by Ulti-Mate®

- > An impact release sign post system
- > The lateral-release system is designed to work with the Ulti-Mate<sup>®</sup> Square Post Sign Support System and comes preassembled
- > The patent-pending design minimizes the deceleration of a vehicle by utilizing an innovative ball-bearing system
- Eliminates need to auger hole in ground and concrete
- > No need for annual torquing of bolts
- > NCHRP 350 compliant
- > Utilizes standard drivable anchor



## Posts & Accessories | Xcessories Squared, Breakaway Systems

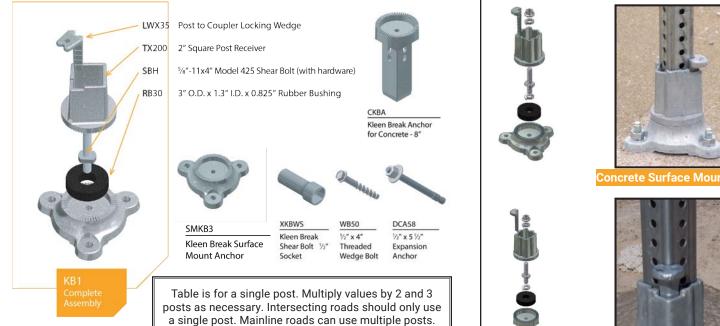


Multi-directional, ground-mounted sign post slip, and breakaway systems.

#### Kleen Break Model 425 Sign Post Coupler

The Kleen Break System is a crash tested frangible ground mounted sign assembly.

- When properly installed, the Kleen Break supports the sign post at 100% of the strength of the post for windloading, yet breaks away per > NCHRP 350 criteria when impacted
- The Kleen Break system allows for 360° indexing, for proper sign orientation after anchoring portion is permanently set >
- After impact, all components of the Kleen Break system are reusable, with the exception of the shear bolt >
- Can hold a 2" square post >
- Made in America >



	90 MPH		120 MPH	
Centroid Height	2″x14ga. PSST	2″x12ga. PSST	2″x14ga. PSST	2"x12ga. PSST
16′	5.36 ft <sup>2</sup>	6.68 ft <sup>2</sup>	2.90 ft <sup>2</sup>	3.65 ft <sup>2</sup>
14'	6.12 ft <sup>2</sup>	7.64 ft <sup>2</sup>	3.32 ft <sup>2</sup>	4.17 ft <sup>2</sup>
12′	7.14 ft <sup>2</sup>	8.91 ft <sup>2</sup>	3.87 ft <sup>2</sup>	4.86 ft <sup>2</sup>
10′	8.57 ft <sup>2</sup>	10.7 ft <sup>2</sup>	4.64 ft <sup>2</sup>	5.83 ft <sup>2</sup>
8′	10.7 ft <sup>2</sup>	13.3 ft <sup>2</sup>	5.80 ft <sup>2</sup>	7.29 ft <sup>2</sup>





Stem Base Flush Mounted in Concret





Stem Base in Direct Drive Soil Ancho

#### Redi-Torque Model 280 Slip Base System

The Redi-Torque System is a MASH compliant ground mounted slip base sign assembly. The REDI - TORQUE system does not require a torquewrench. The top hex head of the REDI - TORQUE bolt breaks off at the predetermined torque value needed to allow the plates to disengage on impact, yet clamps the slip plates with 30% greater clamping force than Conventional Square post Slip Bases.

Post Caps

Hardware

Sign Brace

Sign Post

Slip Base Assemblies 2-1/2" square & 2-7/8" round post syste

Sign Centroid

Height



- Concrete, soil or surface > mount
- MASH-16 compliant for intersecting roads and mainline roadways
- Sign Clamp Does not require any special tools such as a torque wrench
- Can be used with new > square, round and beam post installations
- Can be retrofitted to existing triangular slip base installations, including 8", 9" and 10", as well as rectangular slip bases
- The 3 bolt system is FHWA accepted for up to three posts in 7" span with triangular slip bases (SS134, SS134A & SS175)
- The 4 bolt system is FHWA accepted for up to two posts in 7' span with rectangular slip bases (SS134 & SS134A)
- Made in America >

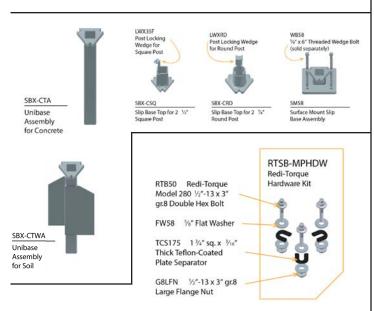


Table is for a single post. Multiply values by 2 and 3 posts as necessary. Intersecting roads should only use a single post. Mainline roads can use multiple posts.

	90 MPH				120 MPH			
Centroid Height	2½*x12ga. PSST	2½*x10ga. PSST	2%*x10ga. ROUND	2½"x10ga. inserted with 2½s"x10ga.	2½*x12ga. PSST	2½*x10ga. PSST	2%"x10ga. ROUND	2½*x10ga. inserted with 2½*x10ga.
16'	10.7 ft <sup>2</sup>	12.4 ft <sup>2</sup>	12.5 ft <sup>2</sup>	21.7 ft <sup>2</sup>	3.6 ft <sup>2</sup>	5.9 ft <sup>2</sup>	7.0 ft <sup>2</sup>	12.0 ft <sup>2</sup>
14'	12.3 ft <sup>2</sup>	14.2 ft <sup>2</sup>	14.3 ft <sup>2</sup>	24.8 ft <sup>2</sup>	4.1 ft ²	6.7 ft ²	8.0 ft <sup>2</sup>	13.6 ft ²
12'	14.3 ft <sup>2</sup>	16.5 ft <sup>2</sup>	16.7 ft <sup>2</sup>	29.0 ft <sup>2</sup>	4.8 ft <sup>2</sup>	7.8 ft <sup>2</sup>	9.4 ft <sup>2</sup>	15.9 ft <sup>2</sup>
10'	17.2 ft <sup>2</sup>	19.8 ft <sup>2</sup>	20.0 ft <sup>2</sup>	34.7 ft 2	5.8 ft <sup>2</sup>	9.4 ft <sup>2</sup>	11.2 ft <sup>2</sup>	19.1 ft <sup>2</sup>
8'	21.5 ft <sup>2</sup>	24.8 ft <sup>2</sup>	25.0 ft <sup>2</sup>	43.4 ft <sup>2</sup>	7.2 ft <sup>2</sup>	11.8 ft ²	14.1 ft <sup>2</sup>	23.9 ft <sup>2</sup>

#### MASSH-400 Multi-Directional Sign Support **Hardware System**

The MASSH-400 Structure is a MASH compliant ground mounted slip base sign assembly. It is designed to be used in place of several W-beam ground-mounted sign structures. It can be custom cut to size in your shop or at the roadside. It contains multi-directional hinges on multi-leg installations to help protect the sign panels. It is much quicker to install than a standard W-beam structure, which helps improve safety and reduce risks. It can also be immediately reinstalled if impacted.

- Assemblies and components 5 for 4" x 8ga Square Post Sign Structures
- MASH-16 Compliant (FHWA Letter SS-180 & SS-182)
- Made in America

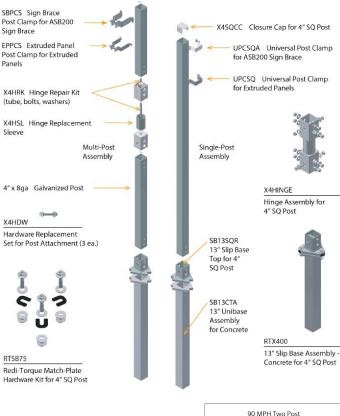
Panels

Sleeve

X4HDW

RTSB75





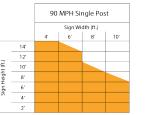
14'

12′

8'

leight (ft.) 10′

lign





sign Width (ft. 10' 12′ 14

# Posts & Accessories | Post Drivers



#### Shop post drivers and pullers to make your job faster.

National Highway Products, Inc. offers a full line of power and manual post drivers for use on even the most demanding jobs, from tough soil conditions to tricky hills. For maximum efficiency on the job site, our post drivers are built to be fast, powerful, durable and maneuverable.

#### Skidril G23 2 Stroke Gas Powered Post Driver

- Patented design enables this machine to produce an amazing 1.25 lbs. of impact force per cc of engine
- Heavy duty >
- Simple starting two cycle >
- Idle feature helps with easy post > leveling
- > Modular design for easy service
- Only four moving parts >
- Anti-vibration handles with air > cushion dampening
- Drives square, round, u-channel, and > T-posts
- Breaks rock and concrete >
- Tamps soil and asphalt
- Weight: 40 lbs.

#### Skidril G30 4 Stroke Gas **Powered Post Driver**

- On-Off air breaker simplicity >
- Simple four cycle OHV engine
- No oil mix means little smoke >
- > Easy service replacement motors, for low cost repairs
- > Highest hitting force available
- > Few moving parts
- Uses standard 1-1/4" tools >
- > Anti-vibration handles
- Air cushion dampening for virtually no > recoil means less operator fatigue
- High fuel efficiency 1qt./hr.
- Uses regular 10w30 oil for lubrication >
- Modular design for easy service >
- > Sturdy steel tool holder
- Tools available for driving, tamping and breaking >
- Weight: 50 lbs. >



#### Rhino GPD-45 Multi-Pro Gas Powered Post Driver

- Beefed up, engineered for more power, and can drive larger posts
- Easy to transport and operate
- Fast-drives T-Posts in second
- Easy to transport and operate
- Runs on regular gas and does not require additional equipment such as propane or hydraulic power sources
- Versatile adapter system allows for guick change
- Perfect tool for post driving tasks across several industries such as erosion control. agricultural, vineyard, sign installation and maintenance, and many more
- Includes Chuck-Lok adapter technology
- Innovative post adapter system increases driving efficiency >
- Designed with a 2-1/2" chuck for the most commonly driven posts
- Limited Lifetime Warranty
- Size: 26"Hx10.75"Wx17"D
- > Weight: 44 lbs.

#### **Gas Driver Transport & Display** For your Fence Pro<sup>™</sup>, Ranch Pro<sup>™</sup>, Multi-Pro<sup>™</sup> and Multi-Pro<sup>™</sup> XA Gas Powered Drivers

- Secure Post Driver Transport
- > Mobility to and from job sites
- Zinc plated for corrosion resistance
- **Ouick and Easv** Assembly
- Padded grip for handling comfort
- Large Diameter wheels for easy maneuvering
- Canvas bag attached provides storage for Pro > Series<sup>™</sup> Driver Manuals and Adaptors





# Post Drivers | Posts & Accessories

#### Rhino PD-39P Panel Post Driver

- Ensures fast erection of temporary panel fencing
- Light in weight operator must pull down on the spring loaded handles to provide the correct weight for driving
- Weight: 39 lbs. >

# Rhino PD-45/PD-55 Light Duty Post Driver

- Easily operated by one man and is the perfect choice > for driving posts
- Has a 1" diameter handle designed into the cover for easy handling and carrying
- O-Ring sealed
- Piston: Alloy steel heat treated with a ground surface with hard chrome plate
- Designed with 2 round valve ports to give better > lubrication and load distribution to the valve ring while running
- Air Consumption: PD-45 30 cfm\* and PD-55 42 cfm\*
- Weight: PD-45, 46 lbs. and PD-55, 55 lbs. > \*cfm - cubic feet per minute

#### **Complete PD-55 Unit Consists of:**

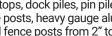
- > PD-55 Drive (66 lbs.)
- Throttle valve kit (6 lbs.)
- Filter-Regulator-Lubricater (6 lbs.)
- Carrier for filter-regulator-lubricator (12 lbs.) >
- 16' air hose (7 lbs.)
- > PD-55 channel post adapter (9 lbs.)
  - Choice of u-channel, square or round

#### Rhino PD-110 Medium/Heavy Duty Post Driver

- Easily operated by one man and is the perfect choice for driving telespar and various types of steel posts
- Body ductile iron casting, with excellent wear resistant characteristics
- The air inlet is cast into the body and tapped with .75" NPT female threaded ports
- 1" diameter side handles for easy handling >
- Piston: Alloy steel heat treated with a ground surface with hard chrome plate
- Designed with two round valve ports to give > better lubrication and load distribution to the valve ring while running
- Weight: 116 lbs.

## Rhino PD-140 Air Post Driver

- > The PD-140 is a power performer
- Often referred to as the guard rail > driver
- Fully capable of driving posts that > competitive systems simply cannot
- No other system strikes the balance between investment and return as does the PD-140
- Suited to drive guard rail posts, heavy > line posts, corner posts, gate posts, baseball backstops, dock piles, pin piles, foundation piles, wood
  - posts, concrete posts, heavy gauge aluminum posts, well points, well casing and fence posts from 2" to 4" in diameter





### **Rhino PD-200 Heavy Duty Post Pounder**

- Perfect choice for driving beams, round, square or rectangular > tubing, wood posts, and stakes of any shape
- Out performs a 90 lb. Jack Hammer
- Features a 4" piston and 5.5" or 7" master chuck
- Drives large, heavy posts quickly and securely
- Delivers up to 930 blows per minute, and capable of driving guardrail and other heavy-duty posts
- Low air consumption and high-quality components, mean low-cost, low-maintenance post driving
- Additional driving options possible with easy bolt-on adapters
- Weight: 170 lbs.

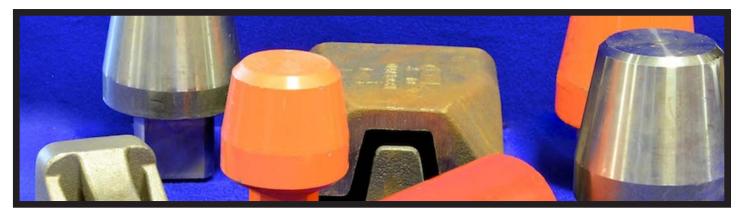


Contact your National Highway Products, Inc. account executive or call the main sales line at 856-692-7572 to inquire about and request pricing for any Rhino<sup>®</sup> unit or accessorv!

Weight: PD-140 139 lbs.



# Posts & Accessories | Post Drivers, Post Drive Caps



### **Drive Caps**

Drive caps for round, square and u-channel posts are made from high strength alloy steel castings which protect your posts and post drivers when installing.

#### **DCH10 Junior Drive Cap**

- Used with 2 lb. and 2-1/2 lb. per foot u-channel sign posts
- > 3/4"Hx2-1/2" square
- AISI-4140 alloy steel casting
- > Heavy duty and long lasting
- > Weight: 4 lbs.

#### **Big Boy Drive Cap for U-Channel Post**

- > Used with posts 3 to 4 lbs.
- > High strength alloy
- > Provides a larger target for sledge hammer
- Protects the top of the u-channel post from becoming deformed or damaged



#### **DCDR68 Drive Caps Round Post**

- Use with 2-3/8", 2-7/8" and 3" round tubular sign posts
- Welded, solid steel top, thick wall
- Weight: 3 lbs.

#### Square Post Drive Cap

- > TL-214: for use with 1-1/2", 3.7 lbs.
- > TL-216: for use with 1-3/4", 5.2 lbs.
- > TL-220: for use with 2", 6.9 lbs.
- > TL-222: for use with 2-1/4", 9 lbs.
- > TL-224: for use with 2-1/2", 11 lbs.





## **Manual Post Drivers**

#### **DH4 Post Driver**

- > The steel driving weight is pinned and welded, guaranteed not to drive out
- > Barrel I.D. 2-1/2", length 24", overall length is 30"
- Lightweight driver for use with delineator posts and snow fence posts
- > Weight: 21 lbs.



# Please see page 32 for post options and availability.

#### DH8 Post Driver

- Barrel I.D. 3-3/4", overall length is 65"
- This one-man driver is designed to drive 2-lb. per foot u-channel posts, and square and round tubular posts, up to 12'-0" from ground level
- Weighted with hardened steel insert, swedged, pinned, welded
- > Weight: 38 lbs.

#### **DHD87 Post Driver**

- > Barrel I.D. 4", overall length is 65"
- > This one-man post driver is almost the same as the #DH8 post driver except that it is a heavy-duty design to accommodate 3-lb. and 4-lb. per foot u-channel sign posts
- > Weight: 45 lbs.



# Post Pullers | Posts & Accessories

#### PL-3 Rhino Hydraulic Post Puller w/ Grabber

- > Field proven hand operated unit
- Designed with the power of > hydraulics to take the effort out of heavy duty pulling jobs
- Easy to use and transport
- Weight: 53 lbs. >

#### P600 Skidril Dual Cylinder Post Puller

- Patented dual cylinder puller providing 6 tons of force directly in line with the post
- Most powerful manual puller of its kind >
- > Pulling stroke: 17"
- Grabbers available: Panel Post Grabber, Post Grabber, Tent Stake Grabber
- Dual 3 ton cylinders can be pumped independently
- Cast and profiled aluminum base provides > stability
- Air filled tires contact ground only when the > puller is tilted
- Proof rated 8 ton chain >
- Pulls sign posts, stakes, pins and wood >
- 1.5" of cylinder travel with each pump of the handle
- > Weight: 53 lbs.

### **U-Jack Manual Post Puller**

- Easy to use, one man operation >
- No chains, no winches
- Designed to extract u-channel and square sign posts
- Within minutes, the post will pull from soil, asphalt or loosened concrete
- Hardened steel replaceable > engagement pin
- One piece, formed and reinforced base >
- > Lifetime warranty

#### JackJaw U-Channel Post Puller

Removes:

- > Concrete form pins and stakes
- T-posts >
- String line stakes >
- Flat stakes
- Tent stakes and rebar
- Sign Posts U pickets, square and round posts
- Utility grounding rods >
- Drill rods for nuclear density gauges



#### JHD7H Heavy-Duty Handle Only

handle > Weight: 17 lbs.

> Husky, heavy-duty jack with trussed stronger

#### H7 Jack Base Hand Operated Jack Stand

- For pulling parking meter posts, street name posts, snow fence posts and farm posts
- Handle is separate from base and has 2 different leverage positions
- Handle can be used for straightening twisted channel posts
- Height: 19" Tall
- Weight: 44 lbs. w/ Base and Handle

#### HD7 Heavy Duty Jack Stand

- > Husky, heavy duty jack, trussed stronger handle
- Heavy duty detachable puller
- > Longer heavier chain
- Wood and piggyback steel posts
- Pulls any size up to and including 6-1/4" O.D.
- Height: 25"
- Weight: 26 lbs. w/ Base, Jack and Handle

#### **Detachable Pullers**

Use with the standard or heavy-duty jack and handle. These pullers pull U-Channel, square, round and wood posts and automatically adjust to any shape post. Shown in the pulling position, the welded, hardened-steel jaws prevent slipping.

### PH4A Detachable Puller

- For pulling posts 3-1/4" O.D.
- Use with H7 Jack and Handle
- > Weight: 11 lbs.

## **PH4AA Detachable Puller**

- For pulling posts 4-1/4" O.D.
- > Use with the standard H7 or heavy-duty HD7 jack and handle
- > Weight: 18 lbs.

#### PHD4AAA Detachable Puller

- > For pulling posts 6-1/4" O.D.
- Use with the heavy-duty HD7 jack and handle
- Weight: 23 lbs.

One Jack Handle. choice of one Jack Stand and a choice of one **Detachable Puller** makes an entire post pulling system.



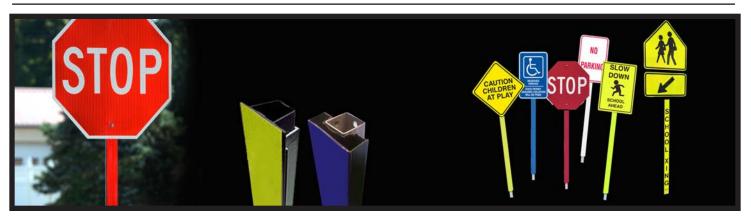








# Posts & Accessories | BriteSide® Reflective Panels



#### Traffic calming, accident reducing and life saving with BriteSide®.

Reflective panels are available in various widths, lengths, and all standard reflective colors. BriteSides<sup>®</sup> are compatible with u-channel, square, and round posts. This innovative post product is a natural complement to reflective traffic signs.

#### **BriteSide® Reflective Panels**

BriteSide<sup>®</sup> panels add special attention to signs. Some applications include helping motorists sooner identify rail, school, pedestrian and bicycle crossings, and alerting people to hidden dangers, to dangerous construction zones and ramps, to handicapped resident areas and to the presence of children. Panels can also serve as mini-message centers by applying computer-cut legends with whatever message you desire.

- > Reflective day and night (Type 4 & Type 11)
- > Fits all styles of posts
- Multiple sizes, profiles and optional legends available (check local ordinances) 3"Wx72"H standard size
- > Vertical reflectivity leads eye to sign
- > Theft-resistant, mounting hardware included and mounts in seconds
- > Safe, no sharp edges
- > Non-corrosive
- MUTCD compliant







**BSX** 

BSD



ProductFitsBSS2"x72" Square PostsBSS2"x72" For 2# U-Channel Posts & upBSX3"x72" For 2# U-Channel Posts & up4"x72" For 2# U-Channel Posts & upBSD4"x72" For 2# U-Channel Posts & upBSD4"x72" For 2" Square and 2-3/8" RoundBSF2-3/4"x72" For 4"x4" Wood Post3"x72" For 4"x4" Wood Post4"x72" For 6"x6" Wood Post





# Call an Account Executive for pricing and availability.

# Hardware Make installing your signs safe and easy.



# Hardware | Standard



#### Protecting and securing your signage with appropriate hardware is essential.

Choose from a complete selection of stainless steel, zinc plated, galvanized or aluminum hardware sets and everything else you may need to get your sign installed. Whether you're ordering a stock or custom sign, please provide mounting information to our Account Executive at time of ordering so accurate hole placements are drilled into your sign.

#### **Standard Hardware for Mounting Signs**



#### Hex Tap Bolt (Full Thread)

- Length: 1-1/2", 2", 2-1/2", 3", 4", 4-1/2", 6-1/2" and 8-1/2"
- > Size: 3/16", 3/8", 5/16"
- > Material: stainless steel, aluminum,



Slotted Head Bolt

- Length: 1-1/2", 2", 2-1/2", 3"
- > Size : 3/16", 3/8", 5/16"
- > Material: stainless steel



#### Hex Nut

- > Size: 3/16", 3/8", 5/16"
- Material: stainless steel, aluminum, zinc plated



**Flat Nylon Washer** 

- > Size: 3/16", 3/8", 5/16"
- > Material: Nylon



Lock Nut

- > Size: 3/16", 3/8", 5/16"
- Material: stainless steel, aluminum, zinc plated



Flat Washer
Size: 3/16", 3/8", 5/16"

> Material: stainless steel, zinc plated



### Hex Lag Bolt (Partial Thread)

- > Length: 1-1/2", 2", 2-1/2", 3" & 4"
- > Size: 3/16", 3/8", 5/16"
- Material: stainless steel, aluminum, zinc plated, galvanized



#### Set Screw

- > Size: 5/16"
- > Knurled point
- > Material: stainless steel, zinc plated



Lock Washer

- > Size: 3/16", 3/8", 5/16"
- Material: stainless steel, aluminum, zinc plated

# Vandal Proof | Hardware

## Vandal Proof Hardware for Mounting Signs

This hardware aids in eliminating theft and vandalism to signs. This section includes various sizes of set screws, nuts, and rivets which are stainless steel, zinc plated or aluminum. We also offer a full line of vandal proof tools.



#### **Carriage Bolt**

- Length: 1-1/2", 2", 2-1/2", 3"
- Size: 3/16", 3/8", 5/16" >
- Tamper-Resistant when used with a tamper resistant nut
- Material: aluminum, stainless steel and zinc plated



#### VPA12 Vandal Proof Bolt

- Length: 1/2"
- Size: 5/16"
- Twelve point drive
- Anodized finish
- Requires T43 tool
- > Material: aluminum



#### **BHP76 Vandal Proof Button Head Bolt**

- > Length: 3/4"
  - > Size: 5/16"
- 5/32" pinned hex access >
- Requires T100 or T handle tool >
- Material: stainless steel



#### Vandal Proof One Way Bolt

- > Length: 5/16", 2", 2-1/2" or 3" one way bolt
- Use with breakaway nut
- Remove with special screwdriver >
- Material: aluminum >



#### Vandal Proof Breakaway Nut

- Size: 5/16"
- Threaded portion is tapered
- > Material: aluminum





#### Vandal Proof Set Screw

- Size: 5/16" >
- Pinned hex recess
- Knurled point >
- Requires T100 or T handle tool
- Material: stainless steel, zinc plated



#### Fluted Nut

- Size: 5/16'
- Requires T2 Tool
- Material: stainless steel



#### **TufNut**

- > Size: 5/16"
- Requires 2 pieces to install >
- > impossible to grab with hand tools
- finish



#### T100 Allen Wrench Tool

- Works with standard set screws having a 5/32' socket, with or without center pin
- Hollow-body design works with vandal-resistant set screws and vandal-resistant button head bolts



#### T Handle Tool for Vandal **Proof Button Head Bolt**

- > Hollow-body design works with vandal-resistant set screws and vandal-resistant button head bolts
- Black oxide finish with orange T > handle for easy gripping







T2 Tool Special installation tool for fluted nut

- Tufbolt Length: 2", 2-1/2" & 3"
- Size: 5/16"
- Material: stainless steel

- Sloped sides and steel construction
- Material: steel with zinc yellow chromate

## Tools

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# Hardware | Vandal Proof, Square Post, Overhead

#### Vandal Proof Hardware Continued



**Torx Bolt** 

- Length: 1-1/4", 1-1/2", > 5 2" & 3'
- Size: 5/16", 3/8", 1/4", > 10-24 Material: stainless >
- steel



**Trident Nut** 

Size: 3/8", 5/16", 1/4",

For use with Torx Bolt

Material: stainless

>

10-24

> steel



**#20 Trident Nut Drive** Socket

Size: 3/8" >

Fits trident nut sizes: 5 #10-24, 1/4"-20



# #30 Trident Nut Drive Socket

- Size: 7/8" >
- Fits trident nut sizes: 5/16", 3/8"



**Torx Bits** 

- Size: 5/16", 1/4", 3/8", #10
- > Use with Torx Bolt

#### **Square Post Breakaway Hardware**





- 2" Corner Bolt
- Size: 5/16"x 2" >
- > Post size 1-1/2" & 1-3/4" Square
- Material: zinc plated >



- 2-1/2" Corner Bolt
  - Size: 5/16"x 2-1/2"
- > Post size 2" Square
- > Material: zinc plated



#### 3" Corner Bolt

- > Size: 5/16"x 3"
- > Post size 2-1/4" & 2" Square
- > Material: zinc plated



# Serrated Flange Nut for Corner Bolt

- Size: 5/16" >
- Material: zinc plated >

#### Hardware for Overhead Guide Signs



#### **Hex Bolt-Stitch Bolt**

- Length: 3/4" >
- > Size: 3/8"
- Material: stainless steel, aluminum, > galvanized



#### Post Clip

- > Proper clamping on all post flanges
- > Material: aluminum



#### Hex Nut-Stitch Nut

- Size: 3/8"
- > Material: stainless steel, aluminum, galvanized



Nylock Nut

- Size: 3/8"
- Material: stainless steel, aluminum, galvanized



**Flat Washer** 

#### Size: 3/8" >

Material: stainless steel, aluminum, > galvanized



#### Rectangular Head (T-Bolt)

- > Length: 1-3/4"
- Size: 3/8" >
  - Material: stainless steel, aluminum, galvanized



#### **Miscellaneous Hardware**



#### **Drive Rivet**

- > Size: 3/8"x5/8"
- > Material: steel plated
- Flush head designed to be vandal resistant
- > Installed with just a hammer



#### 2-Part Blind Rivet

- > R18 delineator posts 1-3/16" long
- R26 2# u-channel posts 1-5/16" long
- > R34 3# & 4# u-channel posts 1-13/16"
  - Installed with rivet gun



#### **Rivet Gun**

- Highly durable and easy to use
- Easy installation and easy handling
- > Rivet tool with slim nose
- Heavy duty steel construction



#### J Clip Assembly

- Material: stainless steel (bolts, nuts, washers only)
  - Assembly includes:
  - One J-Clip
  - One rectangular t-bolt
  - One flat washer
  - One nylock nut



#### **Universal Channel Clamp**

- Fits up to 3/4" stainless steel banding
- > Type 18-8 stainless steel
- Factory preset to fit 3" round posts
- Adjustable serrated stirrups for other size posts



#### Saddle Clamp Bracket

- > Used for 2-3/8" round posts
  - Includes: cast aluminum (1) 5/16" bolt and washer, (1) 5/16"-18 U-Bolt, and (2) 5/16" nut and washer sets
  - Two saddle clamps are needed to secure one sign



#### Save

- > 3-1/2" round circle
- Non-ribbed, flat aluminum with 3/8" hole
- Mount between sign and post to reinforce signs



#### Save2

- > 3"x3" square
- Mount between signs and posts to reinforce signs
- Formed aluminum with stamped ribs to prevent twisting
- Helps prevent warping and buckling



#### SignGrabber<sup>™</sup> - Fence Mount

- SignGrabber<sup>®</sup> SG2 is a galvanized cast metal mounting bracket
- > 2-1/2" square x 3/4" deep
- Supplied with 1-5/16"x3/4" tamper proof bolt and nut
- > A tamper-resistant hardware system



#### SignGrabber<sup>™</sup> - Post Mount

- Used with the 3/4" or 2" tamper resistant bolts for mounting signs to poles
- > Fastens sign panels to u-channel or square steel sign posts with holes on 1" center



#### L-9 Bracket

- For mounting signs on a 90° angle to u-channel posts
- > Two required per sign
- > L-45 45 degree bracket also available
- > Available in aluminum



#### **T-18 Twist Bracket**

 Aluminum twist bracket for installing a "one-way" sign at a right angle atop an existing sign on a u-channel post or square post

45

## Hardware | Caps, Crosses & Post Adapters



#### Resilient and durable street sign brackets to outlast your signs.

National Highway Products, Inc. offers a full line of brackets to meet all of your sign mounting needs. These sign brackets are cast from high strength aluminum. Our wide and extensive range of brackets are used on round, square, u-channel, and wood posts. Mounting hardware comes installed on brackets saving time and the hassle of counting loose pieces. All brackets are drilled and tapped to receive



922F Universal Flat Cap 922X Universal Extruded Cap For 2-3/8" round posts or 2" square posts



91UF-OL90 Flat Cap 91UX-OL90 Extruded Cap For u-channel 90°

#### 5-1/2" Caps & Crosses



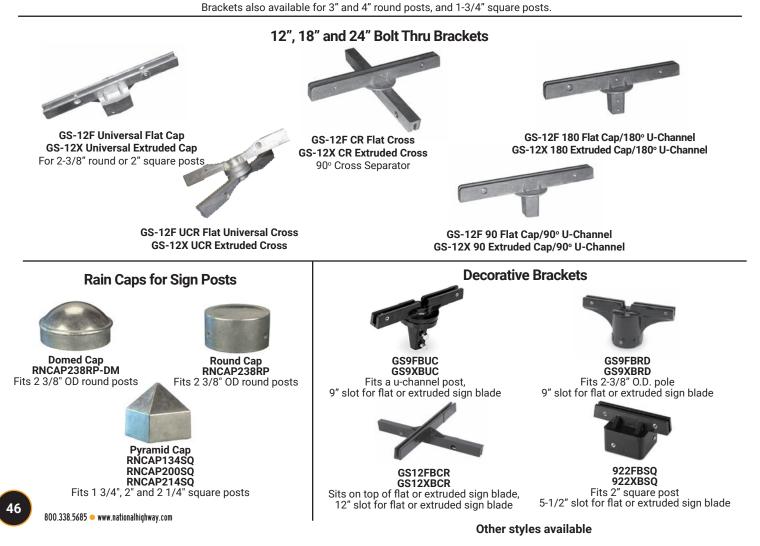
91UF-NU180 Flat Cap 91UX-NU180 Extruded Cap For u-channel 180°



990F Flat Cross 990X Extruded Cross 90° Cross Separator



457F Flat Cross 457X Extruded Cross Set to 45° or 180° 2 piece



# Sign Brackets | Hardware



#### K6 or K9 Bracket

- Blade Holder Length: 6" and 9"
- Blade Type: flat/extruded (shims required when using flat SNS - sold separately)
- Mounted with banding >
- Signs must be punched for mounting



BB-832

Z-238

#### Aluminum Interlocking Bracket Sets

- Z-238 secures one traffic control sign to 2-3/8" O.D.
- BB-832 secures two traffic control > signs facing opposite directions to 2-3/8" O.D. round post
- > Vandal-resistant hardware is available on request
- Z-300 for 3" O.D., Z-400 for 4" O.D. round posts



#### **Chevron Bracket**

- Aluminum bracket secures two chevron signs to a single post
- CAB1 holds 12"x18" or 18"x24" signs
- CAB2 holds 18"x24" or 24"x30" signs >
- CAB3 holds 24"x30" or 30"x36" signs



#### Wing Bracket for Flat or Extruded Signs

- > Bracket dimensions: 5"Hx2"W
- Hardware included: (2) 5/16" standard set 5 screws
- The wing bracket is not compatible with bolt-> through installations
- Mount to post or wall with 3/4" banding, bolts, > or lag screws (not included)



#### **Cantilever Wing Bracket**

- Blade holder lengths: 16", 24", 30" and 36"
- Blade type: flat/extruded
- Mount on wall or any post with banding



#### Bell Wing Bracket

- WB12 12", WB18 18", WB24 24"
- Wing bracket can be banded or bolted to a wall or pole

For banding material please see page 48.

#### Mast Arm Hardware

The brackets in this section are designed to handle single- or double-sided signs from any diameter overhead support. All sign-mounting hardware is included with these brackets.



- GS-OH-ADJ Adjustable-Length Safety Swing Bracket 16-3/4" fully closed / 20-1/2" fully extended
- 6", 12", or 18" are available extensions



**GS-OH-FX Fixed-Length** Safety Swing Bracket 7-3/4" Length >

Sold as a set or individually.

Note: One GS-OH-ADJ and one GS-OH-FX is

considered one set



#### COM-77 & COM-88

Heavy-duty steel plated & aluminum overhead sign mounting brackets. Świvel to any angle and can be used for any size sign.

> **COM-88** For mast arms



COM-77

For 1/4" - 3/8" overhead cables

#### GS-OH-OFS Offset Safety Swing Bracket

- Consists of:
  - One pelco bracket
  - Two sliders
  - Two swivels
  - One tube

# Hardware | Banding, Tools & Accessories



#### **Stainless Steel Banding & Accessories**



#### **Stainless Steel Banding**

- Stock: 3/4"x.020"x100'
- Stock: 3/4"x.030"x100'
- > Other sizes available
- Used to fasten signs, utility > boxes and traffic signals to poles



#### **Cool Tool Banding Tool**

- Used to apply stainless steel banding
- > Spring loaded gripper lever improves ease of use
- Tensions over 2,400 lbs. of force > and cuts off the tail of the clamp being formed



#### P001 Ratchet Type Strapping Tool

- Highly versatile tensioner >
- Cutter and a hammer knob for seal > closina
- Use with 3/8"-3/4" stainless steel > banding and up to .030" thickness



#### Strap/Band Cutter Tool

Carbon steel drop > forged cutter



#### **P4SS Flared Leg Bracket**

- Threaded center hole bracket >
- For use on poles greater than
- 4" in diameter
- Hardware included



# M4SS Straight Leg

#### Bracket > Threaded center hole

- bracket For use on pole 4" in >
- diameter or less > Hardware included



#### 3/4" Strapping Buckle

- Used primarily with .030 stainless steel banding
- > Heavy duty stainless steel
- > Other sizes available





#### 3/4" Wing Seal Clip

- Wing seal clips are generally used for > light gauge banding
- Other sizes available >

- **BB7 Buckle Bracket Assembly**
- Adjustable strapping bracket designed for posts 4" O.D. to 12" 0.D. in diameter
- Each kit includes: (2) P4SS flared leg brackets, 4 end pieces, (2) 5/16 "x1-3/4" hex bolts and 5/16" hex nuts, (2) 3/4"x36" precut stainless steel straps
- Two BB7s required per sign

#### 40" SNAP-Lock Assembly

- Radiator-like clamp for guick mounting of signs >
- Needs only a screwdriver to tighten
- Add a P4SS bracket to hang sign or add (2) P4SS brackets to > hang (2) signs back to back
- > P4SS bracket sold separately
- Two SNAPs required per sign >



# Work Zone Protection Everything you need to get the job done!



# Work Zone Protection | Roll-Up Signs



#### Our roll-up signs are lightweight, portable and easy to use.

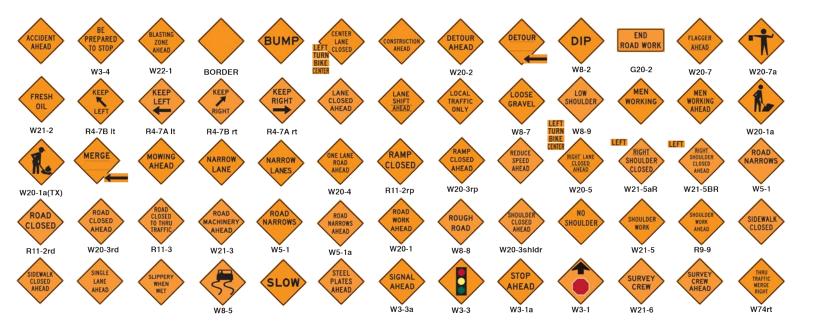
Roll-up signs are perfect for on-the-go construction workers and contractors. All standard and any special legend signs are available in 36" or 48" roll-up signs.

- > Roll-up signs are NCHRP 350 compliant when used with one of our NCHRP 350 compliant stands
- Fiberglass ribs or cross bracing, feature a protective veil to prevent blooming and painful splinters
- > The rib set is fastened at the center with a 1/4" steel rivet and spring washer providing constant tension; it will not loosen or tighten with use the way nut and bolt assemblies do
- Lexan corner pockets are made of tough polycarbonate plastic for durability
- > Corner pockets on the horizontal corners provide three rivet points for durability and a shallower pocket depth for easier deployment
- > Back-to-back hook and loop strap for storage
- Overlays for changeable message signs are also available in all sign materials and colors
- > Custom roll-up signs are also available on request

When placing an order choose from: Size: 36" or 48" Colors: Orange or Coral (Pink) Materials: Non-reflective vinyl, Non-reflective

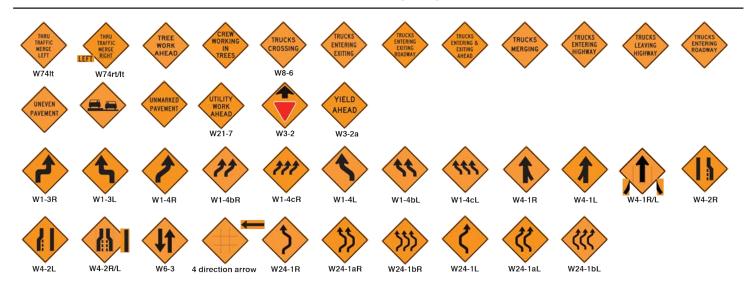
mesh, Superbrite reflective, Diamond Grade reflective

Specify MUTCD legend or special legend



#### Standard Sign Legends/Symbols

# **Roll-Up Signs & Stands | Work Zone Protection**



#### **Emergency Response**



#### **Compact Roll-up Sign Stand**

#### 5012SS WindMaster®

- > Lightweight, portable easy-to-use
- > Holds 36" & 48" roll up signs
- > NCHRP 350 accepted
- > Takes up only 1-cubic foot of storage space and is designed for use with roll-up signs only
- > Roll-up signs attach to the 5012SS with a screw-lock sign bracket (included) - simply slide the vertical cross brace into the bracket channel and secure the sign face by turning the screw handle until the cross brace fits tightly against the pressure plate
- > A single spring base design and adjustable, telescoping legs with kick-release buttons



#### Compact Collapse & Wrap Sign System

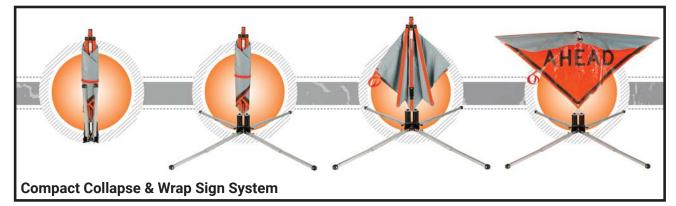
- Comprised of an MDI compact sign & WindMaster sign stand (each sold separately)
- > For use with 3612, 4814 or 5012 sign stands
- > The sign quickly collapses down using the single trigger release button and wraps around the upright on the stand
- > Sign stand and sign setup in less than 20 seconds



Compact Signs and WindMaster Sign Stands are sold separately



Single Trigger release: signs that have hinged, integrated cross bracing with a single trigger release mechanism for rapid deployment and take-down.



## 4818K & 4860K WindMaster® Sign Stand

- > NCHRP 350 accepted
- > Adjustable legs for stability on curbs or uneven terrain
- > Kick-release/telescoping legs simplify set-up and handling
- Dual Spring base for strong initial tension resists twisting and turning of sign in high wind gusts
- > Legs and upright made of .100" wall thickness aircraft aluminum
- > Designed for rigid signs made of aluminum, wood or plastic
- > Holds both rigid & roll-up signs



#### SA-16780 Adjustable Roll-Up Sign Mounting Bracket

- Accommodates any roll-up sign with standard 1¼" wide fiberglass crossbracing, including MDI® roll-up signs
- > Designed to fit all standard tubular mast sizes ranging from ¾" outside dimension to 1½" outside dimension

#### SA-01729 Rigid Sign Mounting Bracket

- > Color: black
- Fits 4818K, 4860K, 4884K and 5018
   WindMaster<sup>®</sup> sign stands
- Brackets are held in place by screw clamps that attach to sign stand upright. Note: two brackets are required - sold individually

# SA-27897 Flasher Bracket

- Use with WindMaster<sup>®</sup> sign stands Model numbers 4818, 4860, 4884 and 5018
- > These units are equipped with a 3-section flag bracket and the flasher bracket locks securely in place in the middle section of the flag bracket

# 4818NL Median Barrier Sign Stand

- > Dual springs and telescoping upright
- Used with MDI's Median Barrier Bracket (Model SA-10436 or SA-28305)
- Sign stand attaches easily to bracket with just two bolts
- Sign stand accommodates a 36" or 48" roll-up or rigid sign

# SA-10436 Median Barrier Bracket

- > Used with Model 4818NL
- The springs on the sign stand are fastened to the bracket with just two bolts
- The bracket and sign stand assembly firmly attach to median barrier with four, screw-in T-handle spikes
- > Color: black
- > Fits 5"-11" concrete median barriers
- > SA-28305 also available to fit 9"-15"



# STUF4 Tuffy 4 Legger Sign Stand

- Holds rigid signs at least 30" wide up to 48"x48", including rectangle, square and diamond shapes
- Stand dimensions: 60"x30"x1"
- Fabricated from 1" aluminum angle or 12 gauge angle iron (dependent upon material availability)
- > Stand folds flat for storage

## **Tripod Sign Stands**

- > Holds 36" or 48" sign a minimum of 12" off ground
- > Meets MUTCD specifications
- > Easy setup
- > 16 ga. tubular steel construction
- > Orange powder coat finish
- > Open footprint of 46"x60"
- > NCHRP 350 accepted

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# **Cones | Work Zone Protection**



#### Keep your traffic areas safe and block off potential hazards.

#### **Traffic Cones**

These cones are strong and flexible in heat or cold, resulting in a more durable cone that will stand up to the challenges of adverse weather or road conditions. The brilliant fluorescent orange color throughout is visible from any angle, day or night. Specially designed cleated base allows ease of stacking. The cones will not stick together; they'll firmly grip the road and won't easily be blown over and maintain their shape. We can customize any cone for you with your logo or name. Cone weights are also available in 4-1/2 lb. and 7 lb.





Size	Weight	Color	Cone Collar	Body
	3#	Orange*	Plain	Wide
	3#	Orange*	1 - 6"	Wide
	3#	Lime	Plain	Wide
	3#	Lime	1 - 6"	Wide
	3#	Red	Plain	Wide
	3#	Red	1 - 6″	Wide
	3#	Pink	Plain	Wide
18″	3#	Pink	1 - 6″	Wide
	3#	Sky Blue	Plain	Wide
	3#	Sky Blue	1 - 6″	Wide
	3#	White	Plain	Wide
	3#	White	1 - 6″	Wide
	3#	Yellow	Plain	Wide
	3#	Yellow	1 - 6″	Wide
	7#	Orange*	Plain	Wide
	7#	Orange	1 - 6″	Wide
	7#	Orange*	6" + 4"	Wide
	7#	Orange	Plain	Slim
	7#	Orange	1 - 6″	Slim
	7#	Orange	6" + 4"	Slim
	7#	Lime	Plain	Wide
	7#	Lime	1 - 6″	Wide
	7#	Lime	6" + 4"	Wide
	7#	Navy Blue	Plain	Wide
	7#	Navy Blue	1 - 6″	Wide
	7#	Navy Blue	6" + 4"	Wide
	7#	White	Plain	Wide
	7#	White	1 - 6″	Wide
00"	7#	White	6" + 4"	Wide
<b>28</b> ″	7#	Yellow	Plain	Wide
	7#	Yellow	1 - 6″	Wide
	7#	Yellow	6" + 4"	Wide
	7#	Sky Blue	Plain	Wide
	7#	Sky Blue	1 - 6″	Wide
	7#	Sky Blue	6" + 4"	Wide
	7#	Pink	Plain	Wide
	7#	Pink	1 - 6″	Wide
	7#	Pink	6" + 4"	Wide
	10#	Orange	Plain	Slim
	10#	Orange	1 - 6″	Slim
	10#	Orange	6" + 4"	Slim
	10#	Orange	Plain	Wide
	10#	Orange	1 - 6″	Wide
	10#	Orange	6" + 4"	Wide
	10#	Orange*	Plain	Wide
	10#	Orange	1 - 6″	Wide
	10#	Orange*	6" + 4"	Wide
0.41	10#	Lime	Plain	Wide
36″	10#	Lime	1 - 6"	Wide
	10#	Lime	6" + 4"	Wide
	12#	Orange	6" + 4"	Wide
	15#	Orange	6" + 4"	Wide
	1		the second se	

\*Commonly stocked cones

# Work Zone Protection | Cones Accessories and Drums

#### **Snap-On Cone Signs**

Snap-On traffic cone signs give directional reinforcement in the work zone. The signs are made of durable, reusable, all-weather plastic with UV inhibitors for maintenance of color. These signs were developed through research by the Federal Highway Administration to improve safety and reduce liability. Proven effective, they are used by more than 2000 cities and utility companies.



- Available single- or double-> sided
- Signs are 12-3/4"Wx10-1/2"H or 12"Wx13-1/4"H >
- > Specially cut grooves in the sign attach securely to ordinary traffic cones

#### Collapsible Traffic Cones

Perfect for emergency responders, Fire EMS or simply as an emergency kit for motorists.

- Constructed of orange waterproof nylon >
- Internal light has 2 settings: steady burn > and flashing
- Cone light endures 100,000 flashes or 36 > hours of steady burn
- > Available in 18" (1 pack, 4 pack)
- Available in 28" (1 pack, 2 pack, 5 pack)

#### Cone Bars

Retractable cone bars are designed to be used with any size PVC cones. Extremely portable and lightweight, the cone bar is easy to use. Just drop the cone bar ring on to the top of the cones to set up an inexpensive barrier around hazardous or controlled areas. In terms of both cost and functionality, the cone bar is more highly effective than warning tape. The cone bar is both reusable and reflective.

- > Two sizes adjust from 4' to 6'
- 9" or 6' to 10'
- > Color schemes:
  - black on yellow
  - orange on white
  - blue on white - green on white
  - red on white



#### Traffic Drums / Barrels

- Tire Locking Ring" Texturized Locking Ring" grips tire, giving you security on the job
- Comfort grip handle for secure, easy pick-up >
- Innovative "light ledge" keeps light upright
- > Anti-roll bottom, flat sections on all four sides - resists rolling when dislodged from ballast
- > Customize your drums with your name or logo
- > Thick walls make this drum rugged and durable
- Five tier design to maximize reflective sheeting >
- NCHRP 350 accepted, meets MUTCD standards >
- Drum dimensions: 36.77"Hx22.94"W (40.02"H with handle)
- Weight: 8 lbs.
- Tire weight: 25 lbs.



#### The All-In-One Navigator<sup>™</sup> / Channelizer

- Break-away design
- > NCHRP 350 compliant
- Compact and stackable design saves space in truck or in storage
- Greater visibility than standard 28-inch cones
- Molded hole for mounting barricade light
- Unique loop handle allows workers to carry several units at a time



- Handle can also serve as roping-off mount
- Meets all applicable MUTCD specifications
- 42" Navigator available with up to five bands of 4" or 6" sheeting, high intensity or diamond grade
- 28" Navigator available with up to three bands of 4" or 6" sheeting, high intensity or diamond grade
- > UV stabilized for longer durability
- Made of a flexible and impact resistant low density polyethylene
- Base weight options: 10 lbs, 16 lbs, 30 lbs

# Impact Attenuator Barrels | Work Zone Protection



#### Impact Attenuators are a great form of control on freeways or traffic control areas.

An impact attenuator, also known as a crash cushion, crash attenuator or Big Sandy<sup>®</sup>, is a device intended to reduce the damage to structures, vehicles, and motorists resulting from a motor vehicle collision. Impact attenuators are usually placed in front of fixed structures near highways, such as gore points, crash barrier introductions, or overpass supports. Array patterns are specific to work zone speed limits. Check with your Account Executive for your specific requirements. We carry the toughest attenuation barrels for your traffic safety needs. Just add sand.



#### Big Sandy<sup>®</sup> 48000 Series

The TrafFix Devices "Big Sandy<sup>®</sup>" is an impact attenuator sand barrel that is easy to move and provides external verification of the barrel's correct weight.

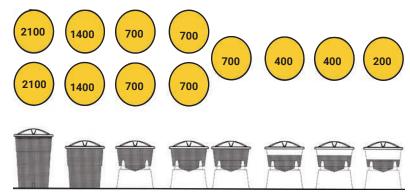
The Big Sandy<sup>®</sup> attenuator has been tested and certified to meet the crash worthy requirements of NCHRP 350; Big Sandy<sup>®</sup> Sand Barrels go above and beyond these requirements to provide the best in highway safety.

- > Three barrels are used to create all of the weights used in current standard array geometrics (200, 400, 700, 1,400, and 2,100 lbs.)
- Combination barrel utilizes a pedestal base and 200, 400, 700 lbs. top half barrel to obtain weights without using shelves or cone inserts - eliminates leaking sand
- Simply fill the sand to the molded-in fill line to obtain the correct weight; the molded-in fill line makes external verification of weights easy
- Reinforced lip prevents the barrels from deforming when filled and provides a quick and secure fit for reinforced lids
- NCHRP 350 tested
- > Big Sandy<sup>®</sup> barrels stack tightly, allowing you to put more on a truck than other competing products
- > Big Sandy<sup>®</sup>'s wide stance allows for more stable barrel without becoming top heavy or tipping



All three Big Sandy<sup>®</sup> sizes are easily lifted, moved, and emptied with the optional TrafFix Lifting Ring

#### Sample Array Pattern 62mph



This drawing is an example of a typical array plan and should in no way override what is specified by your local or state traffic engineer. Contact your local or state traffic engineer for specific site recommendations for each situation.

#### **CrashGard**<sup>™</sup>

Plastic Safety Systems CrashGard<sup>®</sup> universal sand barrel accommodates all weight requirements. The CrashGard<sup>®</sup>, without inserts, holds 2100 or 1400 lbs. and with insert, holds 200, 400 or 700 lbs. The CrashGard<sup>®</sup> utilizes UV stabilizers to maximize durability. Reflective 4" or 6" sheeting is easily applied.

- > Made of 3 components: barrel, lid and insert
- > Meets MASH approval
- > Blow-molded from high molecular, high density polyethylene plastic
- > With insert: 200, 400 or 700 lbs.
- > Without insert: 1,400 or 2,100 lbs.





# Work Zone Protection | Standard Barricades



#### Perfect for crowd control and road closures.



#### 0

#### Omni<sup>™</sup> A-Frame - 2003W

- > Dimensions: 44"Hx28.6"W
- > Weight: 6 lbs.
- Versatile A-Frame accepts many types of boards
- Customize nameplate with your name or logo
- Stacking lugs make transportation and storage easy
- Flashing light mounting receptacle on each leg
- > Use with one or two boards
- Sold as sets or as component parts

## $\bigcirc$

#### Plasticade<sup>®</sup>A-Frame- 2002

- > Dimensions: 42"Hx28"W
- > Weight: 5 lbs.
- Accepts only Plasticade<sup>®</sup> I-Beam boards
- Molded hollow may be weighed internally with dry sand
- Stacking lugs make transportation and storage easy
- Flashing light mounting receptacle on leg
- > Use with one board or two
- Sold in sets or as component parts



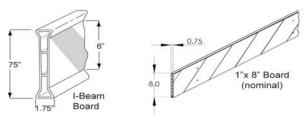






#### **Barricade Boards**

- > Available in I-Beam or coroplast
- > I-Beam lengths: 6', 8' or 10'
- > 1"x8" board lengths: 4', 6', 8', 10' or 12'
- > Single-sided or double-sided
- Sheeting: engineer grade, high intensity, or diamond grade
- > Left or right stripes
- > One or two boards per A-frame set-up
- > Can be stenciled with name or logo
- > Wood boards available please check your state specifications for product approval





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Plasticade A-Frame shown with one I-Beam board



# **Standard Barricades | Work Zone Protection**

### $\bigcirc \bigcirc \bigcirc \bigcirc$

#### Plasticade® Type I and II

- > Dimensions: 25"Wx45"H
- > Weight: 16 lbs.
- All plastic and maintenance free; never rusts, nor needs painting, or leg straightening
- Molded hollow so it can be internally ballasted with up to 10 lbs. of dry sand
- Molded handles with mounting holes for attaching flashing lights
- Sandbag bar (if additional weight is required)
- Stacking lugs keep stacked units from sliding
- > The Plasticade® barricade is NCHRP 350 accepted for use as a sign stand
- NCHRP 350 accepted, meets MUTCD standards

## $\bigcirc$

#### Combocade<sup>®</sup> Type I and II

# Replaceable components save you money!

- > Dimensions: 42.6"Hx24.4"W
- > Boards can be replaced
- > Legs can be replaced or repaired
- Standard 45" steel legs, 14 gauge thickness, galvanized
- White injection molded boards are strong and dense, reinforced with "diamond" design
- Available in 24"Wx12"H, 8"H, or 6"H
- Names can be stenciled on the boards for identification
- NCHRP 350 accepted, meets MUTCD standards



#### Safetycade®

- > Dimensions: 42.5"Hx33"Wx3"D
- > Weight: 29 lbs., 69 lbs. with ballast boot
- Collapsible plastic barricade that's easy to set up and store
- Stack more on your truck! units use 65% less space than drums
- Quick set-up spring loaded feet quickly release for placement
- Lies flat when hit
- Replaceable sheeting panels recessed panels are removable, just clip on new panels
- Anti-skid pads on feet reduce movement in work zones
- Molded-in light receptacle for "D" cell battery lights
- NCHRP 350 accepted, meets MUTCD standards



Type II shown here. Type I only top panel sheeted



Type II shown here. Type I only top panel sheeted

#### ○ ○ ·· · · · ·

#### Sentinel<sup>™</sup> Type III

- Base consists of 2 pieces, base and upright support with panel pre-attached that snap together, no hardware required
- Available with board lengths, 4', 6', 8', 10, or 12' long
- Boards can be purchased sheeted (on one or both sides) or unsheeted
- Base can be internally ballasted with sand, sandbags, or water in warmer climates
- NCHRP 350/MASH accepted, meets MUTCD standards

#### • Telespar® Type III

# Two Options Available

Telespar<sup>®</sup> uprights with Telespar<sup>®</sup> feet

Telespar<sup>®</sup> uprights with Angle Iron feet

- Telespar<sup>®</sup> is galvanized for superior corrosion protection,14 gauge, hot rolled high carbon steel
- Angle iron feet are 10 gauge, galvanized
- Quick removal of uprights from feet allows for short term or permanent placement
- > Telespar<sup>®</sup> and angle iron uprights are 63"H
- > Accepts two flashing lights
- NCHRP 350 accepted, meets MUTCD standards





Please see pages 60-61 for a variety of barricade lights.

# Work Zone Protection | Water Filled Barricades



WUSA,

#### Interlocking barricade systems used to delineate construction areas.

Applications: Commercial and Residential Construction • Education and Healthcare Facilities • Military and Government • Parking Garage Facilities • Sports and Recreation Events • Airport Construction and Maintenance

Yodock<sup>®</sup> water filled barricades can be used for mid-rise, high-rise, and mixed-use construction projects as an alternative to drums, cones and concrete barriers. Unlike concrete barriers, Yodock<sup>®</sup> barricades are stackable for efficient storage and transportation reducing storage concerns and capital costs over time. These barricades are FHWA and DOT approved for traffic and pedestrian channelization. All barricades are a lightweight design that enables convenient positioning by hand - no heavy equipment required. Most barricades can all be accessorized for longitudinal barrier, perimeter fencing, road closure and temporary sign support applications.

#### $\bigcirc \bigcirc$

#### Yodock<sup>®</sup> 2001 Barricade

- > Dimensions: 6'Lx24"Wx46"H
- > Empty 130 lbs. / Full 1,500 lbs.
- Manufactured from Low Density Polyethylene (LDPE)
- Available in custom colors with minimum order quantities



### Yodock<sup>®</sup> 2001MB Barricade Longitudinal Channelizing Device

- > Dimensions: 6'Lx18"Wx32"H
- > Empty: 85 lbs. / Full: 900 lbs.
- Manufactured from High Density Polyethylene (HDPE)
- Available in custom colors with minimum order quantities



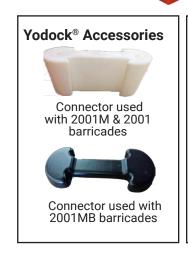


#### Yodock<sup>®</sup> 2001M Multi-Purpose Barricade

- > Dimensions: 6'Lx18"Wx32"H
- > Empty: 75 lbs. / Full: 750 lbs.
- Manufactured from Low Density Polyethylene (LDPE)
- Available in custom colors with minimum order quantities







#### **Longitudinal Barrier Kit**

The Yodock® Longitudinal Barrier Steel Reinforcement Kit is a connection system for Yodock® barricades when used as traffic barriers. When using the Yodock® Model 2001, Model 2001M, or 2001MB, the system must be assembled with the Yodock® Steel Rail Kit to meet NCHRP Report 350 criteria as a longitudinal barrier.



NHP, Inc. recommends anti-freeze additive during cold winter months to prevent cracking of barricade

# Water Filled Barricades | Work Zone Protection

# Emergency Response Trailer

The Yodock® Emergency Response Trailer package provides rapid and efficient deployment of Yodock® water filled barricades during an emergency. Ideal applications include hazardous material spills, traffic management, restricted access, fires, flooding, and other emergency response situations.

Customizable emergency response trailers are fitted with Yodock<sup>®</sup> Model 2001, 2001M or 2001MB. Additional equipment such as pumps, hoses, dollies, lights, fence, signage, and longitudinal barrier reinforcement kits can be included.

#### **Applications:**

- Stackable for efficient transportation & storage
- > Forklift access for easy loading & unloading
- > Trailer package is a self-contained storage unit



#### Available Emergency Response Trailer Packages:

#### Yodock<sup>®</sup> ERT 10' Foot:

Maximum 2001 barricades: 8 Maximum 2001M barricades: 18 Maximum 2001MB barricades: 15 Yodock<sup>®</sup> ERT 14' Foot: Maximum 2001 barricades: 12 Maximum 2001M barricades: 24 Maximum 2001MB barricades: 20 Yodock® ERT 18' Foot: Maximum 2001 barricades: 16 Maximum 2001M barricades: 36 Maximum 2001MB barricades: 30



#### 

#### **Airport Barricade**

- > 8'Lx10"H barricade, units interlock
- > Durable construction, 25 lbs.
- Molded reinforcing ribs add stiffness and strength
- > Connectors are molded into the barricade
- Allows interconnected units to pivot in multiple orientations between 90° and 180°
- > 7° angled sidewall
- > Accepts 72"Lx6"H continuous retroreflective sheeting
- Fill with up to 220 lbs. (26 gallons) of water (two fill holes and one drain hole)
- > Accepts two styles of 360° solar lights
- > Two flag mounts
- > Stackable for transportation and storage
- > FAA compliant

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#### **Remcon Guardsafe 42 Barriers**

- Lightweight Size: 24"Wx72"Lx42"H weight 100 lbs
- Standard Size: 24"Wx72"Lx42"H weight 130 lbs
- Heavyweight Size: 24"Wx72"Lx42"H weight 170 lbs
- Will not crumble or break after multiple deployments like concrete barriers
- Ideal for crowd, and traffic control checkpoints, and security
- > Two molded-in pockets on top of barrier to accept standard lights
- > Durable 100% virgin polyethylene
- Can be used as a TL-2 Barrier when used with steel pipe couplers



Threaded fill cap



NHP, Inc. recommends anti-freeze additive during cold winter months to prevent cracking of barricade

# Work Zone Products | Barricade Warning Lights



Barricade warning lights enhance visibility and make your work zone areas safer for workers and drivers.



LED Barricade Light A/C LED 400



Solar Assist Type A/C 2006 Plus

#### $\bigcirc \bullet$

#### LED Barricade Light - Model 400

- A steady burn LED circuit only uses 25% of what a normal 1906 incandescent bulb uses
- > A flashing LED circuit uses less than 50% of what a normal 1850 incandescent bulb uses
- For example: up to 1,100 hours of operation (Approximately 3 months or 90 days) and it still meets I.T.E. purchase specifications for Type "C" warning lights
- > The LED will possibly never have to be changed
- > It has an estimated life of 10 years
- > Colors: yellow and red
- > Uses 6V spring terminal batteries
- > One or two batteries required

#### LED TECHNOLOGY

LED or Light Emitting Diode is a semiconductor device that emits light due to Electroluminescence effect.

- > Low power consumption
- > Small size
- > Physically robust
- Long lasting

# 

#### Solar Assist Type A/C 3-Way 2006 Plus

- > Internal solar panels trickle charge "D" cell alkaline batteries to give a superior long lasting more reliable power source
- Solar panels are internal providing less chance for damage and theft
- > Type A/C are 3-way, high efficiency lights
- Features completely redesigned rugged and durable co-polymer case with breakaway internal candle
- > Servicing is made easy with a snap-lock case and vertically positioned batteries
- > The "D" cell batteries simply drop into the light base and the case is ready to be snap-lock closed
- > The case will remain closed and secure during the rough handling normally encountered during transportation and service work
- > The impact absorbing breakaway candle reduces internal damage
- Bright and dependable LEDs coupled with power efficient, reliable moisture proof circuitry, provide trouble-free operation



- > Type A/C lights comply with current ITE purchase specification referenced in the Federal MUTCD (the light must function and meet output specifications without the solar panel hooked up for 336 hours in the Type A mode and 168 hours in Type C mode)
- > Two or four batteries required

# **Barricade Warning Lights | Work Zone Protection**



Solar Assist High Intensity Type B 212-3S



High Intensity Type B 212-6



#### Solar Assist High Intensity Type B Light

- > Solar panel trickle charges D-cell alkaline batteries to give a superior long lasting more reliable power source
- > Operates on D-cell alkaline batteries
- No need to replace expensive rechargeable batteries like other solar lights
- > Tested to MUTCD and I.T.E. standards by an approved certified laboratory (the light must function and meet output specifications without the solar panel hooked up for 168 hours)
- Polycarbonate lenses and high impact polypropylene housing
- > Two or four batteries required

## High Intensity Type B Barricade Light

- Available in flashing or steady burn, with or without photo electric switch; runs on 2 - 6V batteries
- > Lightweight high intensity lights

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- > Acceptable device for NCHRP 350
- Tested to MUTCD and I.T.E. standards by an approved certified laboratory
- > Polycarbonate lenses and high impact polypropylene housing
- > One or two batteries required
- > Detachable head high intensity B light is also available

Other styles available: 6 Volt, D-Cell, Trickle Charge, NiMH Full Solar



# Work Zone Products | Crowd Control Barricades



#### Completely customizable. Safe to handle. Simple to store. Designed for display.

#### **Completely Customizable**

- Unique design allows these barricades to interlock, forming a continuous wall
- Various configurations can be set up to delineate restricted areas
- > Bolted together for additional stability and security

#### Safe to Handle

With no sharp edges to contend with, the plastic barricades are friendlier to the people who use them. These barricades are made of high density polyethylene (HDPE), a superior grade of plastic known for its strength and durability. This means these barricades stand up to weather, transport, and crowds.

#### Simpler (and cheaper) to Store

The Billboard Barricade features rotating support feet that close inward, allowing barricades to nest and stack flat for more efficient storage and transport. You'll save man hours on set up time and you'll save money on storage.

#### **Designed for Display**

Branding, advertising and directional messaging are easy with the Billboard Barricade. Many of our clients are able to generate additional revenue by selling ad space. We print graphics on corrugated PVC sign boards that can stand up to weather just as well as barricades do. Signs are 28.5"x36" and are attached with four bolts.

- Support feet close inward allowing barricades to nest and stack flat
- > Barricades interlock to form a continuous wall
- Superior strength to weight ratio when compared to steel
- > Built-in molded inserts hold flags or anchoring posts
- > One-year manufacturing defect warranty
- > Designed to last a minimum of eight years

#### **Custom Printing**

One of the most innovative features of the Billboard Barricade is the built-in advertising space. Many of our customers list this option as their top reason for investing in Billboard Barricades. Including signage can help generate revenue, increase safety, provide direction, and build brand awareness. Instead of covering metal barricades with branded slipcovers, the Billboard Barricade provides a more efficient and attractive solution.

#### **Product Features**

- Standard colors: red, safety orange, yellow, green, blue, silver
- > Custom colors: can match any pantone color
- > Premier colors: purple, black, white
- > Composition: UV-resistant high density polyethylene (HDPE)
- > Blow molded
- > Size: 42"Hx96"Lx2.5W
- > Wall: 0.125"
- > Weight\*: empty: 33 lbs. and full: approximately 58 lbs.

\*Weight calculation based on 3 standard US gallons of water



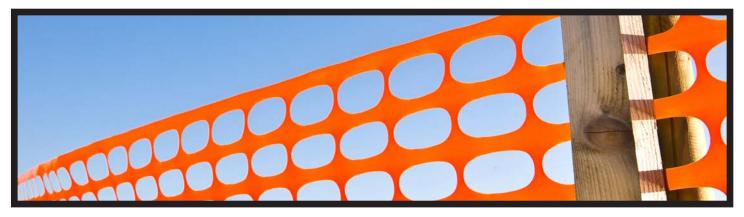
#### **Optional Signs**

Mounting hardware is included when signs are kitted to barricades prior to shipping. If you are printing your own signs, please note that the barricades themselves DO NOT include mounting hardware. The hardware we use to mount our signs include the following (per side):

- > Four (4) self tapping bolts, 1/4"x1/2"L
- > Four (4) flat fender washers, 1/4" inside diameter by 1-1/4" outside diameter"



# **Barrier Fencing | Work Zone Products**



#### When fencing innovation meets safety.

These fencing options are designed to be used at construction sites, job sites, hazardous locations, emergency responses, disasters, and crowd control such as parades, golf tournaments and sporting events. Diamond link looks and feels like chain link but made of high density polyethylene plastic. Warning barrier fence is extremely versatile and an economical plastic construction safety fence. Natural wood snow/sand fence can be used to protect sand dunes and snow drifts to prevent blowing and eroding. Nite Lite II reflective fence's high intensity, reflective sheeting stripes create a continuous, visual delineation for work zones and other hazards. The stripes literally light up when hit by any light source.

Call a NHP, Inc. Account Executive to discuss your project needs at 800.338.5685 or email us at sales@nationalhighway.com today!



# 

#### **Diamond Link**

- > Made from high density polyethylene (HDPE)
- > Looks and feels like chain link but are all plastic
- Colors: OSHA orange for traditional construction applications, green, yellow, black and white
- > Size: 4'Hx50'W rolls for all colors
- > Only orange is available in 4'Hx100'W

## Warning Barrier

- > High visible international orange
- > Will not rust, crack or corrode
- > Easy to install without special tools required
- > Light weight and portable
- > Reusable and durable
- > Economical option for temporary fencing
- Material: UV stabilized polypropylene or high density polyethylene
- > Roll size: 4'H×50'W and 4'H×100'W
- > Accessories sold separately: steel pins, cable ties, T-posts

# Natura

### Natural Wood

- > Ideal for snow drifting to prevent blowing and eroding
- > Can also be used as a sand fence to protect sand dunes
- > Wooden slats are 3/8"Dx1-1/2"W natural wood slats woven together with four 2-wire strands
- > Size: 4'x50'

#### Nite Lite II Reflective

- > Fence made of plastic, in safety orange
- > Standard roll is 4'Hx50'W and weighs 35 lbs.
- > Sheeting with 1"W high intensity sheeting stripes
- > 3 stripes run horizontally throughout the entire roll
- > Stripes also enhance daytime visibility

Posts and installation equipment available. See page 32 for posts and pages 36-39 for pullers and drivers.

# Work Zone Protection | Safety Apparel/Vests



#### Our selection of vests keep you in sight, on site.

With over 40 years on the job, ML Kishigo has made it their mission to design and manufacture the high quality vests that you can depend on to keep you safe and comfortable on the job-site. They take pride in their high standards and focus on the details and safety compliance standards so you don't have to. Choose from a wide selection of safety apparel to meet all of your work zone compliance needs.



#### $\bigcirc \bigcirc$

#### Heavy Duty Vest Black Bottom Mesh Vest

- Style # 1513 Lime | 1514 Orange
- > Ultra-Cool 100% polyester mesh
- Zipper front enclosure with durable webbing
- Reflective trim around arms and piping down sides
- Left and right chest mic tabs
- > Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 2 Compliant



800.338.5685 😐 www.nationalhighway.com



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#### **Black Bottom Mesh Vest**

- Style # 1509 Lime | 1529 Orange
- > 100% polyester material
- > Solid black polyester on lower front
- > Zipper front closure
- > 2" wide reflective material
- Two lower front solid patch pockets with flaps
- > Left chest radio pocket
- Right chest 2-tier pocket
- Two large lower inside pockets
- > Sizes: S-M, L-XL, 2X-3X, 4X-5X
- > ANSI 107 Type R | Class 2 Compliant

#### 

#### 3 Pocket Zipper Mesh Vest

- Style # 1507 Lime | 1508 Orange
- > Ultra-Cool 100% polyester mesh
- Zipper front closure
   2" wide high performance reflective material
- > Left chest mic tab
- Outside left chest radio pocket with hook and loop tab
- > Inside right chest 2-tier, 4-division pencil pocket
- > Lower inside left patch pocket
- > Sizes: S, M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 2 Compliant

Heavy Duty Vest

- Style # 1510 Lime | 1511 Orange > Ultra-Cool<sup>\*\*</sup> 100% polyester mesh
- Brilliant Trim reflective edging improves low light visibility
- Zipper front closure reinforced with durable webbing
- > 2" wide high performance reflective material with 3" breathable contrasting color
- > Left and right chest mic tabs
- > Two lower outside cargo pockets with grommets and adjustable flaps
- > Right chest 2-tier pencil pocket
- > Left chest radio pocket with flap
- Two inside patch pockets
- > Sizes: S, M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 2 Compliant

# Safety Apparel/Vests | Work Zone Protection



Style # 1576 Lime | 1577 Orange

- Ultra-Cool<sup>™</sup> 100% polyester mesh >
- Brilliant Trim reflective edging improves > low light visibility
- Zipper front closure
- X back configuration
- 2" wide reflective material with 3" contrasting color
- > Left chest mic tab
- Two lower outside patch pockets with > flaps
- Inside right chest 2-division pocket >
- Left chest radio pocket with hook & loop tab closure
- Sizes: S-M, L-XL, 2X-3X, 4X-5X
- ANSI 107 Type R | Class 2 Compliant

- Ultra-Cool<sup>™</sup> 100% polyester mesh >
- Brilliant Trim reflective edging
- Zipper front closure reinforced with durable > webbing
- 2" wide high performance reflective material with 3" Ultra-Cool" contrasting mesh
- Left and right chest mic tabs >
- Outside right chest 2-tier, 4-division pocket
- Outside left chest multi-use cell pocket >
- Inside lower patch pockets
- Two lower outside cargo pockets with flaps > and grommets
- Sizes: S, M, L, XL, 2X, 3X, 4X, 5X
- ANSI 107 Type R | Class 3 Compliant 5

#### Ladies Fitted Vest

Style #1521 Lime

- Ultra-Cool<sup>®</sup> 100% polyester mesh back and sides with lightweight solid front
- Zipper front closure >
- > 2" wide high performance reflective material
- Brilliant Trim and reflective piping around arms and down sides
- Two hidden lower outside slash pockets with zipper closures
- Inside ergonomically positioned lower left radio pocket with flap Sizes: S, M, L, XL
- > ANSI 107 Type R | Class 2 Compliant





#### **Mesh Pants**

- > Ultra-Cool 100% polyester mesh
- > Drawstring waist with elastic back
- > Elastic bottom cuffs
- > 2" wide reflective material
- > Left and right side pocket access slits
- Sizes: S-M Waist Up to 48" | Inseam 29" > L-XL Waist Up to 54" | Inseam 32" 2X-4X Waist Up to 60" | Inseam 34"
- ANSI 107 | Class E Compliant





**Premium Brilliant Series Mesh Pants** Style # 3118 Lime | 3119 Orange | 3173 Lime

- > Ultra-Cool 100% polyester mesh
- Brilliant Series reflective piping >
- Snap front closure, hook & loop fly with > adjustable sides and elastic back
- Heavy duty solid right cargo pocket
- Left and right side pocket access slits
- Elastic bottom cuff with zipper for boot access > (3118 and 3119)
- Sizes: S-M Waist Up to 48" | Inseam 29" L-XL Waist Up to 54" | Inseam 32" 2X-4X Waist Up to 60" | Inseam 34"
- > ANSI 107 | Class E Compliant

# Work Zone Protection | Safety Apparel/Vests





Class 3

- 100% polyester mesh
- 5-point breakaway sides, shoulders and front closure
- 2" wide reflective material
- > Left chest mic tab
- Left chest radio pocket
   Sizes: S-M 1-X1 2X-3X
- Sizes: S-M, L-XL, 2X-3X, 4X-5X
   ANSI 107 Type R | Class 2 Compliant
- Durable webbing reinforcements Cargo pockets with flaps Brilliant Series "reflective trim"

Breakaway shoulders, sides & front closures





Class E

### 

#### Enhanced Visibility Multi Pocket Mesh Vest Style # B100

- > Ultra-Cool™ 100% polyester mesh
- > Zipper front closure
- > Left and right mic tabs
- for flagging tape

Class 2

- > Two Inside lower patch pockets
- > Left chest radio pocket & clear ID pocket with flap
- 2" reflective material with 3" high visibility contrasting lime
   Two lower outside cargo pockets with adjustable flaps &
- grommets
- Šizes: S-M, L-XL, 2X-3X, 4X-5X
- Not ANSI/ISEA Compliant



#### **Breakaway Vest**

Style # 1552B Lime | 1553B Orange

- > Ultra-Cool<sup>®</sup> 100% polyester mesh material
   > Brilliant Trim reflective edging improves low light visibility
- Hook and loop front closure reinforced with durable webbing
- 5-point breakaway on shoulders, sides, and front closure
- > 2" wide high performance reflective material on 3" contrasting color
- > Left and right chest mic tabs
- > Two lapel grommets
- > Outside rightc hest 2-tier, 4-division pocket
- > Outside left chest multi-use cell pocket
- > Inside lower patch pockets
- > Two lower outside cargo pockets with adjustable flaps and grommets
- > Sizes: S, M, L, XL, 2X, 3X, 4X, 5X
- ANSI 107 Type R | Class 3 Compliant



#### **Professional Surveyors Vest**

- Style # S5010 Lime | S5011 Orange
- > Solid polyester front with mesh back
- Left chest 2-tier pocket with dual function flap that can be held open by hook & loop
- Large right gusseted pocket with flap
   Outside lower front pockets with flaps
- Outside lower front pockets with flaps
   Lower inside left & right full length zipp
- > Lower inside left & right full length zippers
   > Hidden back pouch with left & right zipper access
- Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 3 Compliant



# Safety Apparel/T-Shirts | Work Zone Protection



# Tagless neck label Black bottom front to keep t-shirt appearance clean & professional Reflective thread for added visibility

Breathable reflective material greatly reduces hot spots

UPF rated material

Lower inside: microfiber patch for cleaning safety glasses

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## **High Performance T-Shirt**

Style # 9160 Lime | 9161 Orange

- UPF rated, extremely lightweight with exceptional breathability
- Smooth polyester material on front with micro sport mesh on back
- 2" wide high performance breathable > reflective material
- Brilliant Series Trim (reflective thread) down > sides and around waist for added low light visibility
- Black bottom front to keep t-shirt > appearance clean and professional
- Tagless neck label for extra comfort >
- Lower inside: microfiber patch for cleaning safety glasses
- Left chest pocket >

- Sizes: M, L, XL, 2X, 3X, 4X, 5X >
- ANSI 107 Type R | Class 2 Compliant >

# T-Shirt

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Style # 9114 Lime | 9115 Orange

- > Microfiber polyester material wicks away moisture
- 2" wide high performance breathable > reflective tape significantly reduces hot spots and provides greater flexibility over solid tapes
- Black sides provide contrast and add > a sporty look
- > Left chest pocket
- > Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 2 Compliant

#### **Flat Stitch Panels T-Shirt**

Style # 9120 Lime | 9121 Orange

- > Microfiber polyester material wicks away moisture
- 2" wide high performance reflective > material on contrast panels
- Flat stitched contrast panels improve > daytime visibility and significantly improves comfort and coolness over layered contrasting panels
- Left chest pocket
- Sizes: M, L, XL, 2X, 3X, 4X, 5X
- ANSI 107 Type R | Class 2 Compliant >

#### Short Sleeve T-Shirt

Style # 9110 Lime | 9111 Orange

- > Microfiber polyester material wicks away moisture.
- 2" wide high performance reflective > material.
- Left chest pocket >
- Sizes: M, L, XL, 2X, 3X, 4X, 5X
- ANSI 107 Type R | Class 2 > Compliant

# Work Zone Protection | Safety Apparel/T-Shirts & Sweatshirts



#### Long Sleeve Microfiber T-Shirt

Style # 9134 Lime | 9135 Orange

- Microfiber polyester material wicks away moisture
- 2" wide high performance breathable reflective tape significantly reduces hot spots and provides greater flexibility over solid tapes
- > Black sides provide visual contrast
- > Left chest pocket
- > Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 3 Compliant



#### **Short Sleeve T-Shirt**

Style # 9118 Lime | 9119 Orange

- Microfiber polyester material wicks away moisture
- > 2" wide high performance reflective material
- > Left chest pocket
- > Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 3 Compliant

#### Long Sleeve T-Shirt

- Style # 9145 Lime | 9146 Orange
- Microfiber polyester material wicks away moisture
- > 2" wide high performance reflective material
- > Left chest pocket
- > Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 3 Compliant



#### $\bigcirc \bigcirc$

#### **Pull Over Hoodie**

Style # JS142 Lime | JS143 Orange

- > Made from high quality heavyweight polyester sweatshirt material with black rib knit cuffing
- > Stay in sight with 2"W breathable reflective material
- > Black accents on lower body and sleeves help hide dirt
- > Concealed reflective piping on front, back, sides, pockets and hood for better low light visibility
- > Hood is lined with soft jersey mesh for optimum comfort
- > Large kangaroo-style pocket keeps hands warm
- > Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 3 Compliant



#### 

Hoodie Sweatshirt with Zipper

- Style # JS102 Lime | JS103 Orange
- > Black lower body and sleeves help the wearer keep a clean appearance
- > High quality 9 oz. polyester sweatshirt material
- > Black rib knit cuffing
- > 2" wide high performance reflective material
- Lower outside slash pockets
- > Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 3 Compliant

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# Safety Apparel/Outerwear | Work Zone Protection



#### Outerwear that not only looks good, it's tough, comfortable and made with quality material for any climate.

### $\bigcirc \bigcirc$

#### 2 in 1 Jacket

Style # JS135 Lime | JS136 Orange

- Durable ripstop material with waterproof seam sealed construction
- > 2" wide high performance reflective material laminated directly to the fabric for longer life
- > Removable zip up hoodie sweatshirt
- Detachable rain hood can be stored in pocket
- Cuffs with durable rubber pull tabs make for easy adjustments while wearing gloves
- Reflective piping accents on back, sides, and pockets
- > Two outside lower gusseted pockets with hook and loop flaps
- > Two outside lower side access pockets with microfleece lining
- > Left chest pocket with retractable clear ID holder
- Left arm cell phone pocket with waterproof zipper
- Inside lower left hidden tablet (iPad) pocket with zipper and tablet pocket can be accessed without unzipping the jacket
- Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 3 Compliant



#### **Bomber Jacket**

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Style # JS119 Lime | JS120 Orange

- Durable ripstop material with waterproof seam sealed construction
- > Removable black quilted liner
- > Hidden collar hood
- > 2" wide 3M" Scotchlite" reflective material with 3" contrast
- > Brilliant Series reflective piping
- > Adjustable cuffs
- Left chest pocket with retractable clear ID holder
- > Left bicep 2-division pencil/pen pocket
- > Two outside lower slash pockets with zippers
- > Inside wallet pocket
- Sizes: M, L, XL, 2X, 3X, 4X, 5X
- ANSI 107 Type R | Class 3 Compliant

Left arm cell phone pocket with waterproof zipper

Two large integrated outside lower gusset patch pockets

Two side access hand warmer pockets with microfleece lining







Ripstop Bomber Jacket Style # JS130 Lime | JS131 Orange > Durable ripstop material with waterproof

- seam sealed construction fleece body and hood
- > Hood fits into the collar or can be removed
- > Right chest vertical pocket for wallet
- > Left chest radio pocket
- Left and right outside slash pockets
- > Left bicep 2-division pencil/pen pocket
- > Large vertical tablet pocket with zipper inside storm flap; tablet can also be accessed without unzipping the jacket
- > Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 3 Compliant

# Work Zone Protection | Safety Apparel/Outerwear



# Parka

Style # JS140 Lime | JS141 Orange

- Durable ripstop material with waterproof seam sealed construction
- > Quilted liner with thermal insulation
- > 2" wide high performance reflective material
- > Zipper front closure with storm flap
- Storm cuff (Powder Barrier) waist and sleeve liners keeps wind and snow out of critical areas
- > Black areas provide contrast, style, and durability
- > Detachable lined hood can be stored in pocket
- Cuffs with durable rubber pull tabs make for easy adjustments while wearing gloves
- Reflective piping accents on back, sides, and pockets
- > Two outside lower gusseted pockets with hook & loop flaps
- Two outside lower side access pockets with micro-fleece lining
- > Left chest pocket with retractable clear ID holder
- > Left arm pencil pocket
- Inside lower left hidden tablet (iPad) pocket with zipper and the tablet pocket can be accessed without unzipping the jacket
- Sizes: M, L, XL, 2X, 3X, 4X, 5X
- > ANSI 107 Type R | Class 3 Compliant



#### $\bigcirc$

# Premium Black Series Soft Shell Jacket

Style # JS137 Lime

- Crafted with durable water-resistant soft shell material
- 2" wide high performance reflective material
- Cuffs feature durable rubber pull tabs for easy adjustments
- Reflective piping accents add better visibility in low light
- > Waist cinches are hidden in front pockets
- Black areas offer contrast, style, and durability
- > Two outside lower slash pockets with zipper
- > Left chest media-compatible pocket
- > Left arm cell phone pocket
- > Sizes: S, M, L, XL, 2X, 3X, 4X, 5X
- ANSI 107 Type R | Class 3 Compliant

# $\bigcirc$

#### Unisex Soft Shell Jacket Style # JS144 Lime

- Crafted with durable water-resistant soft shell material
- > 2" wide high performance reflective material
- Reflective piping accents add better visibility in low light conditions
- Elastic black cuffs with inset thumb holes
- Convenient underarm vents for breathability
- Streamlined cut for slimmer fit
- Black areas offer contrast, style, and durability
- > Two outside lower slash pockets with zippers
- Inside lower left media-compatible pocket with zipper
- Left arm cell phone pocket
- > Sizes: S, M, L, XL
- ANSI 107 Type R | Class 2 Compliant (Size S)
- ANSI 107 Type R | Class 3 Compliant (Size M-XL)



## Premium Black Series Windbreaker

Style # WB102 Lime

- > 4 Layer filtration system provides basic protection against non-toxic dust, smoke and other non-toxic particles found on the job site
- Concealed reflective piping along hood, front and back chest seams for better low light visibility
- Cuff inserts with thumb hole at sleeve hem
- > Durable lightweight lime water resistant ripstop shell with lining
- > Adjustable hood
- > 2" Wide high performance reflective tape
- Durable black water resistant ripstop in high wear areas, along the sides and under the arms
- Sizes: S, M, L, XL, 2X, 3X, 4X, 5X
- Tall collar design with asymmetrical zipper to avoid chaffing
- > ANSI 107 Type R | Class 3

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## Safety Apparel/Rainwear | Work Zone Protection



Jacket

ANSI 107 | Class E Compliant - Pants

## Work Zone Protection | Safety Apparel/Headwear & Eyewear



More ways to stand out with protective headwear and accessories.

6-Point Ratchet Suspension Hard

With a tough polyethylene shell, hard hats are strong, lightweight and durable

Slotted sides to accommodate 6 point

Colors: white, blue, green, yellow, orange, red, hi-vis orange and hi-vis



## 

lime

ratchet suspension

Hat

#### Hard Hat Nape Protector

Style # 2808 Lime | 2809 Orange

- Protects your neck from the sun while wearing your hard hat
- > 100% polyester
- Self-adhesive hook and loop tabs allow you to attach to the inside or outside of any hard hat
- > One size

## 

#### **Full Brim Sun Shield**

Style # 2873 Lime | 2874 Orange

- > 100% polyester shade with
  - breathable mesh nape protector 1/2" reflective material with
- Designed to fit over full brim hard
- hats
- > Easy to fold and put away
- Brilliant Trim reflective edging improves low light visibility



## ••

## Hard Hat Sun Shield

Style # 2810 Lime | 2813 Orange

- > Ultra-Cool™100% polyester mesh with contrasting trim
- 5/8" wide high performance reflective material with contrasting material
- Elastic band to fit over most hard hats
- > Keeps your neck well shaded



## Knit Beanie

Style # 2826 Lime | 2827 Orange

- Soft 100% polyester knit material
- Two stripes of reflective thread are woven into the beanie, allowing for greater flexibility over sewn on reflective tape One size

#### 

#### **Reflective Waist Band, 6 Pack**

Style # 3896-6 | 3895-6 | 3897-6

- > 2" wide glass bead reflective material
- > Adjustable up to 54"
- Plastic clasp closure



# Optical eyewear protection with comfort, style and safety.

#### Safety Eyewear

- > Wraparound design fits snugly for total optical protection
- Meets the requirements of ANSI Z87.1 and AS/NZS 1337
- Ultra-cool and ultra-lightweight polycarbonate frames ensure worker acceptance





## Safety Apparel/Gloves | Work Zone Protection





Proper hand protection is important for construction workers. National Highway Products, Inc. can provide you with an outstanding selection of quality work gloves. Gloves come in different sizes, materials and patterns. Below are just a few customer favorites. If you don't see the gloves you need, call 800.338.5685 or email sales@nationalhighway.com to contact an Account Executive.



#### Hi-Vis Lined Grain Pigskin Leather Palm Style #1938

- > 3M<sup>™</sup> Scotchlite reflective material
- > HeatKeep<sup>®</sup> lining
- > Safety orange nylon back
- > Sizes: S, M, L, XL

#### Hi-Vis Lined Grain Pigskin Leather Palm w/Knit Wrist Style #1938KW

- > 3M<sup>™</sup> Scotchlite reflective material
- > Safety orange nylon back
- > Heatkeep<sup>®</sup> lining
- Knit wrist
- > Sizes: S, M, L, XL, 2X

#### Hydroflector<sup>™</sup> Lined Waterproof Suede Pigskin Palm with Safety Cuff

Style #1958

- Golden suede palm protects the hand with exceptional durability
- > AquaNOT!® waterproof lining
- > HeatKeep<sup>®</sup> thermal lining
- > Sizes: M, L, XL, 2X

#### Lined Hi-Vis Orange Sandy Finish PVC with Knit Wrist

Style #4170

- > Grip control while withstanding greases, oils, most solvents & chemicals
- Soft-Touch thermal lining provides a comfortable barrier on the interior of glove while keeping hands warm
- Straight thumb design, sewn perpendicular to the wrist, helps ensure a firm grip
- > Size: L

#### Hi-Vis Unlined Grain Pigskin Leather Palms

#### Style #1919

- > 3M<sup>™</sup> Scotchlite reflective material
- > Sizes: M, L, XL, 2X

#### **Brown Jersey**

Style #820

- > 9 oz. brown jersey
- > Clute cut
- > Sizes: S, L, XL

#### Split Cowhide Leather Palm

Style #1500

- > Gray split cowhide leather
- > Rubberized safety cuff
- > Sizes: M, L, XL

## Poly-Cotton Knit Shell & Latex Palm

Style #1791

- Gray polyester-cotton blend knit shell
- > Blue crinkle latex coated palm
- > Continuous knit wrist
- > Polyester over-lock hem
- Seamless design
- > Available as pair or banded 3-pack
- > Sizes: S, M, L, XL

#### Women's Alyeska Lined Black Full-Finger

#### Style #5199W

- > Soft acrylic thermal lining
- > PVC dots on palm and index finger
- > Size: one size

#### Women's Grip Knit Shell & Sandy Foam Nitrile Palm Style #1790W

- > 10 gauge 100% acrylic thermal knit shell
- > Locks in warmth, repels cold
- > Sizes: S, M, L

## Work Zone Protection | Kask Safety Helmets



Engineered to exceed the strictest global safety protection standards.

Headwear that promotes all around safety and protection, offers a comfortable fit and is thoughtfully designed. KASK offers a wide array of options for many different job types and locations. One size fits most.





#### Zenith X2

ANSI Z89.1 - Type I, Type II - Class E

- > Dry+
- Polypropylene HD external > shell
- Replaceable lamp clips >
- D-core technology >
- Adaptive fit system >
- Lateral adjustment divider >
- Earplug hooks >
- > HD Crown Protection



#### $\bigcirc \bigcirc \bigcirc$ Zenith X2 HI VIZ

ANSI Z89.1 - Type I, Type II - Class E

- > HI VIZ Reflective Decals
- > Dry+
- Polypropylene HI VIZ HD > extérnal shell
- Replaceable luminescent > lamp clips
- D-core technology >
- > Adaptive fit system
- > Lateral adjustment divider
- Earplug hooks

- Advanced chinstrap
- Ring to hook >
- Earmuff attachment slots >
- Click-In system >
- > Easy click visor adapters
- > Frontal accessory slot
- > HI VIZ nameplate
- > Electric shock protection



> HD Crown Protection

> Advanced chinstrap

Click-In system

> HI VIZ nameplate

Earmuff attachment slots

Easy click visor adapters

Electric shock protection

Frontal accessory slot

Ring to hook

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- Zenith X2 Air
- ANSI Z89.1 Type I, Type II Class C
- Dry+ >
- Polypropylene HD external > shell
- > Replaceable lamp clips
- D-core technology >
- Adaptive fit system >
- > Lateral adjustment divider
- > Earplug hooks
- HD Crown Protection

- Advanced chinstrap
- Ring to hook >
- Earmuff attachment slots >
- Click-In system >
- Easy click visor adapters
- > Frontal accessory slot
- > HI VIZ nameplate
- > Ventilation channels



## Zenith X2 Air HI VIZ

ANSI Z89.1 Type I, Type II Class C

- >
- >
- >





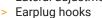
- **HD Crown Protection** >
- > Advanced chinstrap
- Ring to hook >
- Earmuff attachment slots >
- Click-In system >
- Easy click visor adapters >
- Frontal accessory slot >
- HI VIZ nameplate >
- Ventilation channels

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> HI VIZ Reflective Decals

- > Dry+
- Polypropylene HI VIZ HD external shell
- Fire retardant luminescent lamp clips
- D-core technology
- > Adaptive fit system
- > Lateral adjustment divider



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## Kask Safety Helmets | Work Zone Protection



Superplasma HD

Visor attachment

Earmuffs fitting

Chinstrap in eco-leather

ANSI Z89.1

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>

>

> Ventilation

Lamp clips



>

>

> 2Dry

>





#### Superplasma HD HI VIZ ANSI Z89.1

- Ventilation >
- Earmuffs fitting >
- Chinstrap in eco-leather >
- Air grid >
- >
- Ring to hook > Flourescent shell
- > > Up & down system

> 2Dry

Visor attachment >

**Reflective stickers** 

> Luminescent clips





Air grid

Ring to hook

Up & down system

## **Primero**

ANSI Z89.1 Type I - Class E HT LT

- Polypropylene HD external shell
- > Click-In system
- > Ergo fit system
- Neck protector slot >
- HD EPS internal shell >
- > Advanced lite chinstrap
- Earplug hooks
- Replaceable lamp clips

- > Lateral adjustment divider
- > 2Dry > Earmuff attachment slots
- > Easy click system
- Ring to hook >
- > Ventilation channels
- > Frontal accessory slot
- >
- Electric shock protection



#### **Primero HI VIZ**

ANSI Z89.1 Type I - Class E HT LT

- Polypropylene HD external > shell
- Easy click system >
- Ventilation channels >
- Frontal accessory slot >
- Electric shock protection >
- Lateral adjustment divider >
- Click-In system >
- Ergo fit system >



- Neck protector slot >
- HD EPS internal shell >
- Earmuff attachment slots >
- Earplug hooks >
- Replaceable lamp clips >
- Ring to hook >
- > 2Dry
- Advanced lite chinstrap >
- > HI VIZ details





#### **Primero Air**

- ANSI Z89.1 Type I CLASS C HT LT Polypropylene HD external > shell
- Click-In system >
- Ergo fit system >
- Neck protector slot >
- Lateral adjustment divider >
- Earmuff attachment slots >
- Earplug hooks >
- Replaceable lamp clips

- HD EPS internal shell >
- > 2Dry
- > Advanced lite chinstrap
- > Easy click system
- Ring to hook >
- Ventilation channels >
- > Frontal accessory slot



#### **Primero Air HI VIZ**

ANSI Z89.1 Type I - Class C HT LT

- Polypropylene HD external shell >
- > Click-In system
- >
- Frontal accessory slot >
- Lateral adjustment divider >
- Earmuff attachment slots >
- Ventilation channels >
- Easy click system >



HD EPS internal shell

Neck protector slot

Ring to hook

HI VIZ details

Earplug hooks

Advanced lite chinstrap

Replaceable lamp clips

2Dry

>

>



- > >
- Ergo fit system

## >

## Work Zone Protection | Stop/Slow Paddles



Ideal for guiding pedestrians and protecting road crews to ensure that everyone stays safe.

#### 84"Quick Disconnect Stop/Slow Paddles

- > 18"x18" with 12" handle and 72" staff
- > 24"x24" with 12" handle and 72" staff
- Available with: High Intensity Prismatic Fluorescent Diamond Grade reflective sheeting
- For use in most work zones to guide traffic

#### **Other options:**

- > 9" poly grip handle for use with 12" or 18" paddle
- > 72" staff with slot for use with 18" or 24" paddle
- > Available Stop/Stop in 12"

# Quick disconnect

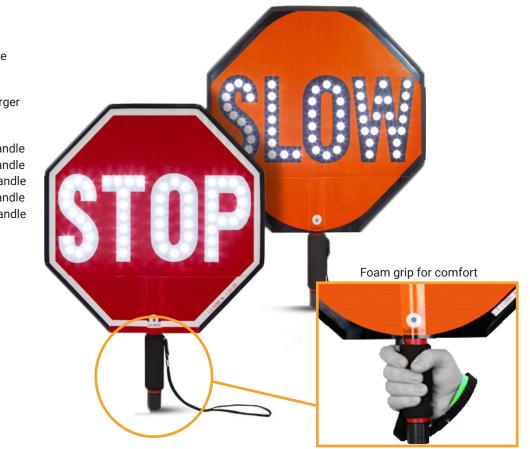


Stop/Slow paddle shown with 9" polygrip handle





Quick disconnect with 12" handle & 72" staff



#### LED Stop/Slow Paddles

- > Meets MUTCD Standards
- > Easy push button ON/OFF feature
- > Steady burn/flashing mode
- Lithium ION rechargeable/ interchangeable battery and charger included
- > Available in:
  - 12" LED Stop/Stop HIP w/ 6" handle
  - 18" LED Stop/Stop HIP w/ 6" handle
  - 18" LED Stop/Slow HIP w/ 6" handle
  - 24" LED Stop/Stop HIP w/ 6" handle
  - 24" LED Stop/Slow HIP w/ 6" handle
- > Accessories available:
  - 4-8' telescoping orange handle
  - Replacement black handle
  - Replacement charger for LED paddle
  - Replacement battery pack

## Traffic Safety Accessories | Work Zone Protection



#### Lighting up one roadway at a time with LED flares.



#### 

## "Ice Cream Sandwich""

#### **Sequential Guidance Flare**

- Five flash patterns to choose from; four sequential patterns; one simultaneous pattern
- > Rechargeable or alkaline battery system
- > Sold individually, 4 pack, 6 pack, or 10 pack
- > Colors: orange, blue, red, yellow



#### Simple Yet Intelligent

Single button to turn on. No programming or pre-numbering of these. The flares communicate with one another to establish their position.



**Rugged and Compact** Designed to be run-over, the flares can withstand the harsh environment of a roadway.



Rechargeable or Alkaline Battery



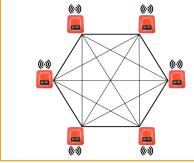


1 Mile Visibility With 12 bright through-hole side LEDs and 4 bright surface mount top LEDs, the flare can light up a desired path visible over a mile on the road.



#### 50 FT Range

50+ foot range between flares (when on the ground), 1,000 feet when placed on top of a cone. No limit to the number of flares in a string.



#### **Control All From One**

Any one flare controls the entire network of flares. Change any parameter (e.g., pattern) on all flares from any single flare. That flare will send a message to the network of flares and will change their patterns as well. In addition, no need to turn off each flare. The user can do a "group off" from any flare and all the flares will turn off.

#### **Group Frequency Channels**

There are times when you want two groups of flares to work together or not work together. Now with the easy group channel (frequency) programming feature the operator can change the group frequency on multiple sets at once.

## Work Zone Protection | Traffic Safety Accessories



#### $\bigcirc \bigcirc$

#### Aervoe Universal LED Rechargeable Road Flare Kit

- 6-Pack flare kit contains 6 flares, 120V wall charger, 12V car charger, recharging case
- > 18 LEDs with 7 flash patterns
- > Visible up to 1 mile
- > Rechargeable and magnetic
- > Corrosion and crush-proof
- > Waterproof
- > LED color: red or amber

#### Safety Triangle Kits

- > Supplied in sets of 3 with compact case for storage
- Manufactured with an outer border of red high-intensity retro-reflective plastic and orange fluorescent plastic inner triangle
- > Meets or exceeds Federal Specification FMVSS-125
- > Dimensions: 19" x 6" x 5



#### **Orion Safety Flares**



- Unique patented PlasTcaps<sup>®</sup> with the nonroll feature
- Ignites easily and continues to burn in all kinds of weather
- > Built-in wire stand to protect them from the elements and increase their visibility
- > Non Perchlorate Formula
- > Dimensions: 17.5"x7.38"x7.25"
- > Packaged: case of 36
- > DOT Class: FUSEE, 4.1, NA1325, PGII
- > 30 minute with wire stand in stock
- > Available styles for purchase: 5, 10, 15, 20, 30 minute flares



## $\bigcirc ullet$

#### **Barricade Tape**

- > Prevent accidents and mark dangerous areas
- Printed with both red and black ink and is used during abatement operations as mandated by OSHA
- > Meets or exceeds all OSHA regulations
- > 3"Wx1000'L rolls

Legend	Color	Size	
DO NOT ENTER	Black on Yellow	3"x1000'	
CAUTION	Black on Yellow	3"x1000'	
CAUTION DO NOT ENTER	Black on Yellow	3"x1000'	
CUIDADO CAUTION	Black on Yellow	3"x1000'	
POLICE LINE DO NOT CROSS	Black on Yellow	3"x1000'	
FIRE LINE DO NOT CROSS	Black on Yellow	3"x1000'	
DANGER	Black on Red	3"x1000'	
DANGER DO NOT ENTER	Black on Red	3"x1000'	
PELIGRO DANGER	Black on Red	3"x1000'	
* Custom legends available - minimum order required.			

Close up

of mesh

#### Heavy Duty Mesh Safety Flags

- Heavy-duty vinyl coated nylon mesh safety flag
- Suited for all construction and traffic applications
- > Use on moving vehicles
- > Design allows air flow and will not fray
- > Sizes: 24"x24"x30" staff, 24"x24"x36" staff, 18"x18"x24" staff, 18"x18"x27" staff and 12"x12"x24" staff

#### $\bigcirc \bigcirc$

#### Plastic Sandbags

- > Holds up to 50 lbs. of sand
- > Polypropylene plastic
- > UV inhibitors added for longer durability
- > Colors: white or orange



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## Vehicle Warning Lights | Work Zone Protection



#### A trusted source for the best vehicle warning lights.

National Highway Products, Inc. has long been providing LED emergency vehicle lights and police light bars to outfit your car or truck. We carry a complete line of North American Signal Company vehicle warning lights. Below is an overview of their product offerings. If you do not see what you are looking for, call 800.338.5685 or email sales@nationalhighway.com to speak with an Account Executive.



#### MicroBurst<sup>\*\*</sup> LED Warning Light

- > Complete 360° revolving or flash display
- > Combination flash / revolve is best seller
- > 5-year warranty, 100,000 hour life on LEDs
- Sonic-welded housing for long-life application
- > Flange base standard, hardware included
- Magnetic mount versions include 15' straight cord and D/C car charger with built-in On/Off switch
- > 1/2" pipe mount plate

#### MicroBurst<sup>™</sup> High Power LED Warning Light

- > Two flash patterns to choose from
- Described as the brightest "little" light on the market today
- > Magnetic or pipe mount available
- 12/24V DC and 120V AC versions available
- > Sonic-welded 5 Year Warranty



#### LED625 Series

- > 12/24V, 1.2 amp maximum current draw
- All flash patterns exceed SAE Class 2 light output
- High impact LEDs offer a complete 360° display
- 5 user-selectable patterns. Pattern changing switch on base (permanent mount) or plug (magnetic mount)
- > 2 bolt permanent mount base standard # LED625-A
- > 3 hole flange base, # LED625F-X
- Magnetic mount includes a 15" straight cord, On/Off and pattern changing switch built into plug
- > 6" Lens optional, part # LED625H-X or # LED625HF-X



#### LED925 Series

- > 12/24V, 1.2 amp maximum current draw
- > 5 user-selectable flash patterns
- > All flash patterns exceed SAE Class 2 light output
- Polycarbonate outer dome with ABS Plastic base
- > Designed for heavy duty applications
- Pipe mount and magnet mount versions available



#### LED400 Heavy-Duty Series

- > 12/24V, 1.6 amp maximum current draw, certified to meet SAE Class 1 in slow single flash mode
- Specifically designed for high vibration, high stress applications - 5 year warranty
- Aluminum heat-sink allows for extended use and LED life through improved heat dissipation
- Can replace any existing warning light and increase visibility
- Features 5 user-selectable flash patterns
- 3/4" NPT female pipe fixture built into base of unit
- Embedded reverse polarity protection provided
- Bright, durable, and built to withstand the harshest environment and keep flashing

All lights within this section come in amber, clear, red, white, blue or green. Call an Account Executive for more information and availability.

#### Surface Mount LED's

#### **Dual Color Surface Mount Light**

All new LED4580-XX takes the LED4500 series surface mount LED lights to a whole new level. The LED 4580-XX alternates between two sets of 4 each different colored LEDs creating a very attentiongetting display in a small package. Two units can communicate for a highly visible synchronized display.

- > 8 total LEDs, you pick the 2 colors
- > Four LEDs of each color you can pick from: amber, white, red, blue or green



> Limited warranty: 5 years

#### High Power LED Surface Mount Warning Light

The LED8800-XX can be a single color or dual color. Two heads can be connected for synchronized flash.

- > Light source: twelve high power LEDs
- > Multiple flash patterns
- Width: 5" >

> Width: 4.5"

- Voltage range: 10.5 32.0V DC
- Limited warranty: 5 years



#### **Economy LED Mini Bars**

#### MMBZLEDFL-C/A

- > 160 high impact LEDs
- > Features 9 user select flash patterns
- > LEDS: amber, red, blue, clear or green
- > Width: 17.25"



#### MINIFLZ-C/A

- > 136 high impact LEDs
- Features 9 user select flash patterns including a "demo" pattern which cycles through all available flash patterns
- > LEDS: amber, red, blue, white or green
- > Width: 13.5"



#### High Power Mini Bars and Full Size Light Bars

#### MINILP-C/A (Clear Outer Dome) MINILP-A (Amber Outer Dome)

The MINILP series features 18 high power LEDs with state of the art TRL lensing, a heavy duty housing, improved gasketing, multiple patterns, and a very low profile - aerodynamic appearance.

- Exceeds SAE Class 1 specifications
- > Voltage: 12/24V
- > Patterns: 8 user select
- > LEDs: 3/lamp, 6 lamps
- > Width: 13.5"



#### MMBLEDLPR3-C/A (Clear Outer Dome) MMBLEDLPR3-A (Colored Outer Dome)

The MMBLEDLPR3-C/X features 24 high power LEDs with state of the art TRL lensing, a heavy duty housing, improved gasketing, multiple patterns, and a very low profile - aerodynamic appearance.

- Exceeds SAE Class 1 specifications
- > Voltage: 12V
- > Patterns: 8 user select
- > LEDs: 3/lamp, 8 lamps
- Width: 17.25"



#### MFX48-C/A, All LED 48" Light Bar

- > SAE Class 1 performance
- > 12/24V DC, 18 amber LED lamps
- > Available in amber, red, blue, green, white
- > 47" x 8" deep x 4" tall with legs installed
- > User select flash patterns
- Mounting hardware included
- > Warranty: 5 years



#### MBX24-C/A, 24" LED Light Bar

- > 12/24V DC, 10 amber LED lamps
- > Available in amber, red, blue, green, white and violet
- > 23" x 8" deep x 4" tall with legs installed
- > User select flash patterns
- > 30 total high power LEDs





# **Equipment** Keep work zones safe for your crews and drivers.

WW INSTALLAN



## Equipment | SolarTech® Message Boards



#### Message boards that are portable, changeable signs and controllable from anywhere.

These character panels use patented optical assemblies that emit bright, distinctive messages to the traveling public. LEDs enhance legibility and visibility while requiring less power than other types of illuminated signs. Full-matrix message centers allow you to display variable text heights and graphic symbols. When fully charged, the message board is capable of operating independently of sun for 30 days with 2-1/2 hours of good sun required for each additional day of operation.

## Yes! You can control your message boards using remote control and GPS tracking

Optional communication package includes free lifetime cell service. It includes an integrated modem and GPS and you can access your signs and change messages right from your office PC, or your laptop, or your smart-phone. Think of it – you can even login and access your signs from home. No more racing to the work-zone at 6 am to change a message!

#### With Command Center you can:

- Create and schedule messages for changeable message boards individually or in groups
- View message status information including current message and time of last update
- Choose preset messages from the Library, or create your own and store in the Library
- Broadcast messages such as Amber Alerts to all signs
- View status information about the sign including battery voltage, estimated
- runtime, photocell reading, temperature and GPS location

## Silent Messenger I Full Sized Message Board

- > This rugged portable, changeable message sign provides information to improve traffic flow and safety in work zones, for both drivers and workers
- > Consists of a 126"Wx76"H sign panel
- > 27x48 pixel full matrix LED display on a sturdy steel trailer, powered by a combination of solar panels and batteries
- > The sign telescopes on a lift and rotate mast, and can be rotated for optimal visibility
- > Character height range: 13"-68"

All message boards are available with optional upgrades: solar array, battery bank, trailer color and multiple towing hitch options.

#### Available for Sale or Rent Rental Options: Daily, Weekly or Monthly

#### Yes, remote access is even available on your older SolarTech<sup>®</sup> equipment If your message boards were purchased before May

2014, you can add the communications package by buying SolarComm. You'll get GPS tracking and service notifications and have all your equipment remotely accessible.



#### Controller

The touch-screen controller needs no manual – it's that easy to use! Includes:

- GPS receiver, cellular transceiver and free cellular service for the life of the board
- > Password protection
- > Intuitive icons for ease of use
- Scheduling capability
- Fully net-workable
- > NTCIP version 2 compatible
- Automatic software upgrades



## SolarTech® Message Boards | Equipment

#### Silent Messenger II Mid-Sized Message Board

> This rugged portable, changeable message sign is designed to provide communications to improve traffic flow and safety in highway work zones

a 27x48 pixel full matrix LED display

on a sturdy steel trailer, powered by a

Consists of a 92"Wx54"H sign panel with



- combination of solar panels and batteries
   Choose from either a foldable or lift and rotate trailer
- > Character height range: 9"-46"

>

#### Silent Messenger III Mid-Sized Message Board

- > The "Silent Messenger III" mid-sized message board is a truly reliable workhorse
- > A 27x48 pixel full matrix LED display on a sturdy steel trailer is powered by both solar panels and batteries



- Display sign panel measures 78"Wx46"H, giving a clean crisp readable message
- > Character height range: 7-1/2"-39"
- > Available in either a foldable or a lift and rotate trailer

#### **Incident Response Trailer**

- > A combination unit that includes everything you'll need to respond to an emergency: spills, rock slides, accidents, flooding, etc.
- > Unit includes a message board plus 10 barrels and 25 traffic cones on a sturdy steel trailer powered by a combination of solar panels and batteries
- The display screen measures 92"Wx54"H and allows you to add a message to slow traffic, reconfigure lanes or warn of dangers ahead



#### Silent Messenger IV Small-Sized Message Board

- > This "Silent Messenger IV" is a small message board, sized right for residential areas, for city or county roads, or anywhere that a smaller footprint is preferred
- > Available in 3 panels sizes and a variety of matrices
- Message board is powered by a combination of solar panels and batteries

#### Vehicle Mount Message Board

- Vehicle mounted signs allow flexibility for DOTs, municipalities, contractors and traffic safety houses
- > A wide array of signs and mounting options enables you to customize for any vehicle:
  - Crash attenuators trucks or trailers
  - Pickup trucks
  - Dump trucks
  - Stake body/flat bed trucks
  - Utility vehicles
- Solar Technology offers multiple mounts in various sizes for any vehicle in your fleet
- > All mounts are available with manual or powered options
- Signs can be powered either by using battery power from the vehicle or by using dedicated batteries
- > Optional solar panels also available

#### **Double-Sided Message Board**

- Ideal for directing traffic from two different directions
- With both models, you can choose from MB II 92"x54" or MB III 78"x46" sign panels
- Model MB-122-3048 has two sign panels on a lift and rotate mast the sign panels can be angled from parallel to 45 degrees
- HERGE LEFT
- Model MB-222-3048 has two trailer-mounted parallel sign panels which can be angled slightly
- > Both models are powered by a combination of solar panels and batteries for reliable performance

#### Pull your radar statistics for free using SolarTech® lifetime cell service package.





## Equipment | SolarTech® Arrow Boards



Trailer Mounted 15 Lamp







SOLAR TECH



Vehicle Mounted 25 Lamp





#### Now talk to your SolarTech® arrow boards...

Choose the Remote Communications Option, and your Arrow Board will come installed with a modem, GPS and free cellular service for the life of your arrow board\*. This option is available for every SolarTech Message and Arrow Board.

All models meet or exceed the standards for flashing arrow panels as listed in the U.S. Federal Highway (FHWA) manual on Uniform Traffic Control Devices (MUTCD). Specifications subject to periodic updates as required without notice.

\*When choosing the remote communications options, cellular service is provided free of charge, and is limited to carrier supported generational wireless technology.

Details	Trailer Mounted			
Panel Size	96"x48" (Type C)			
Lamps	LED – 15 or 25			
Solar Array	40 watts			
Batteries	Two (2) 6-volt heavy-duty deep cycle (GC-2)			
Length	100"			
Width	96"			
Height Traveling	92"			
Height Operating	134"			
Weight	1,180 lbs			
Available Options				
Combination Coupler	Removable, 2" ball and (2) .5" pin rings			
Adjustable Height Coupler	2-inch ball or 3-inch pintle, adjusts from 18 to 28 inches			
Solar Array	80 watts			
Batteries	Four (4) Lead-Acid (flooded) or Two (2) or four (4) Gel-Cell maintenance-free			
Auxiliary Battery Charge	115 VAC line-powered, 45 amp 230 VAC line-powered, 45 amp			
Traffic Cone Carrier	Holds standard 18" and 28" traffic cones			

#### Here's how the remote communications option helps you:

- View a permanent record of what was on each board and when
- > Monitor battery voltage from your desk or smartphone
- > See location of boards using GPS coordinates
- > Get email notifications if a board moves
- > Change arrow patterns remotely

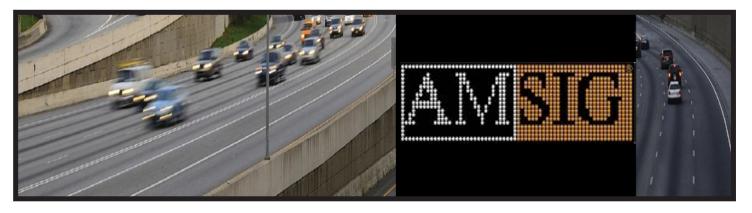
#### Available for Sale or Rent Rental Options: Daily, Weekly or Monthly

Details	Vehicle Mounted	
Display Type	15 or 25 Lamps Type B or Type C	
Mount	Multiple mounting options (universal, pivoting, over-cab, skid, bed-rail, etc.)	
Installation Kits	Self-contained portable or integrated, in-cab controls	
Lifts	Manual or powered	
Battery Packs	Auxiliary battery pack (300/600 AH) Lead Acid or Gel-Cell	
Battery Charge	45 amp 115 or 230 volt	
Solar Power Kits	40 watts	

#### **Optional Easy-To-Use Controller**

- Control Module Displays:
- Battery level
- > Solar charger status lamp intensity cellular status
- > GPS status
- > Arrow and warning patterns can be set with the press of a button
- > Automatic fault protection is built-in

## AMSIG® Message Boards | Equipment



#### CMS-T331 3-Line Message Board

- > Message size: 137.5"x79.5"
- > 3 lines x 8 discrete characters
- > Minimum 30 day battery run time
- > 18" high characters
- > Up to 8 characters per line
- > 2 font sizes: 4x7 , 5x7
- > NTCIP compliant
- +1,000' legibility
- > 4,800' visibility

#### Options

- > Cellular (CDMA / IXRTT , GSM / GPRS)
- > WiFi
- > Landline or ethernet (TCP / IP) options
- > GPS
- > Radar over-speed detection
- > Queue detection
- > VoiceStar<sup>™</sup> highway advisory radio
- > AIMSTAR<sup>®</sup> adjustable solar assembly
- Radar data logging and graphing
- > CCTV
- > Expanded solar / battery bank

#### CMS-T332 3-Line Message Board

- > Message size: 137.5"x79.5"
- > 1, 2, or 3 line messages
- > Line matrix 21 rows x 50 columns
- > 18" characters with variable width fonts
- > Up to 12 characters per line
- > 4 font sizes
- > NTCIP compliant
- Energy efficient and environmentally sound
- > User-friendly
- > Local and/or remote sign control
- Long life LEDs
- > SOLR primary power supply
- The CMS-T332 has the memory capacity to retain 199 preprogrammed messages, 199 user-generated messages, and 250 message sequences (up to six messages/sequences)

SolarTech boards make ITS a possibility today. Not ready? No worries. Once installed, it's ready when you are. No need to add modems and GPS chips later. And – bonus! – never pay for cellular service for the life of the board.



> American Signal Company's Dynapoint Optical Technology provides enhanced visibility and legibility both day and night, with a legibility distance over twelve hundred feet (1200')

#### Options

- Landline or ethernet (TCP/IP) options
- > Cellular (CDMA/1XRTT, GSM/GPRS)
- > Radar over-speed detection
- > Queue detection
- > VoiceStar<sup>™</sup> highway advisory radio
- > AIMSTAR<sup>™</sup> adjustable solar assembly
- > Radar data logging and graphing
- > ITS ready options: CCTV, HAR, GPS

#### CMS-T333 4-Line Full Matrix Message Board

- > Message size: 137.5"x79.5"
- > Full matrix 28 rows x 50 columns
- > 1, 2, 3, or 4 line messages
- > Graphics and animations
- > 13" to 53" characters
- > Up to 12 characters per line
- > Minimum 30 day battery run time
- NTCIP compliant
- > This full matrix display gives you the power to deliver information via larger text and full sign sized graphics
- > Legibility distance over twelve hundred feet (1200')
- Over 200 factory pre-programmed MUTCD compliant messages
- > 11 character fonts with character heights from 13" to 53"
- > LED design provides outstanding legibility in all weather conditions, with wide angle visibility

#### Options

- > Cellular (CDMA / IXRTT, GSM / GPRS)
- > WiFi
- > Landline or ethernet (TCP / IP) options
- > GPS
- > Radar over-speed detection
- > Queue detection
- > VoiceStar<sup>™</sup> highway advisory radio
- > AIMSTAR<sup>™</sup> adjustable solar assembly
- > Graphic user interface software
- > CCTV
- > Vehicle data logging capability
- > Expanded solar / battery bank



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## Equipment | AMSIG® Message & Arrow Boards

#### CMS-GP232T Advantage Full Matrix Message Board

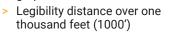
- > Message size: 72"x36"
- > Full matrix 28 rows x 72 columns
- > 1, 2, 3, or 4 line messages
- > Graphics and animations
- > 5" to 19" characters
- > Up to 18 characters per line
- > NTCIP compliant
- Energy efficient and environmentally sound
- > User-friendly
- > Local and/or remote sign control
- > Long life LEDs
- > SOLR primary power supply
- > This full matrix display gives you the power to deliver information via larger text and full sign sized graphics
- > Legibility distance over one thousand feet (1000')
- > 26 MUTCD symbol signs are available
- > 11 character fonts with character heights from 5" to 19"
- > Full height chevrons, moving arrows
- > Ability to flash lines or entire message

#### Options

- > Cellular (CDMA / IXRTT , GSM / GPRS)
- > Landline or ethernet (TCP / IP) options
- > Radar over-speed detection
- > Queue detection
- > VoiceStar<sup>™</sup> highway advisory radio
- > AIMSTAR<sup>™</sup> adjustable solar assembly
- > Radar data logging and graphing
- > ITS ready options: CCTV, HAR
- > Vehicle mount (yoke or skid)

#### CMS-GP432T Advantage Full Matrix Message Board

- > Message size: 96"x48"
- > Full matrix 28 rows x 50 columns
- > 1, 2, 3 or 4 line messages
- > Graphics and animations
- > 7" to 30" characters
- > Up to 12 characters per line
- > NTCIP compliant
- > The full matrix display gives you the power to deliver information via larger text and full sign sized graphics



- 26 MUTCD symbol signs are available
- > 11 character fonts with character heights from 7" to 30"
- Full height chevrons, moving arrows
- > Ability to flash lines or entire message



- > Cellular (CDMA/1XRTT, GSM/GPRS)
- > WiFi
- > Land line or ethernet (TCP/IP) options
- > GPS
- > Radar over-speed detection
- > Queue detection
- > VoiceStar<sup>™</sup> highway advisory radio
- > AIMSTAR<sup>™</sup> adjustable solar assembly
- > Radar data logging capability
- > CCTV
- Vehicle mount (yoke or skid)

# CMS-GP465T Advantage Full Matrix Message Board

- > Message size: 72"x48"
- > Full matrix 24 rows x 48 columns
- > 1, 2, 3, or 4 line messages
- > Graphics and animations
- > 8.5" to 34" characters
- > Up to 12 characters per line
- > NTCIP compliant
- > Energy efficient
- > Environmentally sound
- > User-friendly
- > Local and / or remote sign control
- Long life LEDs
- > SOLR primary power supply
- > This full matrix display give you the power to deliver information via larger text and full sign sized graphics
- > Legibility distance over one thousand feet (1000')
- > 26 MUTCD symbol signs are available
- > 11 character fonts with character heights from 8.5" to 34"
- > Full height chevrons, moving arrows
- > Ability to flash lines or entire message

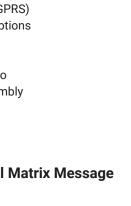
#### Options

- > Cellular (CDMA / IXRTT , GSM / GPRS)
- > Landline or ethernet (TCP / IP) options
- > Radar over-speed detection
- > Queue detection
- > VoiceStar<sup>™</sup> highway advisory radio
- > AIMSTAR<sup>™</sup> adjustable solar assembly
- > Radar data logging and graphing
- ITS ready options: CCTV, HAR

All message boards are available with optional upgrades: solar array, battery bank, trailer color and multiple towing hitch options.







## **AMSIG® Message Boards | Equipment**

- > Message size: 72"x36"
- Up to 18 characters per line >
- 28 rows x 72 columns >
- > 5" to 19" characters
- > 1, 2, 3, or 4 line messages
- > Graphics and animations
- > 11 available font sizes
- > 230 pre-programmed messages
- > 200 user-defined messages
- > 250 message sequences
- > 27 MUTCD symbol signs
- > Full height chevrons, moving arrows
- > Ability to flash lines or entire message
- Incident management capability >
- Legibility distance of one thousand feet >
- > Larger text and full sign sized graphics

#### Options

- > Cellular (CDMA / IXRTT , GSM / GPRS)
- Radar over-speed detection >
- Queue detection
- Work zone alert radar
- Radar data logging
- > ITS compatible
- > WiFi

### CMS-GP432Y Advantage Full Matrix Truck Mount

- > Message size: 96"x48"
- > Up to 12 characters per line
- > 28 rows x 50 columns
- > 7" to 30" characters
- 1, 2, 3 or 4 line messages >
- Graphics and animations
- > 11 available font sizes
- > NTCIP compliant
- > 230 pre-programmed messages
- > 200 user-defined messages
- > 26 MUTCD symbol signs
- > Full height chevrons, moving arrows
- Ability to flash lines or entire message >
- Incident management capability >
- Legibility distance over one thousand feet
- > Larger text and full sign sized graphics

#### Options

- > Cellular (CDMA / IXRTT, GSM / GPRS)
- Radar over-speed detection >
- Oueue detection
- Work zone alert radar
- Radar data logging >
- > ITS compatible
- > WiFi
- Bluetooth controller



- Message size: 72"x48" >
- > Up to 12 characters per line
- 24 rows x 48 columns 8.5" to 34" characters
- > 1, 2, 3, or 4 line messages
- > Graphics and animations
- 230 pre-programmed messages
- 200 user-defined messages >
- 250 message sequences >
- > 26 MUTCD symbol signs
- 11 available font sizes >
- > Full height chevrons, moving arrows
- Ability to flash lines or entire message >
- Incident management capability >
- Legibility distance of one thousand feet >
- Larger text and full sign sized graphics >

#### Options

- > Cellular (CDMA / IXRTT, GSM / GPRS)
- Radar over-speed detection >
- Queue detection >
- Work zone alert radar
- > Radar data logging
- ITS compatible >
- WiFi 5
- > Bluetooth controller

#### Arrow Board

- > 15-lamp and 25-lamp configurations
- Type B (72"x36") and Type C (96"x48")
- High-intensity LED lamps
- Indicator LED lamps on rear of > display
- Wireless controller >
- > AC charger
- Maintenance-free batteries
- Vandal-resistant battery cabinet
- Heavy-duty steel frame
- Superior foot-print for maximum > deployed stability
- Superior power management >
- Simple and secured hand-held controller >

#### **Display Characteristics**

- Flashing & sequential arrows >
- **Double Arrow** >
- > Flashing & sequential chevrons
- Caution bar >
- Caution beacons
- > Alternate diamonds



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## **Equipment | Truck Mounted Attenuators**



#### Scorpion's modular design creates an unbeatable standard of performance.

The Scorpion TMA consists of strut and cartridge sections that are linked together on a support frame. The curved side rails are made from corrosion resistant aluminum tubes, which offer full width impact protection along the entire length of the unit. The side rails were designed to re-direct errant vehicles away from the rear of the truck (coffin corner). Other manufacturers' crash attenuator models have little or no side-angle impact protection.

The aluminum boxes are filled with a moisture proof, aluminum honeycomb material. The boxes, together with the curved side rails, absorb the energy from an impacting vehicle. The aluminum boxes are painted with a bright yellow powder-coated finish for lasting durability.

The TrafFix Devices' Scorpion TMA has been tested and has passed all optional and mandatory requirements suggested in the NCHRP 350 Report for TL-3. The Scorpion TMA has successfully passed a "worse case" side angle re-directive impact test - a test which goes beyond all governmental testing requirements. Full details available upon request.

#### Model A TL-2

The Scorpion TMA Model A utilizes only the cartridge section providing impact protection up to 45 mph. It incorporates a modular design, which can be upgraded to a Model C or Model C-90 (to meet NCHRP 350, TL-3 requirements), by simply adding the strut section.

- > Weight: 760 lbs.
- > Length travel/storage: 3', deployed 8' 8"
- > Width: 8'
- Height: travel/storage 11', deployed 1'

#### Model C TL-3

The Scorpion TMA Model C folds up and over the bed of flat bed, stake bed or dump trucks. The Model C with its compact design and balanced weight distribution makes it ideal for high-speed travel. The Scorpion TMA Model C provides TL-3 impact protection. Side mounts are also available.



Rated for 62.5 mph

- > Weight: 1,975 lbs.
- > Length: travel/storage 2' 5", deployed 13' 10"
- > Width: 8'
- > Height: travel/storage 10' 6", deployed 1'

Rated for 45 mph

#### Model C-90 TL-3

The Scorpion TMA Model C-90 folds just past the 90-degree position (when folding over the truck bed is not desired). This feature allows for easy transit in the upright position. The rear strut is raised 10-degrees for added mobility and ground clearance, making it ideal for safely clearing exit ramps, driveways and other inclined surfaces in the stored or travel position. The Scorpion TMA Model C-90 provides TL-3 impact protection.

- > Weight: 1,975 lbs.
- Length: travel/storage 3' 1", deployed 14' 9"
- > Width: 8'
- Height: travel/storage 14' 2', deployed 1'



Rated for 62.5 mph

Available for Sale or Rent Rental Options: Daily, Weekly or Monthly

Contact our Sales Team today to discuss your project! Call 800.338.5685 or email sales@nationalhighway.com

## **Portable Traffic Signals | Equipment**

# The Most Advanced Operating Systems



#### Fast, efficient deployment without sacrificing quality, versatility or safety.

Every Portable Traffic Signal System is equipped with an internal conflict monitor, or Malfunction Management System (MMS). This feature is exclusive to Horizon portable traffic signals and provides redundancy within each signal network. By monitoring for malfunctions at each trailer within the network, the possibility of an MMS failure is eliminated. The MMS, combined with an intuitive programming interface, makes this control system the most advanced operating system in the industry.

#### SQ3TS® Type TR1 PTS

#### The versatile, portable traffic signal

The SQ3TS Portable Traffic Signal System combines fast efficient setup with highly reliable performance. The multitude of modular add-on components makes the SQ3TS the most versatile portable traffic signal system available today. The SQ3TS is the smart choice for a wide variety of short and long term traffic control applications. From a simple one lane bridge repair project to a complete intersection control, the SQ3TS has the attributes to provide safe and efficient traffic control.

- Bulletproof 900 MHZ radio communication
- > True green time extensions
- > Conflict monitoring
- > Fast efficient setup
- > Tandem tow signal trailers
- > Highly visible 12" LED lights
- > Adjustable overhead mast arm
- > 180° rotating signal heads
- Fixed time, traffic actuated and manual operation options
- Controls up to seven traffic phases with eight signals
- Battery powered with solar and 110 volt charging
- > Meets NEMA TS-5 specifications for Type TR1 PTS





## Equipment | Portable Traffic Signals

#### SQ2<sup>®</sup> Portable Traffic Signal

The SQ2® Portable Traffic Signal System has been designed and tested for fast, efficient deployment without sacrificing quality, versatility or safety. The full matrix operating system features an integrated conflict monitor, programming storage and is actuation ready. The operating system is software-based and conforms to the NEMA performance standards. Failsafe programming is accomplished easily and features fixed time, actuated or manual modes.



The NCHRP 350 TL-3 accepted SQ2<sup>®</sup> System is ideal for daily or short term traffic control applications. It provides increased work zone safety while maximizing traffic flow. The SQ2<sup>®</sup> portable traffic signal meets and exceeds NEMA TS-5 specifications for Type TR2 PTS.

- > Full matrix operating system
- > Bulletproof 900 MHZ radio communication option
- > True green time extensions
- Manual, fixed time and traffic actuated operation mode options
- > Wireless remote operation mode option
- > Work zone indication light to provide visual cues
- > Fast, efficient deployment and relocation
- > Fully MUTCD and NCHRP 350 compliant
- > Integrated conflict monitoring
- > Meets NEMA TS-5 specifications for Type TR2 PTS

#### DAD System - Driveway Assistance Device A first in the industry

The Driveway Assistance Device, engineered exclusively by Horizon Signal Technologies, has been designed to address the need to control driveways that fall within one lane temporary work zones. The system increases safety for both the motorist and the worker while maximizing traffic flow through the work zone.

The Driveway Assistance Device is a self-contained cart with a small footprint, which allows for easy maneuverability during deployment. The cart features a battery bank with on board 110-volt charger and optional outriggers and solar charging system. Each signal is equipped with one 12" red indication and two flashing red arrows.

#### **How It Works**

The Horizon Driveway Assistance Device will display a flashing red arrow in the direction of the traffic traveling within the work zone. The motorist may proceed in the direction of the flashing arrow, yielding to the traffic traveling within the work zone. A solid red indication is displayed when it is not safe for the motorist to enter the work zone.

Each Horizon Driveway Assistance Device is linked to the Horizon Portable Traffic Signal System controlling the work zone traffic.

#### SQ2T<sup>®</sup> Type TR2 Portable Traffic Signal

The highly mobile SQ2T<sup>®</sup> Portable Traffic Signal System combines a full matrix operating system in a tow-able trailer design. For fast, efficient deployment without sacrificing quality or versatility, the SQ2T<sup>®</sup> is the ultimate answer. This trailer mounted version of our SQ2<sup>®</sup> Portable Traffic Signal System features an integrated conflict monitor, programming storage and is actuation ready. The operating system is software based and conforms to the NEMA performance standards. Failsafe programming is easily accomplished and features fixed time, actuated or manual modes. The SQ2T<sup>®</sup> System is ideal for a wide variety of traffic control applications.



It provides increased work zone safety while maximizing traffic flow.

- > High quality tandem tow signal trailers
- > Conforms to NEMA TS-5 performance standards
- > Conflict monitoring
- > Data logger records signal functions
- > Durable aluminum signal heads
- > Work zone indication lights provide visual cue inside the work zone
- > Secure, reliable long range wireless communication system
- Integrated solar charging panels
- > Setup and operational in minutes
- > Year round operation regardless of location or climate
- > Controls multiple traffic phases
- > 80 watts of solar collection capacity standard and expandable
- > Video, motion, sound and in-ground loop detection options available



## **Camera Towers | Equipment**



## SolarTech® solar-powered portable camera towers harness the power of the sun.

The SPCT-3000 is a portable camera tower designed to provide a stable and adjustable base for outdoor security. This camera tower includes a Bosch Autodome camera. Easy to tow and set up, the SPCT-3000 Camera Tower provides reliable observation for a variety of needs:

- > Security
- > Border control
- > Surveillance (e.g., law enforcement)
- > Traffic surveillance (e.g., work zone)

#### Features

- > Three stage telescoping and rotating mast of galvanized steel with inter-stage roller bearing technology and variable mast deployment height as mast can be raised to any height between 13.5' (min.) and 30' (max.) and is stable at any height
- > Truly solar powered: continuous, year-round, uninterrupted power source capable of providing a minimum of 950 watthours per day of electrical power (nominal 75 amp hours per day at 12.5 volts DC)
- Portable: tower system can be towed to any location for temporary surveillance
- > Heavy-duty: all steel trailer frame construction
- Sturdy polyethylene fenders and lockable battery compartment
- > Torsion-type axle for a smooth, stable ride
- Four (4) 3,000 lb. swivel jacks for easy leveling and setup
- Polyamide epoxy primer for excellent rust and corrosion protection
- > Acrylic urethane finish for excellent appearance and durability
- > Five year bumper-to-bumper warranty

#### **Camera Options:**

Other cameras can be mounted on the mast for security or surveillance. Ask about options for customized mountings. SolarTech® also makes a 30-foot tower (SPTT) without a camera.

Contact our Sales Team today to discuss your project! Call 800.338.5685 or email sales@nationalhighway.com

#### Standard Camera: Bosch Autodome Camera

- Day/night IP camera with 28x or 36x optical zoom (12x digital zoom)
- > Wide Dynamic Range (WDR) and sodium vapor white Balance Mode that restores objects to their original color
- New intelligent tracking and alarm rules engine with on-board Intelligent Video Analytics (IVA)
- Enhanced system flexibility with dual recording options (iSCSI, SD card)
- Fully configurable quad streaming with individually configurable SD streams
- > Multiple pre-configured user modes that allow users to select the camera configuration that is ideal for their applications



## **Equipment | Light Towers**



#### Allmand® and SolarTech® light towers provide durability and performance you demand.

Allmand<sup>®</sup> (gas-powered) and SolarTech<sup>®</sup> (solar powered) are two manufacturers who both offer light towers with many features, long and efficient run-times, and lower risk deployment. These light towers are built with durability and performance. View below the selection that we offer.

#### Allmand<sup>®</sup> Night-Lite Pro II<sup>®</sup> LD-Series<sup>™</sup>

The Night-Lite Pro II<sup>®</sup> LD-Series features SHO-HD<sup>®</sup> lamp fixtures that provide 135,500 lumens per lamp – more than competitive light towers. The 30 gallon polyethylene fuel tank prevents contamination from rust and corrosion to keep your light tower

running longer. The optional full Fluid Containment System (FCS) protects sensitive environments from inadvertent leaks and spills. Maximize your job-site productivity with the choice that outshines the competition.



- > SHO-HD<sup>®</sup> lamp fixture
- > SLS Sequenced Light System
- > Gull-wing style doors
- > Forklift pockets and lifting eye
- > 30 gallon polyethylene fuel tanks
- > Four-Point Outrigger System
- > EPA emissions certified

#### Allmand<sup>®</sup> Night-Lite Pro II<sup>®</sup> V-Series<sup>®</sup>

The Night-Lite Pro II<sup>®</sup> V Series<sup>®</sup> offers four different engine models and features a vertical tower with power cables encased in Nycoil<sup>™</sup> flexible tubing to eliminate tangling and stretching of the tower wiring. The SHO-HD<sup>®</sup> lamp fixtures provide 135,500 lumens per lamp – more than competitive light towers.

- > Vertical tower
- > SHO-HD<sup>®</sup> lamp fixture
- > SLS Sequenced Light System
- > Gull-wing style doors
- > Full Fluid Containment System
- > Forklift pockets and lifting eye
- > 30 gallon polyethylene fuel tank
- > Four-Point Outrigger System
- > EPA emissions certified



#### Allmand® MAXI-LITE® II V-Series® 4-Light

Whatever your job-site needs, the Maxi-Lite® II V Series® can deliver with multiple engine options and 542,000 total lumens of lighting. It features 100 gallons of fuel capacity to provide up to 277 hours of nonstop operation (with LEDs). The gull-wing style doors offer easy access to engine and generator. Rear control / outlet panel and remote oil and engine coolant drains make for easy operation and servicing. Built with a



rugged trailer frame with full Fluid Containment System (FCS), hydraulically actuated tower and ability to withstand 65 MPH steady winds, this light tower will deliver the goods to get the job done right.

- > SLS Sequenced Light System
- > (2) 50 gallon polyethylene fuel tanks
- > Full Fluid Containment System
- > Five-Point Stabilizer System
- > Below-the-frame forklift pockets
- > Lifting ring
- > Removable drawbar
- > Gull-wing style doors
- > External oil and engine coolant drain
- > EPA emissions certified

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## Light Towers | Equipment

#### Allmand® MAXI-LITE® II V-Series® 6-Light

The Maxi-Lite® II V Series® 6-Light provides 813,000 lumens of light from the standard 6 light arrangement. With up to 20 kW of power, this light tower has plenty to spare for powering up additional 120 or 240 volt equipment on your job-site. 100 gallons of fuel capacity provides up to 227 hours of run-time (when equipped with LED fixtures). Standard fluid containment means



you don't have to worry about accidental spills damaging the environment, and the large rear drain makes it easy to clean out should an accident occur. Combine all this with Allmand<sup>®</sup> reliability and you have a light tower that is hard to beat.

- > SLS Sequenced Light System
- > (2) 50 gallon polyethylene fuel tanks
- > Full fluid containment system
- > Five-Point Stabilizer System
- > Below-the-Frame forklift pockets
- > Lifting ring
- > Removable drawbar
- > Gull-wing style doors
- > External oil and engine coolant drain
- > EPA emissions certified

#### Allmand<sup>®</sup> Maxi-Lite<sup>®</sup> Pro

The Maxi-Lite® Pro provides best-in-class reliability and the features your team needs to get the job done. With four or six

SHO-HD<sup>®</sup> light fixtures providing up to 813,000 lumens of light with up to 20 kW of power available. there is plenty of power to light a job-site. The Maxi-Lite Pro® comes fully equipped with an operational beacon, wheel chocks, fire extinguisher, emergency stop switch and Secondary Fixture Retention (SFR). Additionally, Light Sequence Commander® will automatically start the unit at sunset and shut it down at sunrise or program the start/stop times to your job-site needs. All this technology delivers the worryfree lighting for your team to focus on the task at hand.



- > SLS Sequenced Light System
- > Fire extinguisher
- Reflective striping
- > Operational beacon
- > Emergency stop switch
- > Wheel chocks
- > Low fuel warning light
- > Secondary Fixture Retention (SFR) System
- > Two-Stage air filter
- Exhaust shield and muffler wrap
- > EPA emissions certified

#### SolarTech® Solar Powered Portable Light Towers

The SPLT-3000 is a portable light tower designed to provide a stable and adjustable base for outdoor lighting. This light tower is perfect to illuminate parking lots, storage yards, special events or any application where permanent lighting is not available or possible. No generator means a quiet, clean lighting system with no gas or diesel fuel to maintain. Included is a 4 or 8-lamp array of LED fixtures on an easy to raise 30 foot mast. The lights are directionally adjustable to provide a customizable field of illumination. Easy to tow and set up, the SPLT-3000 Light Tower provides reliable lighting for a variety of needs.

Three stage telescoping and rotating mast of galvanized steel with inter-stage roller bearing technology and variable mast deployment height as mast can be raised to any height between 13.5' (min.) and 30' (max.) and is stable at any height



- Truly solar powered: continuous, year-round, uninterrupted power source capable of providing a minimum of 950 watthours per day of electrical power (nominal 75 amp hours per day at 12.5 volts DC)
- Portable: tower system can be towed to any location for temporary lighting
- > Heavy-duty: all steel trailer frame construction
- Sturdy polyethylene fenders and lockable battery compartment
- > Torsion-type axle for a smooth, stable ride
- > Four (4) 3,000 lb. swivel jacks for easy leveling and setup
- Polyamide epoxy primer for excellent rust and corrosion protection
- Acrylic urethane finish for excellent appearance and durability
- > Five year bumper-to-bumper warranty
- > ISO 9001:2008 Certified Design and Manufacturing the ultimate in quality assurance

## Equipment | Airstar Portable Balloon Lights



#### A revolution in safety lighting.

#### Airstar Portable Balloon Lights

Portability, durability and ease of use makes the AirStar Sirocco Redtech safety lighting series a customer favorite.

#### Sirocco Redtech 400

- > Open Core Coverage (.5 fc U.S.): 8,244 ft<sup>2</sup>
- > Low Risk Coverage (10 fc U.S.): 407 ft<sup>2</sup>
- > Light Under The Balloon (13 ft): 155 lx 14 fc
- > Maximum Lumen: 33,000 lm
- > Maximum Power: 250 W
- > Amperage Draw: 2.2 AC amps
- > Available Voltage: 100-240 V / 50-60 Hz
- > Power Supply: Main power or 2 kVA generator
- > Efficiency: 132 lm/W
- > Color Temperature: 5,000 K (daylight)



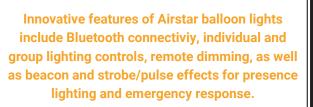
#### Sirocco Redtech 1000

- > Open Core Coverage (.5 fc U.S.): 22,157 ft<sup>2</sup>
- > Low Risk Coverage (10 fc U.S.): 1,527 ft<sup>2</sup>
- > Light Under The Balloon (13 ft): 542 lx 50 fc
- > Maximum Lumen: 99.000 lm
- > Maximum Power: 700 W
- > Amperage Draw: 6.4 AC amps
- > Available Voltage: 100-240 V / 50-60 Hz
- > Power Supply: Main power or 2 kVA generator
- > Efficiency: 141 lm/W
- Color Temperature: 5,000 K (daylight)



#### Sirocco Redtech 700

- > Open Core Coverage (.5 fc U.S.): 13,741 ft<sup>2</sup>
- > Low Risk Coverage (10 fc U.S.): 679 ft<sup>2</sup>
- > Light Under The Balloon (13 ft): 322 lx 30 fc
- > Maximum Lumen: 66,000 lm
- > Maximum Power: 500 W
- > Amperage Draw: 4.1 AC amps
- > Available Voltage: 100-240 V / 50-60 Hz
- > Power Supply: Main power or 2 kVA generator
- > Efficiency: 132 lm/W
- > Color Temperature: 5,000 K (daylight)



#### Sirocco Redtech 1300

- > Open Core Coverage (.5 fc U.S.): 35,316 ft<sup>2</sup>
- > Low Risk Coverage (10 fc U.S.): 1,994 ft<sup>2</sup>
- > Light Under The Balloon (13 ft): 704 lx 65 fc
- > Maximum Lumen: 132,000 lm
- > Maximum Power: 920 W
- > Amperage Draw: 8.1 AC amps
- > Available Voltage: 100-240 V / 50-60 Hz
- > Power Supply: Main power or 2 kVA generator
- > Efficiency: 143 lm/W
- > Color Temperature: 5,000 K (daylight)

#### Sirocco LED Battery Pro-Case

- > Open Core Coverage (.5 fc U.S.): 3,425 ft<sup>2</sup>
- > Low Risk Coverage (10 fc U.S.): 205 ft<sup>2</sup>
- > Light Under The Balloon (7.6 ft): 24 fc
- > Maximum Lumen: 12,300 lm
- > Maximum Power: 120 W
- > Available Voltage: min 12 V DC / max 48 V DC
- > Power Supply: 12 V or 48 V lithium battery
- > Efficiency: 100 lm/W
- > Color Temperature: 4,750 K (daylight)
- > Battery Life: Up to 8 hours







## **Airstar Portable Balloon Lights | Equipment**



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## Equipment | Radar Data Collectors



#### Innovative, non-invasive data gathering devices.

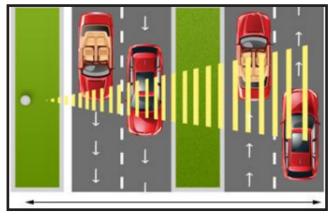


#### SpeedLane® Pro

Houston Radar SpeedLane® Pro is a state of the art true dual beam, low power side-fire radar. It is designed to accurately detect lane, speed and class of individual vehicles and compute per lane volume, occupancy, gap, average speed, 85th percentile and headway parameters.

#### Features:

- > Simultaneously measures all vehicles in 16 user defined lanes
- > Mounts on the side of the road for non-intrusive traffic data
- collection and works in all weather and lighting conditions. > World's lowest power usage highly integrated multi-lane traffic measurement radar. At 0.85 Watts the SpeedLane® Pro requires 10X less power than competing products.
- Optional cloud based server to aggregate data from multiple devices provides quick and seamless dashboard view.
- > All traffic measurements are on per-vehicle, per-lane basis, available in real-time and stored in device memory.
- > Patented (US Patent: US10317525 & EU Patent: EP3117235) true dual beam "speed trap" technology inherently provides accurate measurements without the need for in situ calibration.



#### Maximum 16 Lanes, 255 Feet

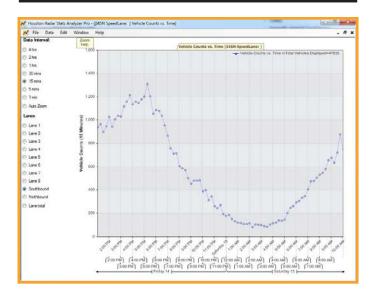
The SpeedLane Pro can support a maximum of 16 lanes, with each lane moving in any direction. The far edge of the farthest lane should be no more than 255 feet (78m) away.

#### **Advanced In-Radar Statistics Features**

> Tracking and storage inside the radar for up to 60+ days of traffic.

- > Excellent collection accuracy for 1 and 2 lane incoming traffic.
   > User selectable 1 minute to 60 minute binning and storage intervals.
- > Live histogram feature to monitor "live" traffic from the radar for remote monitoring applications.
- > Stats collection possible from either radar COM port.

Houston Radar's Advanced In-Radar traffic statistics is a unique, best in class traffic statistics gathering and storage option.



#### Windows Statistics Analyzer Software Features

- > MS Windows® 7/8/10 based professional quality software.
- > Connect to radar and retrieve data or read from file.
- > Store and organize data in individual projects.
- > Generate weekly views of hourly counts and average speeds.
- > Generate average monthly views by weekday hour of counts and speeds.

> Generate detailed hourly counts, average speed, max speed and 85th percentile reports.

> Generate interactive raw data scatter graphs of speed vs. time, counts vs. time.

> Join and trim data sets to manage data effectively

#### Armadillo® Tracker

Armadillo® Tracker Traffic Collector is a fully integrated multi-lane bidirectional traffic data gathering device. Featuring small size, no hassle field setup, non-intrusive sensing technology, and long range wireless connectivity Armadillo® Tracker ensures operational safety during installation and data retrieval.



#### Power Maximizer

- > 2+ Weeks Run Time On Batteries
- > Ultra low power consumption of our proprietary radar and Lithium Iron Phosphate rechargeable batteries allow over 2 weeks of run time. Optional MPPT solar charger efficiently charges the battery from a small 5 watt solar panel even in overcast conditions to keep it going year around.

#### Versatility - Aggregate Multilane Bidirectional Counting

> Collect data in both directions in up to four lanes with a single Armadillo® Tracker device.

#### Proven Radar Technology

> Built on rock solid foundation of our DC310 microwave sensor, Houston Radar's Armadillo® Tracker provides a turn key solution to your traffic monitoring needs. We packed a world class feature set in a small, portable and easy to deploy form factor.

#### **Dimensions - Small Package, High Performance**

> At 3lbs (1.4 Kg), this lightweight system is easy to transport and can be deployed in minutes.

> "In my opinion the Armadillo Tracker is the most convenient traffic data gathering device I have ever used."

- Joe Tryon, Traffic Analyst, City of Houston

Unidirectional	Extended Bidirectional	Bidirectional
> Two incoming lanes with Armadillo® Tracker Mounted on the side.	> Two incoming and two outgoing lanes with Armadillo® Tracker mounted in a median.	> One incoming and one outgoing lane with Armadillo® Tracker mounted on the side.

#### Armadillo® Crossfire

Houston Radar Armadillo® Crossfire is a state of the art non-intrusive traffic collector designed for volume collection on the roads with up to 6 lanes of detection. It is the premier product in its class.





#### Features:

- > Simultaneously measures all vehicles in 16 user defined lanes.
- > Mounts on the side of the road for non-intrusive traffic data
- collection and works in all weather and lighting conditions. > World's lowest power usage highly integrated multi-lane traffic
- measurement radar. At 0.85 Watts the SpeedLane® Pro requires 10X less power than competing products.
- > Optional cloud based server to aggregate data from multiple devices provides quick and seamless dashboard view.
- > All traffic measurements are on per-vehicle, per-lane basis, available in real-time and stored in device memory.
- > Patented (US Patent: US10317525 & EU Patent: EP3117235) true dual beam "speed trap" technology inherently provides accurate measurements without the need for in situ calibration.

## Equipment | Line Striping Systems, Graco®



There is no other line striping system like the LineLazer® Airless Professional Striping System.

Since 1990, Graco<sup>®</sup>'s LineLazer<sup>®</sup> Airless Striping Systems have delivered on all counts and have led the pavement striping industry! The LineLazer<sup>®</sup> family of stripers has constantly been improved to meet the changing needs of the pavement marking industry, each time delivering substantial benefits to the professional striping contractor. NHP, Inc. proudly offers a full line of stripers, accessories and parts for all of your linestriping needs. We also have a full service maintenance center to keep your units operational year-round.

#### Choose the right series for all your striping applications.



## If you're an indoor/outdoor striping contractor, you need an EPOWER Series striper

- > Your jobs range from small to medium
- > You perform indoor/outdoor jobs
- > You are looking for low noise, low vibration and no fumes



## If you're an everyday striping contractor, you need a Standard Series striper

- > Your jobs range from small to medium
- > You perform mostly re-stripe jobs
- > You need a single-color, single-gun striping solution



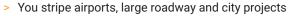
## If you're a high production striping contractor, you need a HP Automatic Series striper

- > Your jobs range from medium to large
- You stripe new parking lots, city streets, intersections and bike paths
- > You need a multi-gun, automatic system

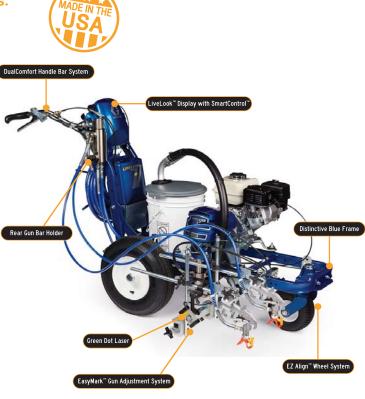


# If you're a high production reflective contractor, you need a HP Reflective Series striper

> Your jobs are typically large



> You need a multi-gun, automatic gun system with pressurized beads





## Line Striping Systems, Graco® | Equipment



#### LineLazer® ES 1000 Electric Battery-Powered Airless Line Striper

The industry's first electric striper, the LineLazer® ES 1000 is powered by a high-output battery allowing it to be used safely indoors while having the power and performance needed for outdoor jobs. "Go Green" with this quiet, fume-free striper!

- > Max tip size: 0.025
- > Max gallons per minute: 0.60
- > Max PSI: 3300

#### No engine noise

> Do any job anytime, without disruptive engine noise

#### No engine vibration

> Allows for perfect lines on all surfaces and reduces user fatigue

#### No engine fumes

> Enables you to spray indoors without production shut downs or disruptions

#### Deep Cycle 100AH AGM Battery

- > 12V sealed lead acid battery provides enough run time to spray up to 20 gallons/charge
- > Add a second battery in parallel to increase your capacity and reduce your voltage drop – allowing you to stripe up to 60 gallons/charge

#### On-board 120V inverter/charger

> Simply plug in to recharge, no need for battery removal

#### 120V Capability

 Get infinite spray time when using for stationary applications by running on 120V wall power – just plug it in

#### SmartControl<sup>™</sup> 2.5

 Advanced pressure control system delivers consistent spray fan resulting in unmatched line quality

#### Exclusive endurance pump

> Industry-best pump performance in this field-proven design

#### ProConnect<sup>™</sup> System

 Industry-first for walk behind stripers allows quick on the job pump replacement

#### FastFlush"

- > High flow cleaning system runs faster and dramatically reduces cleaning time
- > First time on a walk-behind striper

#### EasyMark<sup>®</sup> Gun Adjustment System

> Innovative gun adjustment design with"G" Clamp Holder System

LineLazer® ES 2000 2-Gun Unit and LineDriver ES Now Available



#### LineLazer<sup>®</sup> 3400 Airless Line Striper

The preferred choice of parking lot and seal coating contractors looking for professional performance in a one-gun machine.

- > Max tip size: 0.027
- Max gallons per minute: 0.75
- Max PSI: 3300

#### New frame

- That is 3 inches longer for greater stability and straighter lines
- Now accepts the 15-gallon hopper and the EZ Bead System

#### EasyMark<sup>®</sup> Gun Adjustment System

- > Simple guide mark system
- > Easy gun on/off, front/back
- > Perfect gun set up everytime

#### Rear mount hose wrap

> Provides easy on/off for stenciling applications

#### Easy reach controls

- Operator controls are located on the handle bars allowing adjustments to be made without stopping
- > You can fine tune the striper without stopping

#### Honda power

 Contractor preferred, excellent power and proven reliability

#### Exclusive easyout filter system

- > 60 mesh filter for no plug performance
- Inside-out filtering prevents clogs

#### Endurance" paint pump

- > Industry-best performance
- > Proven design with 25 years of success

#### Front swivel wheel

- Provides easier "up to the curb" parking lot striping and hard-to-do curves
- Tapered locking pin design for years of dependable operation



## Equipment | Line Striping Systems, Graco®



#### LineLazer® V 5900

The LineLazer® V 5900 is designed for 2-gun professional stripers, delivering the most precise and consistent lines in the industry.

- > Max tip size: 0.043 1-Gun, 0.029 2-Gun
- > Max gallons per minute: 1.60
- > Max PSI: 3300
- > Honda GX160 engine

#### **Standard Series Features:**

#### EasyMark<sup>™</sup> Gun Adjustment System

- > Simple guide mark system
- Easy gun on/off, front/back

#### EZ Align<sup>™</sup> front wheel system

- > Keeps unit tracking straight
- > Intuitive design

#### **DualComfort Handle Bar System**

> Fits all users - easy to adjust

#### LiveLook display with SmartControl<sup>®</sup>

- > Tracks all aspects of the job
- > Real-time information

## Additional HP Automatic Series Features:

#### Automatic, semi-automatic guns

- > Push button control for accurate stripes every time Auto-Layout II
- > Easy to use cuts layout time in half
- > Exclusive LazerGuide 1700 start/stop laser

#### Data logging with J-Log system

- > On-board job information for "proof" of completion
- USB download capabilities allow you to capture and save all job data

#### On-board power

> 12V battery for all your accessory items

#### LineLazer® V 3900

- > Max tip size: 0.036 1-Gun, 0.025 2-Gun
- > Max gallons per minute: 1.25
- > Max PSI: 3300
- > Honda GX120 engine

#### **Standard Series Features:**

#### EasyMark<sup>™</sup> Gun Adjustment System

- > Simple guide mark system
- > Easy gun on/off, front/back
- EZ Align<sup>®</sup> front wheel system
- Keeps unit tracking straight
- Intuitive design

#### **DualComfort Handle Bar System**

> Fits all users - easy to adjust

#### LiveLook display with SmartControl

- > Tracks all aspects of the job
- > Real-time information

#### Additional HP Automatic Series Features: Automatic, semi-automatic guns

 Push button control for accurate stripes every time

#### Auto-Layout II

- > Easy to use cuts layout time in half
- > Exclusive LazerGuide 1700 start/stop laser

#### Data logging with J-Log system

- On-board job information for "proof" of completion
- USB download capabilities allow you to capture and save all job data
- On-board power
  - 12V battery for all your accessory items





## Line Striping Systems, Graco® | Equipment



#### LineLazer® 130HS

- > Hydraulic airless striping unit
- > Max tip size: 0.037 1-Gun, 0.029 2-Gun
- > Max gallon per minute: 1.3
- > Max PSI: 3300
- > Honda GX120 engine

#### **DualComfort Handle Bar System**

- > Fits all users easy to adjust
- > Solid 8-bolt design

#### **EZ Align Front Wheel System**

Keeps unit tracking straight

#### EasyMark<sup>™</sup> Gun Adjustment System

- > Simple guide mark system
- Easy gun on/off, front/back

#### **Honda Power**

SFRIFS

> Contractor preferred - excellent power and proven reliability



- Hydraulic airless striping unit
- > Max tip size: 0.047 1-Gun, 0.034 2-Gun
- > Max gallon per minute: 2.15
- > Max PSI: 3300
- > Honda GX200 engine
- **DualComfort Handle Bar System**
- > Fits all users easy to adjust
- > Solid 8-bolt design
- **EZ Align Front Wheel System**
- > Keeps unit tracking straight
- EasyMark<sup>™</sup> Gun Adjustment System
- > Simple guide mark system
- > Easy gun on/off, front/back

#### Honda Power

 Contractor preferred - excellent power and proven reliability

#### Additional HP Automatic Series Features: Automatic, semi-automatic guns

Push button control for accurate stripes every time

#### Auto-Layout II

- > Easy to use cuts layout time in half
- > Exclusive LazerGuide 1700 start/stop laser

#### Data logging with J-Log system

- > On-board job information for "proof" of completion
- > USB download capabilities allows you to capture and save all job data

#### **On-board power**

> 12V battery for all your accessory items

#### Additional HP Reflective Series Features:

#### **Pressurized Bead System**

- > Innovative bead tank with unmatched performance
- > Provides perfect bead embedment
- > Air valves to dial in starts and stops
- Installed and ready to go



SERIES

## Equipment | Line Striping Systems, Graco®



#### LineLazer® V 250SPS

#### **HP Automatic Series**

- Max tip size: 0.055 1-Gun, 0.039 2-Gun, 0.031 3-Gun, 0.025 4-Gun, 0.021 5-Gun
- > Max gallons per minute: 2.5
- > Max PSI: 3300
- > Honda G390 engine

#### Automatic Gun Control System

Manual, automatic or semi-automatic paint and bead guns with the push of a button

#### **Electric Cluth System**

- > Disengages engine for fast starting
- 25-Gallon (95 L) Paint Hopper
- Extended striping time with large capacity hopper

#### **Remote Mount - Control Box**

- Simple to use and easy to see in all conditions
- Information at-a-glance

#### Graco Hydraulic Motor System

 Graco's no-stall hydraulic motor for uninterrupted performance

#### Flex Plus<sup>™</sup> Guns

 Industry proven paint guns with LineLazer tips provide precise lines

#### **Endurance Piston Pump System**

 Long life pump provides precise flow for wide range of striping materials

#### Rear Gun Mount System

 Provides straighter long lines - perfect for bike paths, airports and other long line jobs

#### HP Reflective Series includes all HP Automatic Series features Plus EZ Bead Pressurized System

- Innovative bead tank with unmatched performance
- > Provides perfect bead embedment
- > Air valves to dial in starts and stops
- Dual bead tanks hold up to 240 lbs. of beads (120 lbs. each)



#### LineLazer® V 250DC

- HP Automatic Series Features:
- Max tip size: 0.055 1-Gun, 0.039 2-Gun, 0.031 3-Gun,
- 0.025 4-Gun, 0.021 5-Gun
- Max gallons per minute: 2.5
- > Max PSI: 3300
- > Honda G390 engine

#### Dual Graco Hydraulic Motors

 No-stall design provides uninterrupted performance

#### Dual Endurance Displacement Pumps

 Provides precise flow for a wide range of striping materials

#### **Exclusive Self-Centering Front Wheel**

#### Provides simpler operation

#### **Exclusive Stand-On Platform**

 Provides ergonomic place for standing, great view and all-day comfort

#### **Dual 15-Gallon Paint Hoppers**

 Simultaneously spray two colors and refill less often

#### Front or Rear Gun Mount

 Use up to 6 guns to create straighter long lines

#### Flex Plus<sup>™</sup> Guns

 Industry proven paint guns provide precise lines

#### **Graco Bead Guns**

 Reliable design delivers proven performance

#### **Dual Bead Tanks**

Holds up to 240 lbs. of beads (120 lbs each)

#### HP Reflective Series Includes All HP Automatic Series Features PLUS:

- > EZ Bead pressurized system
- Innovative bead tank with unmatched performance
- > Provides perfect bead embedment
- > Air valves to dial in starts and stops
- Installed and ready to go
- Dual Bead Tanks hold up to 240 lbs. of beads (120 lbs. each)



## LineDriver<sup>™</sup>

> Honda GX160

#### Exclusive FlexBeam<sup>®</sup> Break-A-Way Light System

- Fully adjustable for all types of low light applications
- Break-A-Way design helps protect against costly repairs and keeps you on the job

#### Patented Dual Foot Pedal System

 For forward and reverse - move between jobs without having to push

#### Exclusive ProStart<sup>®</sup> Engine Starting System

- > Up to 50% less pulling effort to start the engine no more broken recoils
- Outperforms manual pull and electric start systems when the weather starts turning cooler



POWERED by HONDA

#### LineDriver<sup>™</sup> HD

> Honda GX200

## Exclusive FlexBeam<sup>®</sup> Break-A-Way Light System

- Full adjustable for all types of low light applications
- Break-A-Way design helps protect against costly repairs and keeps you on the job

#### Patented Dual Foot Pedal System

 For forward and reverse - move between jobs without having to push

#### Exclusive ProStart<sup>™</sup> Engine Starting System

- > Up to 50% less pulling effort to start the engine - no more broken recoils
- Outperforms manual pull and electric start systems when the weather starts turning cooler

## Line Striping Systems, Graco® | Equipment



#### ThermoLazer® 200TC

A portable thermoplastic handliner ideal for striping contractors who already have Premelt Kettle Systems.

#### FlexDie

 Delivers excellent line quality with exclusive deep-die, all steel construction

#### 200 lb. Material Kettle

 Easy-to-fill cylindrical kettle allows for precise heating of thermoplastic material, and its no-tool change-out design lets you switch colors fast

#### 40 lb. Bead Hopper

 Perfectly matched to the material kettle with a superior flow design

#### **Direct Heat System**

 Direct flames and an on-board hand torch which delivers maximum heat, resulting in maximum material flow

#### **Tri-Wheel System**

> Dual solid front and single solid rear wheels provide smooth, quiet operation

#### Adjustable operator handle

> Handle easily adjusts to multiple heights

#### Adjustable Front Pointer

 Easily adjusts for all size dies for following all marks and creating straight lines

#### **Bead dispenser**

> 8.5 or 12.5" dispenser, and 1" increments allow you to "dial-in" the bead drop rate

#### Complete systems include:

- > (1) ThermoLazer<sup>®</sup> 200TC
- > (1) FlexDie



### ThermoLazer® 300TC

The most user-friendly, innovative thermoplastic striper to hit the streets. **EasyGlide**<sup>®</sup> **Wheel Mount System** 

 Front mounted caster along with dual rear pneumatic air-filled tires makes handling safe and as easy to maneuver as a LineLazer<sup>®</sup> striper

#### **Tri-Flame Die Heat System**

 Reliable, safe system to keep die ready to use

#### **Bead Dispense System**

 No-tool system that allows fast and easy line width changes

#### Split Bead Hopper System

- > Holds over 90 lbs. of beads
- Simple conversion to double drop bead system with optional kit

#### Fat Track<sup>™</sup> front swivel wheel

- Proven front caster wheel system which makes turning and maneuvering curves fast and easy
- > Maneuver curves better
- No need to "muscle" it while moving

#### Optional LineDriver<sup>™</sup> System

- Get higher productivity and straighter lines with less fatigue
- > Move between jobs without having to push
- Dual Pedal System has multiple positions allowing for simple forward and reverse (patented)



#### ThermoLazer<sup>®</sup> ProMelt Ease-Z-Steer Handle Bar System

- Makes turning and handling as simple as a LineLazer System
- > Adjustable handle bar for users of all sizes

#### **ProMelt Technology**

- > 4 Chamber Melting System more surface area to melt thermoplastic fast
- > 100,000 BTUs faster melt time means more jobs get done everyday

#### SmartDie II System

- Fast change-out-system hardened steel dies with mil thickness adjustment system built in
- Use with or without heat allows you to optimize your striping in all weather conditions
- "Floats" with the surface puts the thermoplastic where you want it for superior line quality
- > External Heat System 4 torch die heat system keeps it hot

#### **Ergonomic Design**

 Easier to use and almost effortless to push/ pull, just like the proven LineLazer design

#### **Optional LineDriver**<sup>™</sup> System

LineDriver<sup>®</sup> and LineDriver<sup>®</sup> HD Systems adaptable for the ThermoLazer 300TC System

- Get higher productivity and straighter lines with less fatigue
- > Move between jobs without having to push
- Dual Pedal System has multiple positions allowing for simple forward and reverse (patented)

#### GrindLazer Standard DC89 G Gas-Powered Scarifier

The GrindLazer Standard DC89 G scarifier is a great option with more power to easily handle smaller traffic marking removal jobs, trip hazard removal and for preparing a surface before applying new traffic markings.

- > Heavy-duty all steel frame for a jobsite tough design
- > Durable Honda power with Cyclone Filter
- > Multi-position lever and rotating knob controls
- > Swivel and fixed front wheel
- > Dual purpose tachometer and hour meter
- > Vacuum port for LazerVac vacuum system
- > Triple drive belts
- > Durable high-torque power transfer



## Equipment | Line Striping Systems, Graco®



#### GrindLazer HP DC1013 G Gas-Powered Scarifier

The GrindLazer HP DC1013 G is the contractor choice for all-around scarifying jobs, including parking lot lines, intersection markings, construction zones and sidewalk smoothing. The optional LineDriver System delivers unmatched productivity to get more work done without the fatigue from walking.

- DialDown Depth Control System

   easy cutter depth control and easy to "dial down" for precise cutting depth control with multiple positions
- > InstaCut technology ultimate removal or inlay flexibility and allows deck to "float" when on uneven surfaces
- Only unit to offer "hands-on" engagement of the cutting deck system for up or down position
- Vibration reduction technology provides all-day comfort and offers up to 4x less vibration than the competition
- > Durable 13 HP Honda power with Cyclone Filter that protects the engine from harmful airborne dust
- Extreme-duty ProStart system offers a safer operation and provides longer belt life and eliminates broken recoils
- TriBelt drive system for maximum road handling
- 3-cog belt design optimizes power transfer and eliminates costly downtime
- > Fat Track Front Swivel Wheel provides fast, easy turning
- EasyGlide Wheel Mount System makes the unit safer and easier to maneuver
- > Front-mounted caster along with dual read pneumatic air-filled tires
- Pneumatic air-filled tires help eliminate vibration
- Vacuum port for optional LazerVac vacuum system
- > LineDriver compatible



#### GrindLazer HP DC1021 G Gas-Powered Scarifier

The GrindLazer HP DC1021 G is the high production choice for demanding scarifier jobs. Its "Up-Cut" cutting direction removes all types of lines on parking lots or roadways while providing the power for inlay/grooving jobs. The LineDriver will help you finish jobs faster and more accurately.

- DialDown Depth Control System easy cutter depth control and easy to "dial down" for precise cutting depth control with multiple positions
- Only unit to offer "hands-on" engagement of the cutting deck system for up or down position
- InstaCut technology provides ultimate flexibility for removal and inlay and allows deck to "float" when on uneven surfaces
- Vibration reduction technology provides all-day comfort and offers up to 4x less vibration than the competition
- > Vanguard 21 HP Engine with Donaldson Heavy-Duty Filtration offers improved filtration to work longer and improve engine life
- Electric start system allows for easy starting with the turn of a key - even in cold weather
- > Extreme-duty ProStart system offers a safer operation and provides longer belt life and eliminates broken recoils
- TriBelt drive system for maximum road handling
- 3-cog belt design optimizes power transfer and eliminates costly downtime
- Fat Track Front Swivel Wheel provides fast, easy turning
- EasyGlide Wheel Mount System makes the unit safer and easier to maneuver
- Front-mounted caster along with dual read pneumatic air-filled tires
- Pneumatic air-filled tires help eliminate vibration
- Vacuum port for optional LazerVac vacuum system
- > LineDriver required

### RoadLazer<sup>™</sup> RoadPak System<sup>™</sup>

- Double-acting paint spray gun has complete chemical compatibility and highest flow rates available
- Double-acting bead spray gun has better on/ off control and eliminates chattering often found in competitive guns
- > Optional RoadView Camera System provides optimum forward viewing of existing or new lines
- > Exclusive Graco<sup>®</sup> displacement pumps for long life and low maintenance; 100% chemical compatibility with all traffic paints
- Spray gun boom arm for straighter lines and more accurate curves; easily moves from centerline to edge-line



#### RoadLazer<sup>™</sup> RoadPak<sup>™</sup> HD Packed with Features:

- > Higher Performance 2 times the output
- > High-Capacity Bead Tank 3 times the volume
- > RoadPak<sup>™</sup> HD Gun Bar 5+ gun capacity
- > Advanced Controller airport and road patterns built-in
- > Rear Operator Seat all controls easily within reach
- Steerable Carriage joystick operation and variable speed control
- High-Capacity Hydraulic Reservoir two times the volume
- > Advanced Cooling System two times the cooling capacity
- Higher Output Kohler<sup>®</sup> Engine 40% more horsepower
- RoadView HD Camera System HD camera and in-cab display
- LazerGuide<sup>®</sup> 3000 long line laser for straight lines (optional)

## Line Striping Systems, Titan<sup>®</sup> | Equipment



#### Solve your paint striping needs with these powerful line stripers.

Professional contractors, property managers and maintenance personnel aren't interested in complicated machines; they want to get the job done quickly and done right. Serious contractors, maintenance managers and athletic organizations rely on our line of line stripers that offer a full range of versatility for every application – from municipal parking lots and athletic fields to airport runways and football stadiums.

#### Titan<sup>®</sup> field and pavement marking equipment - the sprayers' choice.

Titan<sup>®</sup> offers line stripers that incorporate hydraulic pump technology for heavy-duty use as well as clutch-driven machines that are perfect for entry level projects.



#### PowrLiner<sup>™</sup> 550

>

- Simple, compact design weighs only 70 lbs. easy to use, transport and store; only requires one operator to transport and fits easily in most automobile trunks
- Powered by a dependable, easy-starting 37.7 cc
   4-stroke engine
- Equipped with LX-40 spray gun, TR1 419 line striping tip (4" pattern) and 50' airless hose

## Designed to carry 5-gallon pail of paint

#### PowrLiner<sup>™</sup> 850

- > Recommended for smaller jobs on pavement, grass or turf
- > Simple, compact design weighs only 70 lbs. easy to use, transport and store; only requires one operator to transport and fits easily in most automobile trunks
- > Powered by a dependable, easy-starting 37.7 cc 4-stroke engine
- > Equipped with LX-40 spray gun, TR1 419 line striping tip (4" pattern) and 50' airless hose
- > Designed to carry 5-gallon pail of paint
- > Removable gun for stenciling and painting



#### PowrLiner<sup>™</sup> 2850

- > The PowrLiner<sup>™</sup> 2850 is designed to withstand the rigors of steady, everyday use on pavement, fields and turf
- Fluid section has slower-stroking piston, slower cycle rate and larger displacement for longer performance life
- > Higher output and longer sustained use in a design that weighs only 160 lbs. easy to use, transport and store
- > Versatile gun bracket can be positioned to spray on left, right, front or rear of striper
- Perfect for contractors who need a maneuverable, medium-duty line striper for projects where the big machines just aren't profitable to operate
- Powered by a dependable, easy-starting Honda<sup>®</sup> 118cc OHV engine
- > Equipped with RX-80 4-finger spray gun, 697-419 TR1 tip and 50' airless hose
- > Two gun units come with second gun kit

www.nationalhighway.com - 800.338.5685

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## Equipment | Line Striping Systems, Titan®



#### PowrLiner<sup>™</sup> 3500 PermaStroke Technology<sup>™</sup>

- > The Titan PowrLiner<sup>®</sup> 3500 is a gas-powered, sealed hydraulic line striper that offers a lifetime of durability
- Delivers top performance at pressures from 300 to 3300 PSI and when using small or large tip sizes
- No piston or packings, cylinder or clutch to wear or burn out
- > Perfect for spraying coatings prone to shearing
- > Elite lifetime warranty on fluid pump
- FlatLine Pulsation Dampener<sup>®</sup> eliminates all pressure fluctuations and dead band in the system
- > Provides smooth operation and a consistent finish
- Fuel efficient with all the power and performance of a 120cc Honda<sup>®</sup>
- > Low oil alert system prevents engine seizure



#### PowrLiner<sup>™</sup> 4955

- > The Titan PowrLiner<sup>®</sup> 4955 has features that deliver more control, convenience and comfort
- > Dependable 118cc Honda® gas engine with pull start
- > Versatile gun bracket can be positioned to spray on left, right, front or rear of striper
- > Precise pressure control from 400 PSI to 3000 PSI for spraying lightbodied coatings all the way up to low-VOC striping paints
- > Heavy-duty, epoxy-finished frame resists harsh solvents and corrosion
  - PowrCenter" designed with convenient and easy-to-use controls
- > HydraDrive<sup>™</sup>

>

- > Large hose storage rack holds 300' hose
- > 12 gallon paint hopper
- > Pneumatic tires for shock absorption
- > SmartArm<sup>™</sup>
- > S-3 gun standard with premium TR1 line striping tip
- > Second gun kit complete with S-3 gun hose and tip kit for wider or dual lines



#### PowrLiner<sup>™</sup> 6955

- > Electric start Honda<sup>®</sup> 163 cc engine with low-oil alert
- > Versatile gun bracket can be positioned to spray on left, right, front or rear of striper
  - Precise pressure control from 400 PSI to 3300 PSI, for spraying light bodied coatings all the way up to low-VOC stripping paints
- > PowrCenter" designed with convenient and easy-to-use controls
- > HydraDrive
- > 12 gallon paint hopper
- > Pneumatic tires for shock absorption
- > SmartArm<sup>™</sup>
- > S-3 gun standard with premium TR1 line striping tip
- > Second gun kit complete with S-3 gun hose and tip kit for wider or dual lines



#### PowrLiner<sup>™</sup> 8955

- > Electric start Honda<sup>®</sup> 196 cc engine with low-oil alert
- > Versatile gun bracket can be positioned to spray on left, right, front or rear of striper
- Precise pressure control from 400 PSI to 3300 PSI, for spraying light-bodied coatings all the way up to low-VOC stripping paints
- > PowrCenter<sup>™</sup> designed with convenient and easy-to-use controls
- > Hydradrive
- > 12 gallon paint hopper
- Pneumatic tires for shock absorption
- > SmartArm
- > S-3 gun standard with premium TR1 line striping tip
- > Second gun kit complete with S-3 gun hose and tip kit for wider or dual lines

#### Line Striping Systems, Titan<sup>®</sup> | Equipment



#### LazyLiner<sup>™</sup> Pro

- 169cc Subaru<sup>®</sup> OHV/OHC (Pull Start)
- > Standard pneumatic tires 16" x 4.5"
- > 0-12 mph forward 0-7 mph reverse
- Multi-position seat (forward/back, side to side)
- > Height adjustable foot pedals
- > Hitch not included



#### LazyLiner<sup>™</sup> Elite

- Electric start 211cc Subaru<sup>®</sup> OHV/OHC (200 watt lamp coil charging system capable)
- > HD pneumatic tires 16" x 6.5"
- > 0-12 mph forward 0-7 mph reverse
- > Engine protection bumper bar
- Multi-position seat (forward/back, side to side)
- > Height adjustable foot pedals
- > Hitch not included



#### ProMark 100/150/200/250

- > Complete MMA Striping Systems
- > Push button spray technology
- > HydraDrive"
- > Pressurized beads



#### ThermoMark HD1500

- > ThermoMark HD is a midsize ride on applicator, with a large melting capacity, which provides 100 gallons of hot thermoplastic for maximum long line production; this insures minimal interruptions on each job
- > 1,500 lbs. of material at ±400°
- > Hydrostatic drive provides smooth operation at any speed
- > Uses one fuel (diesel) for the engine drive and melting systems
- > Oil jacketed from the kettle to the die (kettle, supply lines and dies)
- > Two rear independent drive motors handle heavy loads with ease
- > Standard with a programmable electronic skip timer
- > Versatile two sided seating
- > Pressurized bead dispenser (200 lb. capacity)
- > Applies single or double lines
- > Fortified mid-size chassis design
- > Rugged, dependable and precise
- > Kubota turbo diesel engine with a 30 gallon diesel tank
- > Heavy duty front axles and 3" tires and rims
- > On-board melting capability
- > Large kettle size (1,500 lbs. / 100 gal.)
- > Rear hydrostatic drive motors
- > Rubber mounted engine frame
- > Large capacity radiator with hydraulic cooler
- > Electronic skip timer and 1" king pins
- > Electric toggle switch controls and speed control
- > Fluid drive pedals
- > No loose linkage



#### ThermoMark 250

#### 250 lb. / 300 lb.

Thermoplastic Applicator 250 or 300 lb. reservoir Available with single or double bead system

- > The industry's only insulated reservoir
- > The bolt-together design allows for modular updates and repairs
- > Dual front brakes for added control
- > All controls are easily accessible
- > Adjustable bead width lever with an "OFF" position
- > Wheel and axle bearings deliver smooth operation
- > Wide mouth bead box offers auto or manual bead application
- Rear swivel wheel increases maneuverability

#### Smart Design

- > Dual-screen system filters out solids
- > Easy-to-read thermostat
- Supply lines and valves are made of stainless steel, brass and copper
- Color-coded lifting rings for easy loading and unloading

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#### Equipment | Line Striping Systems, Krylon®



#### Laying lines one stripe at a time.

We offer three machines for hand striping athletic fields and parking lots. All three machines are durable and made with 18-gauge, all-steel construction. Collapsible for compact, easy storage; easy-to-use, convenient handlebar to control the paint applied to the field or parking lot; and have adjustable striping widths of approximately 2"-4". Paint a safety stripe in parking lots, warehouses, construction sites or anywhere with these rugged steel stripers.

#### Krylon<sup>®</sup> Line-Up K08340 Pavement Manual Striper

The Line-Up pavement striping machine produces professional lines and symbols on all outdoor and indoor surfaces such as concrete, blacktop and metal.

- > Collapsible for compact, easy storage
- > Professional striping results
- > Simple and easy to use
- > Color-coded to match cans to proper maching
- > 18-gauge, all steel construction
- > Designed for easy maintenance
- > Clean lines in one coat
- > Striping widths of 2" to 4"

#### Krylon<sup>®</sup> Line-Up K08350 Athletic Field Manual Striper

Line-Up athletic field striping machines are ideal for use on grass, dirt, gravel or any other uneven surface. The 10 inch wheels elevate the carriage to provide an even ride over rough or uneven surfaces. For use with Line-Up aerosol striping paints from facilitating lines on an athletic field to striping the safety yellow lines within a manufacturing facility to warehouse or striping the lines in a parking lot.



- Collapsible for compact, easy storage
- > Professional striping results
- > Simple and easy to use
- > Color-coded to match cans to proper machine
- > Conveniently holds one case of product
- > 18-gauge, all steel construction
- > Designed for easy maintenance
- > Clean lines in one coat
- Striping widths of 2" to 4"

#### Krylon<sup>®</sup> Line-Up K08370000 Dual Can Manual Striper

Line-Up athletic field striping machines are ideal for use on grass, dirt, gravel or any other uneven surface. The 10 inch wheels elevate the carriage to provide an even ride over rough or uneven surfaces. For use with Line-Up aerosol striping paints from facilitating lines on an athletic field to striping the safety yellow lines within a manufacturing facility or warehouse or striping the lines in a parking lot.



- Collapsible for compact, easy storage
- > Professional striping results
- > Simple and easy to use
- > Color-coded to match cans to proper machine
- > 18-gauge, all steel construction
- > Designed for easy maintenance
- > Clean lines in one coat
- > Striping widths of 2" to 4"



See our selection of paints on page 110.

## Pavement Avoid the void!





#### Pavement | Marking Paints



#### Add the final touch to almost any traffic or field painting project.

Whatever your traffic marking material needs, National Highway Products, Inc. (NHP, Inc.) has the right product for your application – from rural roads to congested urban intersections, these materials are carefully designed and manufactured to ensure optimal performance and safety.

HYDROPHAST

HALF TIME

#### 

#### Hydrophast<sup>™</sup> Waterborne Traffic Paint

- Hydrophast<sup>®</sup> lead free, VOC compliant, fast drying, 100% acrylic waterborne traffic paint
- Conforms to Federal Specification TT-P-1952E Type I & II as well as many state and federal specifications
- For use on bituminous, Portland cement, concrete pavements and various seal coat applications
- Not recommended for use on concrete sealers containing silicone
- Fast drying
- FAA compliant
- > Stocked colors: white, yellow, blue, black
- > Special order colors: green, red, brick red
- Available in 5 gallon pails, 50-55 gallon drums or 250-275 gallon totes

#### 

#### Half Time" - Athletic Field Paint

- > Half Time<sup>\*</sup> is specifically formulated for use on grass athletic playing fields for sports such as football, soccer, field hockey, lacrosse, etc.
- Half time is supplied ready to use, no dilution required
- Stock colors: white, yellow
- > Special order colors: blue, red, black, orange
- Available in 5 gallon pails, 50-55 gallon drums or 250-275 gallon totes



#### $\bigcirc \bigcirc$

#### Hydrophast" PREMIUM Waterborne Traffic Paint

- Hydrophast<sup>®</sup> PREMIUM is a premium lead free, VOC compliant fast drying, extremely durable,100% acrylic waterborne traffic paint
- For use on bituminous, Portland cement and concrete pavements, as well as various seal coat applications
- May be applied with conventional or airless sprayers
- Available in 5 gallon pails, 50-55 gallon drums or 250-275 gallon totes



#### 

#### Turbo Dry<sup>™</sup> Low VOC Acetone Traffic Paint

- > A durable fast drying acrylic/alkyd traffic paint
- No pick up in as fast as 3 minutes at 70° F and 42% humidity
- Conforms to current federal VOC regulations as well as newer lower state VOC limits of 100 g/L



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WINNING STRE

- Recommended for use on bituminous, Portland cement and concrete pavements
- Not recommended for use over concrete sealers containing silicone or asphalt sealers
- Special order colors: white, yellow, blue, green, black, red
- > Available in 5 gallon pails

#### 

#### Winning Streak<sup>®</sup> Athletic Field Marking Paint

- > Winning Streak<sup>\*\*</sup> is specifically formulated for use on grass athletic playing fields for sports such as football, soccer, field hockey, lacrosse, etc.
- Can be used on synthetic turf where durability is not required
- Winning Streak<sup>®</sup> is supplied in a liquid paste ready for dilution with water
- Special order colors: ultra white, premium white, white, yellow, red, blue, black, orange
- Available in 5 gallon pails, 50-55 gallon drums or 250-275 gallon totes

#### Marking Paints, Stencils & Accessories | Pavement

#### 

#### Krylon® LINE-UP® Solvent-Based Pavement

#### Striping Paint

- Solvent-based aerosols for striping pavements, blacktop, concrete, curbs or other smooth, hard surfaces
- Fast drying; traffic-ready in 60 > minutes
- One aerosol can stripes approximately 250 linear feet of a 4" wide line
- > Excellent bleed retention
- Universal, non-clogging spray tip is compatible with most manual striping machines
- Conforms with U.S. Bureau of Public Roads colors
- Colors: fire lane red, highway yellow, handicap blue, highway white, cover-up black
- > Packaged 12 cans per case
- Special colors sold in case quantities only

#### 

#### Krylon<sup>®</sup> Line-Up<sup>®</sup> Water-Based Athletic Field Striping Paint

- For athletic fields, where bright, crisp lines are required
- Paints provide a professional looking job > quickly and easily They are available in aerosol across a
- large selection of colors
- Highly pigmented formulas fortified with optical brighteners for eye-catching lines that pop under stadium lighting
- Won't harm grass >
- Won't stain uniforms >
- > Fast drving
- Colors: scarlet, maroon, orange, gold, yellow, turf green, royal > blue, navy, white, black, fluorescent orange, fluorescent green
- Packaged 12 cans per case
- Special colors sold in case quantities only

#### Krylon<sup>®</sup> Marking Wands

#### The Quik-Mark<sup>™</sup> Wheeler Hand Held Marking Wand

- Helps apply > inverted marking paints quickly and efficiently
- Made of durable, rugged plastic & lightweight steel
- Comfortable > pistol grip is made to help reduce finger fatigue
- 34"in length >

#### **Spotter Hand-Held Wand**

- Made of durable, rugged > plastic and lightweight steel
- Comfortable pistol grip for easy handling & marking
- Avoid paint or chalk on your fingers
- 12" in length



#### 

#### QUIK-MARK<sup>®</sup> Solvent-Based Inverted Marking Paints

- One-coat coverage and our Spray-Thru<sup>\*\*</sup> non-clogging cap allow for inverted painting ease
- For concrete, pavement, gravel, grass, brick, asphalt, athletic fields, utility, excavation, ground surveying and construction marking
- High-solids formulation for bold, bright, visible markings
- Fast-drying formula penetrates and adheres to hot and cold surfaces
- Colors: red, bright orange, high visibility yellow, safety yellow, green, blue, utility white, silver, asphalt black
- Fluorescent: hot pink, purple, safety red, red/orange, green, caution blue, orange
- Packaged 12 cans per case
- Special colors sold in case quantities only

#### 

#### QUIK-MARK<sup>®</sup> Water-Based Inverted Marking Paints

- One-coat coverage and our Spray-Thru<sup>™</sup> non-> clogging cap allow for inverted painting ease
- For concrete, pavement, gravel, grass, brick, > asphalt, athletic fields, utility, excavation, ground surveying and construction marking
- > High-solids formulation for bold, bright, visible markings
- Fast-drying formula penetrates and adheres to > hot and cold surfaces
- Colors: orange, green, blue, black, high visibility yellow, utility yellow
- Brilliant: red, orange, yellow, green, blue, white, orange >
- Fluorescent: pink, purple, red, safety red, red/orange, green, caution blue, orange
- Packaged 12 cans per case
- Special colors sold in case quantities only

#### FormFlex<sup>®</sup> Stencils

- > Cut from heavyweight, thick poly-vinyl, these stencils are more durable than plywood stencils, yet are lighter, easier to transport and resist warping
- Dried paint flakes clean away > from the vinyl surface very easily
- Standard letter and number sizes > are 4", 6", 8", 10", 12", 18", 24", 36", 48", 72" and 96"
- 96" letters and numbers come in standard 4" strokes (6" stroke special order and can not be returned)
- Wide array of symbols available including straight and curved > arrows, railroad crossing symbols, stop bars, fire hydrants, bike and ped xings, bike lane symbols, handicap symbols, sport kits, standard legends in different sizes (NO, PARKING, FIRE, LANE, etc.) – please inquire
- Custom-made stencils are also available >

#### Ask your Account Executive for exact sizes and color variations.















#### Pavement | Preformed & Bagged Thermoplastic



#### An exciting and durable alternative to traditional traffic markings.

Studies have shown that properly applied thermoplastic can provide up to 8+ years of service life at 1/3 the life cycle cost of other marking products. Today's formulations and application techniques have evolved to provide enhanced safety benefits to the motoring public.

#### **Preformed Thermoplastic**

Preformed thermoplastic is a durable pavement marking system where thermoplastic lane lines, legends and symbols are supplied pre-cut and can be easily installed. As the material wears down, additional glass beads are exposed, thus ensuring exceptional retroreflectivity during the life of the preformed thermoplastic pavement marking.



#### Features:

- > Available in 90 and 125 mil thicknesses
- > Ready to install out of the box
- > Standard colors: white, yellow, blue, black, red, green, purple & orange
- > Custom color matching available
- > Lasts 8-10 times longer than standard traffic paint
- > Quickly & easily installed, no specialized equipment required
- > Legends & symbols come precut to MUTCD standards
- Can be installed at lower temperatures, extending pavement marking season

#### **Bagged/Bulk Thermoplastic**

Thermoplastic Alkyd is specified for municipal application that comes in 50 lb bags of granular material ready for melting. The thermoplastic is available in white or yellow.



#### Rumble Strips, Marking Tape, Installation Equipment | Pavement

The ATM line of removable tapes work together to safely and economically direct traffic around construction work zones. The preapplied, pressure-sensitive adhesive extends the application season typically shortened by marginal weather conditions. Quick and easy installation: simply prepare the surface, apply the tape, and tamp in place. Marked roadways immediately can be opened to traffic.

#### Applications: Intersections • Streets • Highways • Construction Zones • Parking Lots • Commercial Garages • Driveways Loading Docks

#### $\bigcirc \bigcirc$

#### ATM 200 Removable Construction Grade Tape

ATM 200 offers excellent daytime visibility for delineation and superior nighttime reflectivity. When the job is completed, the reinforced fabric backing makes removal easy.

- > Size: 4" 6" or 8"x150' also 4"x500'
- > Colors: white, yellow

#### ATM 280 Hide-A-Line Removable Construction Grade Tape

ATM 280 Hide-A-Line installs quickly and easily over existing markings and eliminates costly removal of permanent road markings. The non-reflective, matte black color blends with asphalt surfaces providing an effective mask day or night.

- > Size: 6" or 8"x120'
- > Color: black

#### $\bigcirc$

#### ATM 300 Permanent Durable Tape

ATM 300 provides exceptional durability. Recommended for longitudinal and transverse application in moderate traffic areas. The highly retroreflective tape offers superior visibility under all lighting conditions. Minimum 60 mil thick. Superior adhesive system minimizes tape movement in hot and cold climates.

> Size: 4", 6" or 8"x120'

> Color: white

#### $\bigcirc$

#### ATM 400 Permanent Extended Life Tape

ATM 400 heavy grade tape provides durability in hot and cold climates with superior adhesive. Recommended for longitudinal and transverse application in moderate traffic areas. Visibility under all lighting conditions. Minimum 60 mil thick. When the job is completed, the reinforced fabric backing makes removal easy.

- > Size: 6" or 8"x120'
- > Color: white

#### $\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$

## Rumble Strips Removable, Reusable or Permanent

Rumble strips create a visual, audible, and physical alert to drivers of a change in traffic patterns and draw attention to caution signs or road construction. The strips easily install with no special equipment. Custom colors available.

- Strips available in 4"x96'; 8 strips per box and are 250 mil thick
- > Colors: black, orange, bright green, white

#### ATM Primer Cart

The three wheeled, ATM Primer Cart features an adjustable spray nozzle for both single and double line coverage. Cart includes a wheel-driven, gear vacuum pump for trouble-free operation.

- Welded steel construction for high durability
- > Shielded for over spray protection
- > Sure-grip rubber handles
- > High-visibility orange finish
- > Accommodates 1 or 5 gallon containers
- > Weight: 55 lbs.

#### **ATM Tamper Cart**

The Tamper Cart fully tamps marking tape to the roadway surface to insure maximum adhesion.

- Solid steel welded construction
- > Ball-bearing steel tamper wheel
- High-visibility orange finish
- > Sure-grip rubber handles
- > 250 lb. capacity weight platform
- > Weight: 50 lbs.

#### **ATM Advance Applicator**

Sturdy, versatile applicator cart can be adjusted for single or double roll tape installation. Foot-operated cutting bar and automatic tape feed simplify tape application. Simultaneous single or double roll application applies solid or skip line permanent or temporary materials.

- Welded steel and aluminum construction for high durability
- > Sure-grip rubber handles
- > High-visibility orange finish
- > Adjustable guide assembly folds up for easy transportation
- > Tape capacity: two 4" lines or a single line up to 12"W
- Maximum roll lengths: 500'
- > Machine size: 44"Hx41"Lx16"W
- Weight: 155 lbs.

#### ATM Adhesives

Removable primer and black TAC permanent primer

 Adhesives are available in 1 gallon and 5 gallon containers















#### Pavement | Cold Patch & Ice Melt



#### Keeping roads and walkways safe and clear year-round.

## High performance, year-round, permanent cold patch

Applications: Streets • Major Highways • Utility Cuts • Railway Crossings • Dangerous Potholes • Ruts • Wide Cracks • Parking Areas

NHP, Inc.'s high performance, permanent pavement repair is a high quality, premixed, 100% asbestos free, asphalt "cold patch" compound which combines a carefully selected aggregate with a special bitumen formula. Its' tenacious binding adhesive causes it to remain in the repaired area indefinitely. Even when applied to wet and frozen potholes, high performance cold patch will



compact with the back of a shovel and the surface may be immediately opened to traffic. Money will be saved in labor costs because workers will not be constantly repairing an area where other types of "cold patch" asphalt mix were used.

- > Available in 50 lb. bags
- > 20-25 tons in bulk deliveries

#### **Premium Ice and Snow Melt**

NHP, Inc.'s premium ice and snow melt attacks ice and snow to minus 5° Fahrenheit. It is fast acting, quickly penetrating through ice and snow. Apply premium ice and snow melt to pavements, driveways, streets and walkways when precipitation begins.



Apply 1 cup of premium ice and snow melt per square yard. Amount may vary, however, depending on the depth of the ice and snow. Available in 50 lb.

bags or 20-25 tons in bulk deliveries; store opened bags tightly sealed.

> Premium Blend (most popular)

Also Available in:

- > Rock Salt
- > Cal. Pellets
- > Cal. Flake
- > Magnesium Pellets



#### Aquaphalt<sup>®</sup> High Performance Patch Material Applications: Highways (asphalt or concrete) • Runways

- Taxiways Aprons Bridge Decks Manhole Repairs
   Potholes Utility Cuts Parking Lots Driveways
- Tennis Courts Pathways

Aquaphalt<sup>®</sup> is an eco-friendly cold-mix patch material for permanent repair for asphalt and concrete. It is commonly used by DOTs, municipalities, government agencies, schools and universities, property management firms, asphalt maintenance contractors, and anyone else who has roadway and parking areas that need to be maintained.

- > Solvent-free
- > Pre-mixed just add water
- > Sets immediately, even in wet and cold conditions
- > 3 year warranty
- > Can be sealed or painted 24 hrs. after installation
- > 4.0 Fine: Used for repairs .5"-1"
- > 6.0 Medium: Used for repairs 1" plus
- > 9.0 Coarse: Used for repairs 1.25" plus
- > Weight: 50 lbs. of material



Simple Installation - Aquaphalt is simply poured into the area to be repaired, leveled with a rake or trowel, sprinkled with water and compacted with a hand-tamper or roller.

#### **Temporary/Permanent Pavement Markers | Pavement**



#### The most convenient pavement markers that effectively work day and night.

Temporary road markers provide an opportunity for both improving safety and reducing costs. Quick, simple placement reduces the time that your crew is exposed to traffic. TRPMs can be installed in only seconds by one worker with no special equipment, providing high profile delineation on freshly sealed roads until permanent markings can be applied. Holding the original lane line location eliminates the need to survey prior to restriping the roadway.

#### O 🚺 1W 2W

#### **Temporary Chip Seal Marker (TRPM)**

- Improves safety, provides effective lane line delineation
- Polyurethane marker body for toughness and durability
- Comes with one clear plastic cover designed to protect the marker and reflective sheeting
- TRPMs have a factory-applied high tack butyl adhesive pad, that provides for "peel-and-stick" quick installation to the roadway
- > Highly visible both day and night
- > Available in 1-way or 2-way
- > Colors: white or yellow
- > Dimensions: 4"Wx2"H

#### O 🗌 1W 2W

#### **Temporary Overlay Markers (TOM)**

- Improves safety, provides effective lane line delineation
- Polyurethane marker body for toughness and durability
- > Highly visible both day and night
- > Installation takes only seconds
- > TOMs have a factory-applied high tack butyl adhesive pad, that provides for "peel-and-stick" quick installation to the roadway
- > Available in 1-way or 2-way
- > Colors: white or yellow
- > Dimensions: 4"Wx2"H
- > Super TOM also available dimensions: 6"Wx2"H

#### 

#### **C80 Raised Pavement Marker**

- Abrasion resistant coating provides enhanced retained reflectivity
- Advanced optics deliver high reflectivity and durability
- Available in 1-way, 2-way same color or 2-way multi-color
- > Colors: white, yellow, red, blue, green, fluorescent orange
- > Dimensions: 3-1/4"Wx4-1/2"Lx5/8"H



#### Snowplowable Low Profile Marker

- Iron casting attached to replaceable snowplowable marker
- Insert for reflecting light from a single or opposite directions
- Optic grade Methyl Methacrylate
- Abrasion-resistant lens hard coat
- Available in 1-way, 2-way same color or 2-way multicolor
- > Colors: white, red, yellow, blue
- > Dimensions: 10"Lx5"Wx1-3/4"H

#### 

## 921 & 921AR Aspex Prismatic Marker, Raised Pavement Marker (RPM)

- > 921 is made of a durable ABS plastic shell filled with a tightly adherent potting compound
- 921AR contains one or two glass covered prismatic retroreflective faces as required to reflect light from a single or opposite directions



- > Thin untempered glass is bonded to the prismatic retroreflective faces to provide an extremely hard durable abrasion resistant surface
- > The base of the marker is free from gloss and substances that may reduce its bond to adhesive
- Available in 1-way, 2-way same color or 2-way multicolor
- > Colors: white, red, yellow, blue
- Dimensions: 4"Wx4"Lx3/4"H



#### Storm Drain Markers | Pavement



#### Help prevent water pollution in your community.

Storm drains are commonly misused by the public for the disposal of waste such as paint, motor oil, antifreeze, pesticides and other pollutants. This improper disposal can seriously damage water quality and the environment. Help make the earth a "greener" place - mark all storm drains in your community and spread the message of water conservation.

Storm drain markers have been engineered to perfection and can be installed onto roadways, curbs, storm drain grates or storm drain heads.

- Virtually indestructible >
- Easy to install on any surface >
- Adhesive or bolt-on theft resistant options available
- Up to 30-year warranty
- Custom designs available >
- High visibility
- All metal, deep 3-D embossed >
- Sand-blasted matte finish >
- UV baked enamel paint >
- 1-2 color option or natural
- Optional deep stamped sequential numbering or > name of town/city
- Optional UV clear multi-color graphics dome or > laser engraved aluminum center disc
- Size: .062"x4" >

Aluminum markers carry a 15-year warranty, and stainless steel markers carry a 30-year warranty. Custom markers are also available in quantities of 100 or more.

#### When ordering specify: legend, symbol, material, inside color, outside color, center hole or no hole and if serialization is required or not.

Legends: Choose from No Dumping, Only Rain in Drain, or Drains to; then choose Bay, Lake, Stream, Waterways, Pond, River, Ocean, Creek, Wetlands or Gulf

Material: Stainless steel, anodized aluminum, brass standard

Colors: red, orange, black, blue, yellow, green, purple, natural/ unpainted

Custom Colors & Symbols: Available with minimum orders

#### **Storm Drain Markers Accessories**

E6100 Adhesive



Dripless Caulking Tube Gun Surface Mount Only

Adhesive Discs

Drive Rivet Surface Mount Only

Salamander

Frog

Standard Symbols:



Fastener Set Stainless Steel Welded Bolt & 2 nuts/1 washer





Fish w/ Wave

**Catch Basin** 

Sunfish



800.338.5685 • www.nationalhighway.com



# Intelligent Warning Systems & Directional LED Signs Guiding the roadways of tomorrow.

25



#### Intelligent Warning Systems | TraffiCalm<sup>™</sup>, Flashing Sign System



#### The next evolution in road signage.

Applications: Stop Intersections • High Incident Intersections • Rural Roads • Dangerous Curves • High Accident Areas

#### **Flashing Sign System**

The traffic industry has long recognized that many sign scenarios (placement, visibility, etc.) are more critically important than others. There has been a need in the industry for a simple and affordable way to retrofit existing signs with additional levels of warning for those situations that demand them - and to do this in such a way that the additional alert system can be motion activated to conserve power and extend the life of the LEDs.

- > LED rings field retrofit onto almost any existing sign
- > Very affordable
- > 100 Level auto-dimming
- > Solar or AC power options
- Configuration app works on nearly any Wi-Fi phone, tablet, or PC
- High intensity LEDs visible day or night (visible up to 2 miles at night)
- Hassle-free installation (No dirt moved means less permits, and streamlined implementation)
- LED flashers face mount on existing signs with permanent bonding tape and/or mechanical fasteners
- Scheduling functionality expands system versatility and performance
- > Field replaceable batteries
- > MUTCD Compliant

#### Why TraffiCalm?

- ISO:9001 Certified USA based manufacturing facility
- > Vandal resistant designs
- Industry leading turn-around from order to delivery
- Unlimited tech support and customer service from the USA facility
- Industry pioneers in LED enhanced signage

#### "Plug-N-Play" System

Specifically engineered to enhance a single, standalone sign. Examples include speed zone reductions, advance warnings, and speed limit regulation.

#### Feature Highlights:

- > Affordable implementation, easy installation
- Radar option adds real-time feedback to drivers
- Battery and solar options for extreme performance
- Wide range of input trigger devices, including buttons and environmental sensors

#### Flashing Sign System Intelligent Controllers & Collaborators

Today's pinnacle of sign enhancement. Designed to wirelessly unify signs and sensors to provide unparalleled flexibility of application and use. Examples include sequential chevrons, conflict intersection warning, pedestrian activation, and road condition warnings.

#### All the benefits of the Basic System, plus:

- Radio collaboration between signs and input sensors
- Configuration of complex scenarios made easy in app
- Fastest implementation with intuitive wireless technology
- Individual units easily field upgraded or replaced
- Schedulability to warn drivers at just the right times
- > Audible push button compatibility

#### TraffiCalm<sup>®</sup> Stop Sign Enhancement Ring | Intelligent Warning Systems

#### Flashing Sign System Stop Sign Enhancement Ring

#### Illumination

- LEDs configured around perimeter of sign, within border (fully MUTCD compliant design)
- > LED pitch: 1.9"
- > Red LEDs with 30 degree viewing angle
- > DG3 white reflective sheeting applied to ring face for natural appearance

#### Compatibility

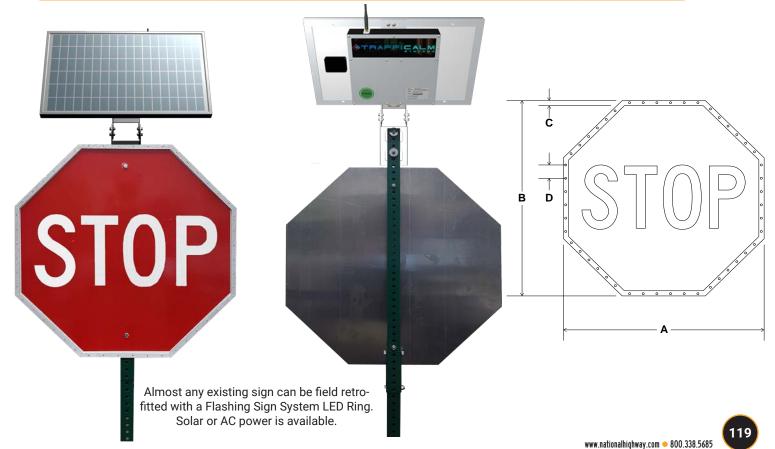
Integrates with all TraffiCalm SA300 controllers and collaborators and can be push button, speed (radar), time clock or sensor activated

#### **Physical Description**

- > Available sizes: 24", 30", 36" or 48"
- Retrofits to any existing Stop sign manufactured to MUTCD requirements
- Mounting: all LED hardware mounted within the white border of the sign; mounted either with adhesive backing or included self-tapping screws; rivets may be utilized to improve tamper resistance
- > MUTCD compliant LED placement and usage
- > 10 ft. single cable extension to reach controller or collaborator



MUTCD Sign Size	Part Number	Ring Width (A)	Ring Height (B)	Ring Width (C)	LED Count	Power (Watts)
24"	M75-R2424-WR01	24"/61cm	24"/61cm	.625"/1.6cm	40	3.20
30"	M75-R3030-WR01	30"/76cm	30"/76cm	.625"/1.6cm	48	3.84
36"	M75-R3636-WR01	36"/91cm	36"/91cm	.625"/1.6cm	48	3.84
48"	M75-R4848-WR01	48"/122cm	48"/122cm	.625"/1.6cm	48	3.84



#### Intelligent Warning Systems | TraffiCalm<sup>™</sup> Warning Sign Enhancement Ring

#### Flashing Sign System Warning Sign Enhancement Ring

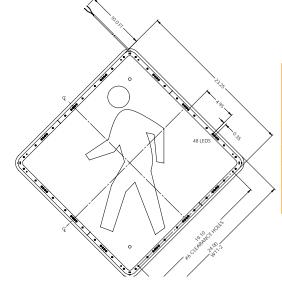
#### Illumination

- LEDs configured in clusters of four around perimeter of sign (fully MUTCD compliant design)
- > LED pitch: .35" within clusters
- > Cluster pitch: 6" (on center)
- > Amber LEDs with 15 degree viewing angle

#### Compatibility

- Integrates with all TraffiCalm SA300 controllers and collaborators and can be push button, speed (radar), time clock or sensor activated
- > Available sizes: 24", 30", 36" or 48"
- Retrofits to any existing Warning sign manufactured for MUTCD requirements
- Mounting: all LED hardware mounted within the black border of the sign; mounted either with adhesive backing or included self-tapping screws; rivets may be utilized to improve tamper resistance
- > MUTCD compliant LED placement and usage
- > 10 ft. single cable extension to reach controller or collaborator





MUTCD Sign Size	Part Number	Ring Width (A)	LED Group Offset (B)	LED Pitch in Group (C)	LED Count
24"	M75-R2424-BA47	23.3"/7.6cm	6"/15cm	.35"/.89cm	48
30"	M75-R3030-BA47	29"/73.7cm	6"/15cm	.35"/.89cm	64
36"	M75-R3636-BA47	34.8"/88.4cm	6"/15cm	.35"/.89cm	80
48"	M75-R4848-BA47	46.5"/118.1cm	6"/15cm	.35"/.89cm	112

Where side streets meet highways, collisions represent a common threat. With input-output logic definable, the TraffiCalm<sup>™</sup> Flashing Sign System provides the versatility to warn the right drivers at the right time.

Enhance Stop and Warning signs based on real-time radar detections from crossing traffic.

TRAF

#### TraffiCalm<sup>™</sup> Push 2 Cross | Intelligent Warning Systems



#### Pedestrians have peace of mind with a safer crossing through the simple push of a button.

#### Applications: Pedestrian Crossings • School Crossings • Advanced Crosswalk Warnings

Push 2 Cross is an MUTCD Compliant solution for controlled safe pedestrian crossings and is perfect for safe routes to school, complete streets or for mid-block pedestrian crossing applications. Configuration settings for Push 2 Cross are made easy through TC Connect, a secure WiFi connection platform developed by TraffiCalm, requiring NO internet connection, special apps or software! With any browser enabled device, the user can select from multiple options and settings.

#### SA328 RRFB

- > 80 High intensity amber LEDs for redundancy and uniform light distribution
- > MUTCD approved RRFB flash pattern
- > Exceeds SAE J578 for chromaticity
- Each of the 80 LEDs have built-in 15 degree UV resistant lens
- > Horizontal aiming adjustment
- Side-mounted LEDs for a side visual confirmation
- > Dimensions: 24"x4"x.85"





#### **Edge-Lit Flasher Rings**

- > Full assembled, one piece construction
- Complete edge-lit illumination within the sign border
- > Hermetically potted and sealed
- 3M VHB tape and optional selftapping mounting screws create secure adhesion to sign
- High intensity LEDs rated for 100,000 hours
- > 24", 30", 36", 48" rings available

## Push2ross

#### **Typical RRFB System:**

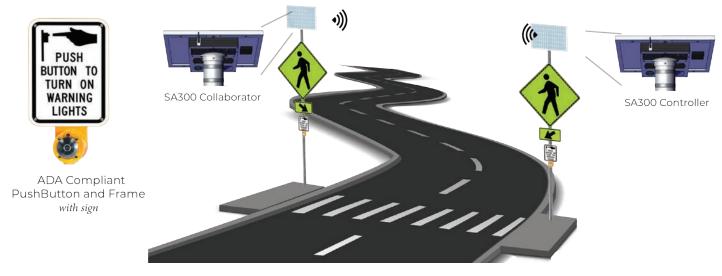
- > (1) P2C controller 30W or 50W
- > (1) P2C collaborator 30W or 50W
- > (4) SA328 RRFB
- > (2) ADA compliant push buttons
- > (2) 9"x12" push button frames
- > (2) 9"x12" "Push button to turn on warning lights" sign
- > (4) 24"x12" W16-7 (L-R) ARROW signs
- > (4) 30" W11-2 Ped Crossing Sign (Yellow or FYG)
- > (2) 14' pole kits
- > Mounting brackets
- > Manuals
- > TC connect software

## Push2ross

#### Typical Flasher Ring System:

- > (1) P2C controller 30W or 50W
- > (1) P2C collaborator 30W or 50W
- > (2) 30" amber LED flasher ring
- > (2) ADA compliant push buttons
- (2) 9"x12" push button frames
- (2) 9"x12" "Push button to turn on warning lights" sign
- > (2) 24"x12" W16-7 (L-R) ARROW signs
- > (2) 30" W11-2 Ped Crossing Sign (Yellow or FYG)
- > (2) 14' pole kits
- > Mounting brackets
- > Manuals
- > TC connect software

#### Intelligent Warning Systems | TraffiCalm<sup>™</sup> Push 2 Cross



Detection/Activati	on Unit				
Weight with battery	20 Watt = 25 lbs (11.3 Kg) 30 Watt = 28 lbs (12.7 Kg) excluding poles				
Power Requirements					
Voltage	11VDC to 15VDC				
Charger	Smart solar charger 14.6VDC, 30W temperature protected				
Communications	Wireless Meshnet integration (device 2 device, +1,000ft range, repeatable signal, 4 channels available, configurable network ID, AES-128 encryption security, DSSS transmissions on selectable channels)				
Battery Reserve	28 days @ standard load (standard load = 25% activations per day with a single flasher ring) with no sunlight				
Isolation Required	2 hours of good sunlight each day @ standard load				
Panel Supplied	20W, 17.2V MMPV, 21.6V open circuit				
Mounting	Universal pole mount included (optional top of pole & side of pole extension mounts available)				
Flush Mount LED	Flasher Rings				
Size	24", 30", 36", 48" x .625" sizes available				
Mounting	Outdoor rated mounting tape and provisions for self drilling/tapping screws				
	Red (626nM); 30 degree cone of view, rated 100,000 hours; auto dimming employed				
LEDs	Amber (590nM); 30 degree cone of view, rated 100,000 hours; auto dimming employed				
	White (cool white); 30 degree cone of view, rated 100,000 hours; auto dimming employed				
	Blue (470nM); 30 degree cone of view, rated 100,000 hours; auto dimming employed				
Power	10V to 18V				
Flash Patterns	50-60 flashes per minute; 50% duty cycle. Additional alternative flash patterns available and are user				
Dimming	100 levels of autodimming				
SA328 RRFB					
Size	24"x4"x.85 (60.96x10.16x2.16cm)				

#### TraffiCalm<sup>™</sup>, Push 2 Cross, RRFB | Intelligent Warning Systems

#### SA328 Rectangular Rapid Flashing Beacon

#### **Human Interface**

Installers will easily make all configurations through TC Connect, a WiFi platform developed by TraffiCalm that requires NO internet connection! With any browser enabled device, the installer can easily log in and select from multiple options and settings including flash duration, LED brightness and dimming control. The available traffic data can also be retrieved.



#### **Durability and Reliability**

Roadside signage and the like attract all forms of vandalism. Through our multi-string LED configuration design and permanently sealed electronics, the SA328 will maintain MUTCD standards for brightness even if 1 or 2 vertical LED strings are damaged through vandalism.

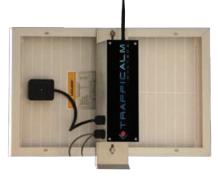
#### **Power Sources**

Each system relies on either solar power or an available AC option.

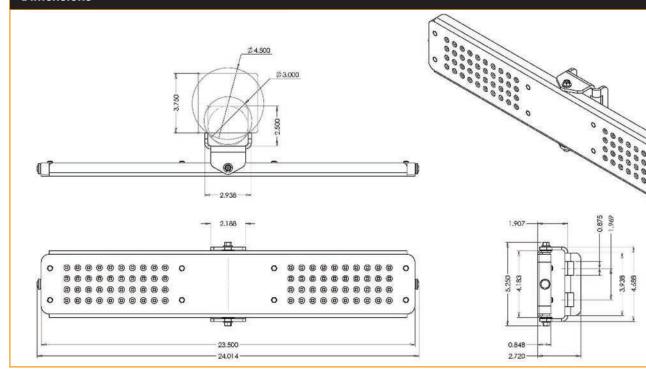
SOLAR: Stemming from either standard 20W solar panel or an available 60W upgrade, the collected power from these efficient panels is stored by a standard 12Ah lithium iron phosphate battery (Life004), which has been proven to be a safer and more stable power storage option. All of which, including the supporting electronics, are hermetically "Potted & Sealed".



5-Year limited warranty



#### Dimensions

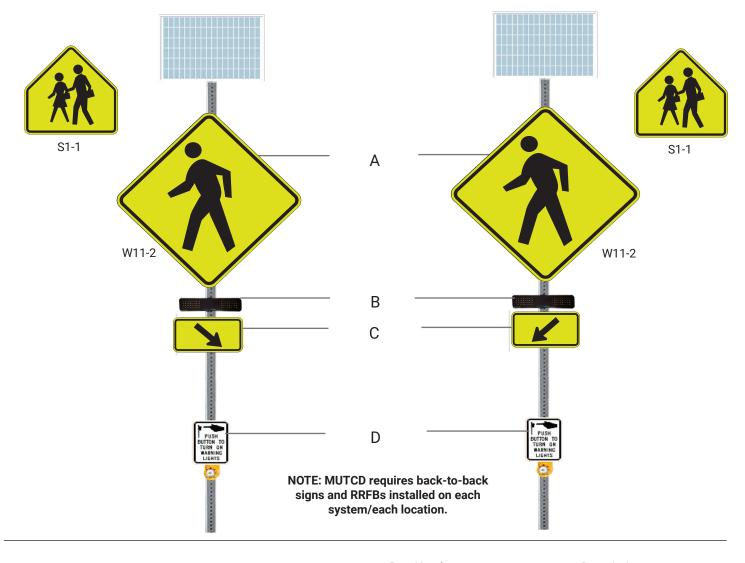


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#### Intelligent Warning Systems | TraffiCalm<sup>™</sup>, Push 2 Cross, RRFB

#### Build your Push 2 Cross using the SA328 RRFB

Let's start by understanding the difference between a Controller and a Collaborator. It's simple, just remember that every Push 2 Cross System will require a minimum of (1) Controller and (1) Collaborator to create a basic, 2-sign Crosswalk System and form a complete communication network. However, if multiple signs are required for one location, ONLY additional Collaborators will be needed.



		1	Part Number	Description
Push 2 Cross	Push 2 Cross		W11-2F1130DI080FYG	30" W11-2 Pedestrian Xing Sign
Controller	Collaborator		W11-2F1136DI080FYG	36" W11-2 Pedestrian Xing Sign
With 30W Solar and	With 30W Solar and		S1-1F1130PE080FYG	30" S1-1 School Xing Sign
12Ah Lithium Battery Order PN:	12Ah Lithium Battery Order PN:		S1-1F1136PE080FYG	36" S1-1 School Xing Sign
TRAFCALMSA300CTL3 or	TRAFCALMSA300CLB3 or	B-	TRAFCALMRRFBSA328	Rectangular Rapid Flashing Beacon
With AC Power Supply Order PN: M75-SA300-XWKQ	With AC Power Supply Order PN: M75-SA300-SQWA	c –	W16-7PLF112412080FYG	24"x12" W16-7L Arrow Left Sign
		] Ĺ	W16-7PRF112412080FYG	24"x12" W16-7R Arrow Right Sign
Flashing Sign System Controllers or Collaborators with selected power options above can be paired with Options A, B, C or D.		D-	TRAFCALMBDL3400NS	BDL3-Y BullDog III Push Button w/ PBF9X12-X Push Button Frame:

BDL3-Y BullDog III Push Button w/ PBF9X12-X Push Button Frame; 9"x12" "Push To Turn On Warning Lights" Sign

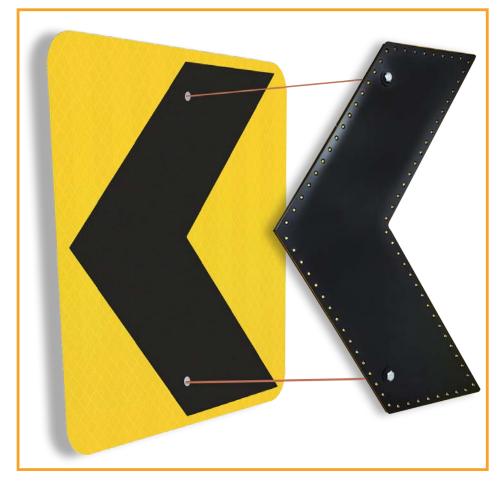
#### 800.338.5685 • www.nationalhighway.com

#### TraffiCalm<sup>®</sup> Curve Warning System | Intelligent Warning Systems



#### Guiding drivers through dangerous curves with a true-to-shape Chevron Sign.

Flashing Sign System Chevron Solution is designed to give drivers an elevated level of visual guidance when approaching curves. TraffiCalm's Flashing Sign System Chevrons are ideal for use on today's highways that have high potential for vehicle lane departures. The sign retrofit features a high visibility display that outlines the Chevron legend with 80 to 160 high intensity amber LEDs (depending on sign size) and boasts an effective angularity of 15 degrees. Multiple Chevrons in a single location are configured as a single network and flash sequentially in the direction of traffic.



One Piece-Potted and sealed LED enclosure provides the most protection against the elements.

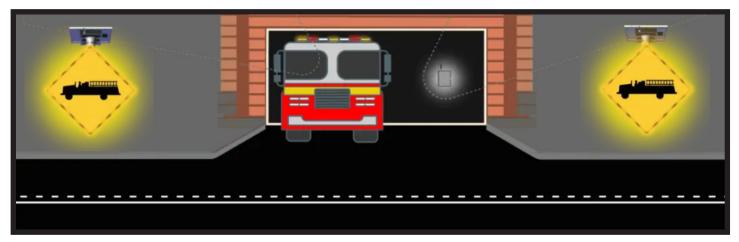
- > .080 gauge 5052 aluminum
- > Black powder coated for surface durability

All Sequential Chevron components are designed to easily adapt and retrofit to existing signs!



- > LEDs are rated for 100,000 hours
- > 1,000,000 millicandela sign output (nominal daylight maximum)
- > LEDs per sign:
- > 18"x24" 80 LEDs
- > 24"x30" 112 LEDs
- > 30"x36" 128 LEDs
- > 36"x36" 160 LEDs
- Thin LED assemblies are mounted using accommodations (holes) for bolt-mounting directly to sign and post
- LEDs are wired in strings to activate simultaneously per MUTCD sign
- All LEDs will continue to flash in the event of an individual LED failure
- All assemblies are manufactured in an ISO 9001:2015 facility

#### Intelligent Warning Systems | TraffiCalm<sup>™</sup> Emergency Mobility



#### Traffic control begins at the fire station.

SA-FR 1184 is a sign enhancement device utilized by fire stations to engage and forewarn drivers prior to the first responders call-toaction and departure for an emergency response. The device initiates an immediate activation of LED enhanced flashers permanently mounted and networked together on Fixed Warning Signs at or near the ingress / egress to the Fire Station.

- > SA-FR operates within a wireless network
- > Easy installation
- > Remote connectivity
- > TC Connect WiFi compatible
- > 20W solar kit included
- > A/C option available
- > Retrofit existing signs and infrastructure
- > Warning signs available
- > 30" or 36" LED Flasher Rings included
- > 5-Year warranty
- > Flasher Rings and flash rates are MUTCD compliant
- Flasher Ring confirmation LED located on remote and wall mounted activator

(2) SA-FR 1184 Activation options available:

- > 24/7 Flashing
- > Portable Remote
- > Wall-Mounted Activator





Requires NO Hot Spot or Internet Connection Requires NO software or apps Works on any platform or mobile device Operates within a secure environment NO Charges – recurring or otherwise The activated system prompts an immediate roadside alert with a visible "Motorist Call to Action" to yield during first responder deployment and return to the fire station.

WHEN

FLASHING



#### **TraffiCalm<sup>™</sup> Ice Detection & Advanced Warning System | Intelligent Warning Systems**



#### Wet roads, they're not always wet.

Flashing Sign System Ice Detection is an Advanced Warning System utilizing Surface Temperature that is measured by an accurate, non-contact infrared temperature sensor. Air temperature is also measured achieving higher levels of detection accuracy and driver notification.

The system alerts vehicle operators or pedestrians of hazardous icy road conditions by locally or wirelessly activating Flashing Sign System Warning Signs. It measures a wide cross section of actual road surface temperature to activate live notifications.

- System alerts vehicle operators or pedestrians of hazardous icy road conditions by locally or remotely activating Flashing Sign System Warning Signs
- Provides surface temperature and air temperature measurements that will collectively be used to maximize detection accuracy
- Flashing Sign Systems are triggered directly from a Non-Invasive Road Surface Condition Sensor
- Can be used to trigger other signs within a configured network







#### **Configuration Options**

#### **Network System**

A deployable Surface Temperature Sensor is placed at the ingress to a bridge deck or over pass, communicating road surface conditions to a network sign placed up to 1000 feet away. This notification triggers a LED Enhanced Advanced Warning Sign, advising drivers of icy road conditions ahead.

- > (1) Surface Temperature Sensor
- > (1) Flashing Sign System Controller w/ 20W Solar Kit
- > (1) Flashing Sign System Collaborator w/ 20W Solar Kit
- > (1) Flashing Sign System Amber LED Ring

#### Single Sign and Sensor

A Single Sign and Surface Temperature Sensor is placed at the ingress to a bridge deck, overpass or any location where advance notification is required. This notification triggers a LED Enhanced Advanced Warning Sign advising drivers of icy roads.

- > (1) Surface Temperature Sensor
- > (1) Flashing Sign System Controller w/ 20W Solar Kit
- > (1) Flashing Sign System Amber LED Ring

#### Intelligent Warning Systems | TraffiCalm<sup>™</sup>, Wrong Way Warning System



## TraffiCalm's spear-head of Innovation and Technology has now increased the level of Wrong Way Driver Detection.

Wrong Way Warning and Wrong Way Warning + Notification are the only prevention solutions that retrofit to existing signage and infrastructure. TraffiCalm<sup>™</sup> wrong way technologies raise driver awareness where driving the wrong way produces deadly results. The system is affordable, scalable, and designed for quick retrofit installation on the fly, all while repurposing investments already made.

#### Features

#### Sign Enhancement Rings

 Quickly mount on existing Wrong Way signage with permanent bonding tape and/or optional mechanical fasteners

#### Back-Lit, Ring Enhanced Wrong Way and Do Not Enter Signs

- Unparalleled nighttime visibility
- Maintains reflectivity, but adds even illumination across face of sign

#### Warning Controller (Stage 1)

- Provides fast, simple setup of complete warning system, consisting of one Controller multiple Collaborators
- Secure Wi-Fi setup requires no internet and no software download, just a phone, tablet, or pc
- Controls synchronized flashing of all connected devices based on radar, input (like loops), or 24/7 activation
- Can be reduced to Collaborator functionality when upgrading to +Notification Solution (stage 2)

## TraffiCalm's Cloud-Based Solution

- Visual confirmation of detections
- Immediate notifications
   All web-enabled devices compatible

#### Notification Controller (Stage 2)

- > Upgrade any Warning System by just replacing the Controller
   > Unit can be located anywhere
- within Alert zone (dictated by configuration utility setup)
- Mesh-Net Wireless Radios – Serve immediate wireless collaboration with remote devices configured into the system, with up to 3,000 ft between devices
- Accepts 12V input from AC transformer or Solar supply (AC power highly recommended)
- Fast 4g Cellular Modem delivers full video notification in an average of 10 seconds
- > HD Resolution IP Camera

#### Collaborators

- > Work in collaboration with any Controller to both build the detection algorithm and control flashing devices.
- Flashing output configurable to several flash patterns and frequencies

#### Radar Detector

- > 450 ft. / 137m detection range> Works with any Controller or
- Collaborator
   Directional configuration can be set to detect approaching

or receding motion

#### Securely Mount within the border of the Wrong Way Sign

Flashers

Detectors play an immediate first line of defense to detect a Wrong Way Offender. One or more detectors may be used depending on the situation. Each detector (front line or confirmation) scans an area that it divides into three zones. When zone one is penetrated, flashers start on all signs and other detectors get put on notice. When zones 2 and 3 are penetrated, an additional notice is sent to collaborative detectors, triggering the capture of video or photos and priming a confirmation detector. When a confirmation detector is used, further validation will be done before notices are sent to first responders.



#### TraffiCalm<sup>®</sup>, High Water Warning System | Intelligent Warning Systems



Where high water can pose a threat to drivers, The TraffiCalm<sup>™</sup> Flashing Sign System becomes the right solution.

With Flashing Sign Systems, drivers can make informed, calculated decisions based on real-time information streamed from remotely placed high water sensors well in advance of the hazard.

#### **Calmly Moving Traffic Forward**

When it comes to warning drivers of impending danger, nothing performs better than Flashing Sign System LED sign enhancements.

By engineering cutting edge LED technology, millisecond response times, and intuitive designs, TraffiCalm<sup>™</sup> offers solutions that make a difference on today's roads.



Requires NO Hot Spot or Internet Connection Requires NO software or apps Works on any platform or mobile device Operates within a secure environment NO Charges – recurring or otherwise





#### Intelligent Warning Systems | TraffiCalm<sup>®</sup>, High Water Warning System

Features	
Controllers	<ul> <li>&gt; All SA300 Controllers and Collaborators</li> <li>&gt; Permanently and Environmentally Sealed Electonics</li> <li>&gt; Compact and lightweight aluminum enclosure</li> <li>&gt; Weight: under 30 lbs including battery</li> <li>&gt; Mounted behind solar panels</li> </ul>
Power Options	<ul> <li>AC or Solar Power</li> <li>20W Solar Panel with up to 60 Watt available</li> <li>MPPT Solar Collection</li> </ul>
Visual LED Enhancements	<ul> <li>MUTCD and FHWA Compliant for all Warning Signs</li> <li>Fits 24", 30", 36" and 48" signs</li> <li>48-112 Amber LEDs (Depending on sign size) for Redundancy and Uniform Light Distribution</li> <li>Exceeds SAE J595 Class 1 Intensity</li> </ul>
Battery (Solar Models)	<ul> <li>Standard 12Ah AGM batteries; larger battery packages available including 13Ah Advanced AGM and 40Ah AGM batteries</li> <li>Accessible batteries, easily replaceable in field</li> <li>Lighter weight for ease of handling</li> </ul>
Human Interface (HMI) TC Connect	<ul> <li>&gt; WiFi Connectivity - No internet connection required</li> <li>&gt; Configurable flash duration</li> <li>&gt; Automatic unique channel selection</li> <li>&gt; Wirelessly configures all devices on network</li> <li>&gt; Traffic data recording/reporting</li> <li>&gt; Auto and configurable dimming</li> </ul>
High Water Sensor Features	<ul> <li>Water presence detected by conductivity test</li> <li>Minimum water level - 1" (2.5 cm)</li> <li>Maximum water level - 48" (121.9 cm)</li> <li>Clog free design maintains full operation in the presence of build up of mud, refuse, and naturally occuring organic material</li> <li>Detection method operates in both fresh water and salt water</li> <li>Non-mechanical detection requires minimal maintenance</li> </ul>

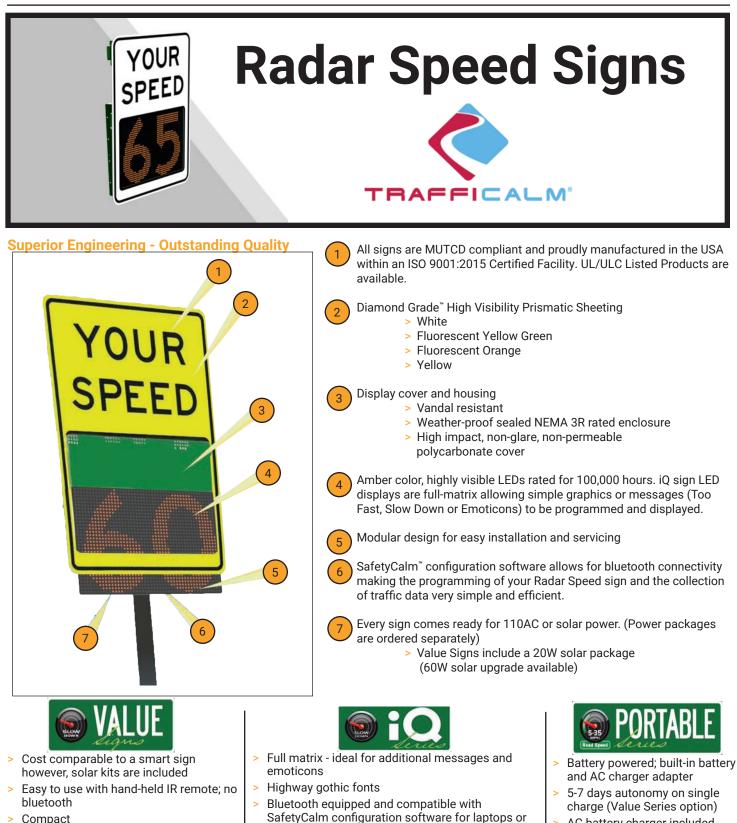




## Speed Reduction Be Alert, Accidents Hurt!



#### Speed Reduction | Radar Speed Signs, Trafficalm



Android devices

compatible devices

purchaser of sign

solar kit

>

>

>

Provides traffic data logging

Almost unlimited program schedules

Expandable for beacons, cameras and other

Firmware upgradable at no charge to original

Requires the purchase of either AC power supply or

- AC battery charger included
- IR remote included for > configuration and basic programming
- Ability to be moved to multiple locations

- No traffic data recording >
- No provisions to adapt camera, beacons > or other devices

7 segment sign only displays numerical

speeds; no additional messaging

Can only program 2 events per 24 hour period



>

available

#### Radar Speed Signs, Trafficalm<sup>™</sup> | Speed Reduction



Designed for low-speed applications:

9" Radar Speed Sign - Value Sign PN: M75-009SE-000x (20 Watt) PN: M75-009SE-002x (60 Watt) White - 0001 Fl. Yel/Green - 0002 Fl. Orange - 0003 Yellow - 0004

YOUR

SPEEL

12" Radar Speed Sign - Value Sign PN: M75-012SE-000x (20 Watt) PN: M75-012SE-002x (60 Watt) White - 0001 Fl. Yel/Green - 0002 Fl. Orange - 0003 **Yellow** - 0004



Designed for temporary deployment and the ability to be moved to multiple locations:

9" Radar Speed Sign - Portable Value Sign

PN: M75-009SE-P00x White - P001 Fl. Yel/Green - P002 Fl. Orange - P003 Yellow - P004

#### iQ900 Portable Radar Speed Sign

PN: M75-009SE-PK0x White - P001 Fl. Yel/Green - P002 Fl. Orange - P003 Yellow - P004

12" Radar Speed Sign - Portable Value Sign PN: M75-012SE-P00x White - P001 Fl. Yel/Green - P002 Fl. Orange - P003 Yellow - P004

> iQ1200 Portable Radar Speed Sign PN: M75-012SE-PK0x White - P001 Fl. Yel/Green - P002 Fl. Orange - P003 Yellow - P004







iQ900 Radar Speed Sign PN: M75-9IDFB-000x White - 0001 Fl. Yel/Green - 0002

roadways:

Fl. Orange - 0003 Yellow - 0004

iQ1200 Radar Speed Sign PN: M75-12DFB-000x White - 0001 Fl. Yel/Green - 0002 Fl. Orange - 0003 **Yellow** - 0004

iQ1500 Radar Speed Sign PN: M75-15DFB-000x White - 0001 Fl. Yel/Green - 0002 Fl. Orange - 0003 Yellow - 0004

iQ1800 Radar Speed Sign PN: M75-18DFB-000x White - 0001 Fl. Yel/Green - 0002 Fl. Orange - 0003 Yellow - 0004

18" Jumbo Radar Speed Sign PN: M75-018IE-000x White - 0001 Fl. Yel/Green - 0002 Fl. Orange - 0003 Yellow - 0004

TraffiCalm Radar Speed Detection Signs are manufactured in the USA in an ISO 9001 certified facility, meeting and exceeding industry standards and state testing requirements.

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#### Speed Reduction | Radar Speed Signs, Trafficalm



SafetyCalm<sup>™</sup> is a feature-rich design configuration and data collection suite, built into an intuitive, efficient interface. This easy-to-use and license free program is menu driven and provides iQ Series Sign owners with an uncomplicated view of speed data statistics.

Bluetooth communication allows for convenient sign programming and traffic data collection using a laptop or Android device from up to 300 feet away.

	Value		iQ				
Features	9" Value Sign	12" Value Sign	iQ900 Sign	iQ1200 Sign	iQ1500 Sign	iQ1800 Sign	iQ1800 Jumbo Sign
Optimal Road Speed		<b>(5-35</b> )	5-25	5-35	25-50	45-90	45-90
Housing Dimensions	18"W x24"H 22.7 lbs	24"W x30"H 28 lbs	18"w x24"H x1-7/8"D 10 lbs	24"W x30"H 15 lbs	30"W x41"H x3"D 36 lbs	36"W x48"H x2-3/4"D 28 lbs	48"W x60"H x4"D 28 lbs
LED Display	88	88	88 SLOW DOWN	88 SLOW DOWN	88 SLOW DOWN	88 SLOW DOWN	88 SLOW DOWN
Sign Legibility Distance	450 ft	600 ft	450 ft	600 ft	750 ft	1000 ft	1000 ft
Programming Input	RF remote 30' range	RF remote 30' range	300' range	300' range	300' range	300' range	300' range
Capable of Collecting Traffic Data (SafetyCalm software included)			•	•	•	•	•
External Ring or Beacon Compatible			•	٠	•	•	•
Stealth Mode (for collecting data when LEDs are off)			•	•	•	•	•
Power Package	Solar Kit Included	Solar Kit Included	Solar/AC Ready	Solar/AC Ready	Solar/AC Ready	Solar/AC Ready	Solar/AC Ready
Modular Design for Easy Service					•	•	•
Portable Configuration	٠	٠	•	٠			
Dolly Configuration	•	•	•	•			
RS-232 Port			٠	٠	•	•	•

#### TC Mini Display Trailer, Trafficalm<sup>™</sup> | Speed Reduction

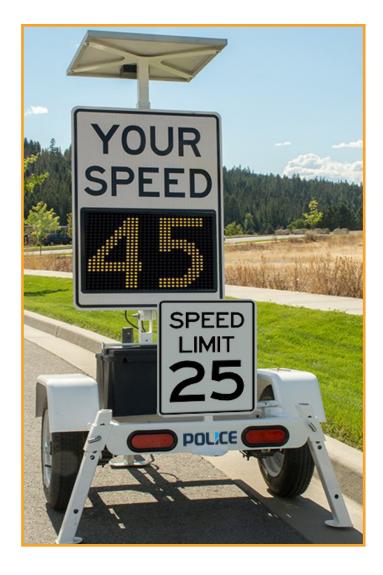


#### Traffic calming is even easier.

TraffiCalm's Radar Feedback signs are an effective tool in decreasing speeds in urban communities, on highways, in school zones, construction sites or special events. Now, with TraffiCalm's TC Mini Display Trailer, traffic calming is even easier and even more portable. A portable radar sign, operating on solar power or batteries, can be moved from place to place, calming traffic and collecting data about traffic that can be downloaded through a wireless Bluetooth connection.

- > Made in the USA
- > Quick and easy setup
- For use with any of Trafficalm's Radar Speed Signs or Variable Speed Limit Signs (sign ordered separately)
- Meets DOT regulations & requirements for safety and road worthiness
- > 18"x24" 25MPH Speed Limit Sign included with numerical plaques to allow for changes to the static speed limit sign to be made
- > Provision for a solar panel mount
- Powder coated in white or work zone orange (optional colors available)
- Provided with a cushioned battery mount to reduce vibration and shock to the battery





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#### Speed Reduction | Radar Speed Trailers



## SolarTech<sup>®</sup> Silent Advisor radar speed detection and monitoring made easy.

The "Silent Advisor" Radar Speed Trailer is a radar speed display available in two sizes for use on highways or on residential streets. These portable radar speed displays are designed to slow traffic for safety in neighborhoods, work zones, road construction and other venues. Both the RST 1000 and RST 2000 Silent Advisors consist of a fixed speed limit sign and an LED display, powered by a combination of solar panels and batteries.

The RST 1000, designed for lower speed use, is 56" wide with stacked speed limit and LED speed displays. The RST 2000 is designed for highway use, and is 75" wide with signs mounted side by side. Data collection is built-in for easy analysis of statistics. The signs come with an integrated GPS receiver, a cellular transceiver and FREE lifetime cellular service for remote data retrieval – view the speed data from your office.

- > Truly solar powered engineered for continuous operation
- > Brightest, most visible display
- > Legible messages under all conditions
- > Sign Panel Failsafe System automatically detects and corrects errors and faults
- CE Marked insures complete electromagnetic compliance for superb reliability
- > Custom sign case and door frame extrusions sturdy, secure and weather-tight
- Modular construction easy maintenance and repair

#### Yes! You can control your speed trailers using remote control and GPS and cell tracking\* \*Optional upgrade

With our remote communications package you can access your signs and change messages right from your office PC, or your laptop, or your smartphone. Think of it – you can even login and access your signs from home. No more racing to the work-zone at 6 am to change a message!

#### **Additional Features:**

- > Three thresholds of speeding: over-speed, excessive speed, extreme speed
- > Fully networkable
- NTCIP version 3 compatible
- > NO manual required they are that easy to use!

#### Control your signs anywhere, anytime.

#### Easy-to-use controller

Included with the purchase of the Remote Communications package:

- GPS receiver, cellular transceiver and free cellular service for the life of the board
- > Password protection
- > Intuitive icons for ease of use
- Scheduling capability
- > Fully net-workable
- > NTCIP version 2 compatible
- > Automatic software upgrades

## Yes, remote access is even available on your older SolarTech<sup>®</sup> equipment.

If your message boards were purchased before May 2014, you can add the communications package by buying SolarComm<sup>®</sup>.

You'll get GPS tracking and service notifications and have all your equipment remotely accessible. Ask a NHP, Inc. Sales Account Executive for details.









#### **Traffic Calming Bumps & Humps | Speed Reduction**



#### Helping to slow cars down with recycled traffic calming devices.

Rubber speed bumps and humps are used in residential areas to slow down vehicles while keeping traffic moving. Rubber speed bumps are designed to slow vehicles down to 2 to 5 mph while rubber speed humps are used to slow vehicles down to 10 to 20 mph. Speed bumps are perfect for areas where more drastic speed reduction is necessary; speed humps are perfect for school zones, hospitals, malls, apartment complexes - both are perfect for any place where traffic calming is necessary. Install bumps and humps into asphalt with rebar spikes and into concrete with lag bolts and shields.

Traffic calming devices address the ever critical speed control problem that every community has. Recycled rubber products help the environment and every community by "going green". The combination of the two are shown here in the products featured - speed humps, speed bumps and parking blocks.

- Resistant to weather, oil, salt, moisture, UV light, and > temperature
- > Will not warp, chip, or crack
- > Never needs painting, durable striping - molded-in reflective marking tape
- > Flexible, conforms to surface contours

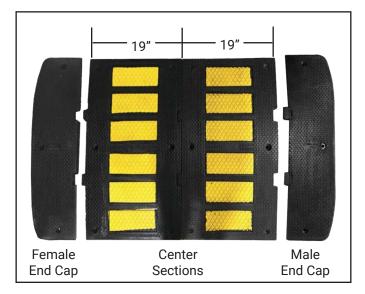
Easy one person installation >

Installation

Holes

- install on asphalt or concrete (hardware sold separately)
- Removable for road surface maintenance or snow > plowing
- 100% post-consumer recycled rubber with > polyurethane binder

Premium Speed Hump Info				
Dimensions	20"Lx35"Wx2"H, 38 lbs.			
End Caps	10"Lx35"Dx2"H, 14 lbs.			
Stripes	6 per center section			
Installation Holes	Center Section - 6 End Cap - 3			





End Cap - 1

#### Speed Reduction | Parking Lot Stops



#### $\bigcirc \bigcirc \textcircled{0}$

#### **Recycled Rubber Car Stops**

- > The safest, smartest parking device to protect your car
- Size: 3'L, 4'L or 6'L x 6"W x 4"H
- > Easy to install
- > Molded reflective tape, available with yellow or white
- Installs with rebar spikes on asphalt surfaces and lag bolts and shields on concrete surfaces
- Warranty: 3 years on the product and 1 year on the tape (under normal use)
- > Hardware sold separately



#### •

#### Handicap Recycled Rubber Car Stops

- Highly visible, durable and designed specifically for handicap parking spaces
- > Molded white reflective tape
- Installs with rebar spikes on asphalt surfaces and lag bolts and shields on concrete surfaces
- Warranty: 3 years on the product and 1 year on the tape (under normal use)
- > Blue color is not covered under warranty
- > Hardware sold separately



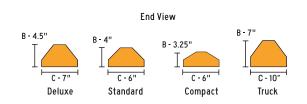




#### 

#### Maintenance Free Recycled Plastic Car Stops

- > Made from 100% recycled, solid plastic
- > Chip and crack free
- > Withstands abuse from gas, oil, salt, sunlight and chemicals
- > Molded in solid colors and never need painting
- > Maintenance free and can be installed by one person
- > Installation hardware included
- > Lightweight options available



NOTE: Please make your product selection carefully. PARKING STOPS ARE NON-RETURNABLE. All dimensions are nominal – allow for up to 3-6% mold shrinkage.

Concrete parking blocks available upon request.

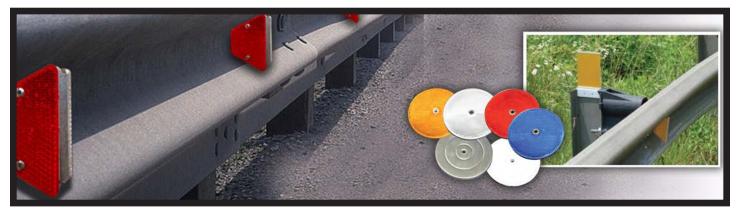


## Humps, bumps and car parking stops installation hardware

## **Roadside Markers** Impacting today's roads for a safer tomorrow.



#### Roadside Markers | Guide Rail & Barrier Mount Delineators



#### Bright lines and roads save lives.

Barrier mounts, guide rail reflectors and delineators are beneficial at locations such as lane-reduction transitions and curves and provide effective guidance at night and during adverse weather conditions. There are many styles to choose from to suit every application. Specify options when ordering. If a particular item is not shown in our catalog, please call 1.800.338.5685 for a Sales Account Executive for assistance.

#### 

#### **Barrier Mount FB Style**

Barrier delineators provide effective guidance at night, in low light and in adverse weather conditions. Yellow and white delineators shall be the same color as the roadway edge lines.

- > Barrier markers can be used for top or side mount applications
- Use for temporary work zone traffic control or permanent applications
- > Marker size:
  - PCBM-9 3"x3" sheeting
  - PCBM-12 4"x3" sheeting
  - PCBM-15 3"x5" sheeting
  - Little Dog 6"x12" sheeting
  - Big Dog 8"x12" sheeting
    - > Use for temporary work zone traffic control or permanent applications
    - > Color: fluorescent orange sheeting
- > 1-way or 2-way
- A wide-angle delineator for extra visibility on short radius curves and around obstructions
- Reflective sheeting colors: white, > yellow or red
- Reflective sheeting types: Type 4, Type 5, Type 9 or Type 11
- Meets the minimum MUTCD > requirements for reflectivity



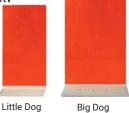












Contact our Sales Team today to discuss your project! Call 800.338.5685 or email sales@nationalhighway.com

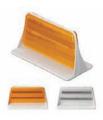
#### $\bigcirc$

#### **Flexible Hinged FT Marker**

- Mount to the top or side of barrier wall
- Use for temporary work zone traffic control or permanent applications
- Marker size:
  - PCBM-T9 3"x3" sheeting
    - > Designed for use on top of movable barrier systems
  - PCBM-T12 4"x3" sheeting - PCBM-T16 - 3"x5" sheeting
- A hinged marker that mounts to the top or side of barrier wall
- "Gator Jaw" hinge allows the reflector to take an impact and spring back to its full upright position
- Reduces maintenance and provides for long-lasting delineation
- Made of high impact engineering grade thermoplastics
- 1-way or 2-way >
- Available in variety of reflective sheeting to comply with local specifications
- Reflective sheeting colors: white or yellow
- Reflective sheeting types: Type 4, Type 5, Type 9 or Type 11

#### $\bigcirc$ JD Cube Marker

- > Delineates the barrier far in advance to approaching drivers
- The JD Cube is the largest acrylic cube corner delineator in the industry
- More than two times brighter than > requirements for prismatic reflectors as shown by state photometric tests
- > Size: 3"H and 5.5"W
- > Marker material: ABS and acrylic
- Reflective colors: white or yellow >
- 1-way or 2-way >
- Meets the minimum MUTCD requirements for reflectivity and > exceeds all state and federal brightness standards









PCBM-T16

#### Guide Rail & Barrier Mount Delineators | Roadside Markers

#### 

#### **Aluminum Delineators**

- Sizes: 4"x8" rectangle, 5" diamond, 4" square and 3-1/4" round button
- Fasten to all types of posts with hardware; sold separately
- Reflective sheeting mounted on .080" aluminum
- > 2 (two) mounting holes top/bottom on center
- Reflective sheeting types: Type 4 or Type 9
- Reflective sheeting colors: yellow, fluorescent yellow, white, red, green, and orange

#### 

#### Ground Mount Flex (Poly)

- 3-1/4" diameter lens comes in white, yellow, red, blue or green
- 1-way or 2-way >
- 7 square inches of reflectivity >
- Excellent visibility during general road conditions
- Provides increased safety during > inclement weather situations
- Easy fit and glue on installation > into the channel of the guide rail; glue sold separately
- High impact polycarbonate bracket

#### 

#### Round Button Steel Delineators

- > 3-1/4" diameter lens comes in white, yellow, red, blue and green
- 1-way or 2-way >
- 7 square inches of reflectivity >
- Mounts with existing guide rail bolts in the center channel
- Meets or exceeds photometric standards
- Heavy duty galvanized bracket, riveted reflector >

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#### **Butterfly Delineators**

- > Available in steel or plastic
- Available in bolt-on or glue-on
- > Bolt-on style best suited for installation during initial guide rail construction
- Glue-on style can be used at any time > because installation does not require the loosening and re-tightening of existing guide rail bolts
- 8 square inch delineator installs with > existing guide rail bolts
- Butterfly shape fits in the center channel for protection from accidental damage or vandalism
- Reflective sheeting types: Type 4 or Type 9 >
- Reflective sheeting colors: yellow, white or red
- > 1-way or 2-way



- Flex Rail body will retain original position after being hit repeatedly
- Fits over steel I-beam guide rail posts with polyurethane hinge
- 1-way or 2-way
- Sizes: 3" or 4"
- 2 hinge styles available
- Available for Weak Posts

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#### S-Flex Guide Rail Marker Posts

- Mounts to wood or steel guide rail posts
- 4"x8.745" reflector
- Reflective sheeting colors: yellow or white
- 1-way or 2-way

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#### Flat Guide Rail Markers

- Oversized guide rail measuring 4"x15" and 5 3"x13"
- Multiple reflector size options and reflective sheeting
- 1-way or 2-way >
- Easy to see in high-speed areas, work zones, dangerous curves and intersections
- More visible in low light conditions

#### FG 427 and FG 527 Marker

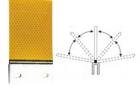
- Mounts to wood or steel guide rail posts >
- Flexible, impact resistant and highly visible
- Impact resistance: capable of withstanding impacts from wide loads, overhanging maintenance equipment, mowers, etc.
- Post sizes: 3"x27"
- Post colors: yellow, white or grey (grey is available in 3" only)
- Profiles: 3" dual curve, 3" single curve





#### **HiWayFlex Guide Rail Delineators**

- For metal, wood or concrete guide rails
- Size: 3-3/4"x27"
- Post colors: white or yellow > Curved surface improves visibility of reflective > sheeting
- Provides flexibility and impact resistance from wide loads and overhanging equipment
- Comes standard with 2-hole or 4-hole drill pattern
- Minimum order box 35















## Plastic

## Glue-on



Bolt-on



#### **Roadside Markers | Drivable Ground Mount Delineators**



Ground mount, flexible, fiberglass reinforced composite utility marker posts and highway delineators are designed to withstand multiple vehicle impacts and return to an upright position. Fiberglass is naturally rust, rot and corrosion resistant and can withstand extreme temperatures making it the ideal material for marker and delineator applications.

All delineators can be ordered with a u-channel anchor or a general plastic anchor.

#### 

#### Flextough<sup>™</sup> Delineators

- Standard lengths: 62", 66", 72"
- > Post color options: white, brown, yellow, orange, red, blue, green - custom colors available (e.g., purple) - minimum order box 20

3.84"

- > The most popular marker specifically designed with a thicker mid-section for easier installation in hard soil conditions
- Approved for use by numerous Departments of Transportation throughout the US
- Raised side rails and recessed surface areas protect reflective sheeting from damage during impact
- > Holds up to 2-7/8" wide decal
- > Installs with GMD400 post driver



#### DualFlex<sup>™</sup> Delineators

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- > Standard lengths: 62", 66", 72"
- Post color options: white, brown, yellow, custom colors available - minimum order box 20
- For use on trails, secondary roads, rural 9-1-1 house markers
- Flat, recessed decal surfaces for dualsided decal application
- Raised side rails to protect decals from damage upon impact
- Install with GMD400 post driver
- Reflective sheeting and decals may be applied to one or both sides





3.95"

#### 

- Standard lengths: 62". 66". 72"
- > Post color options: white, brown, yellow, orange, red, blue, green, purple custom colors available minimum order box 20

2 60"

- Rounded back rib for improved impact resistance, pointed and ready for installation
- > Flat surface for decal application
- Recommended for use on straight-aways and for general delineation
- Ideal for use in extreme temperature environments
- > Holds up to 2-7/8" wide decal
- > Install with GMD400 post driver



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#### HiWayFlex<sup>™</sup> Delineators

- > Standard lengths: 62", 66", 72"
- Post color options: white or yellow minimum order box 25
- Our most flexible marker half-moon shape for improved impact resistance
- Ideal for interstate ramps, curves and other high-impact areas
- Designed to withstand repeated bumper and wheel impacts
- Flat side flanges protect sheeting upon impact
- Install with GMD400 post driver
- > General anchor can be installed
- Holds up to 2-7/8" wide decal



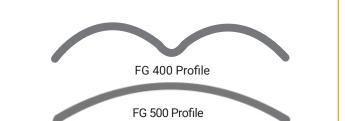
#### **Drivable Ground Mount Delineators | Roadside Markers**



#### Boundary / Survey Markers

- Low-cost, all-purpose post for marking boundaries, right of ways, hiking trails and surveyed property
- Single rib provides extra support and easy installation in hard soil
- > Ideal for non-impact areas
- Reflective sheeting/decals applied to one side only
- > Install with GBD250 post driver
- > Holds a 2-3/8"W decal
- Standard lengths: 66", 72"
- Post color options: orange minimum order box 25 (custom colors available with 3000 foot minimum order)



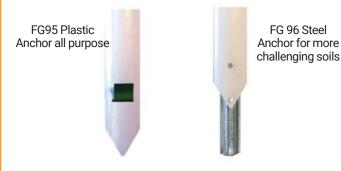


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## FG 400 / 500 Drivable Delineators

- > The first posts to exceed field performance standards using recycled polymers
- Superior outdoor weather-ability and UV stabilized
- > Select from Type 4 or Type 9
- > Soil anchor systems are available
- Custom orders include colors and message decals for utility markers
- > Post color options: yellow, white or grey
- > FG400 sizes: 56", 60", 66", 72", 78"
- > FG500 sizes: 42", 48", 56", 60", 62", 66", 72"

#### Anchoring Options



#### 

#### **Enhancemark Utility Markers**

- > 3-1/2" HDPE post with 3.8" domed enhancer top
- Includes 2 custom decals and plastic T anchor
- Offers 360° visibility with the addition of a 3rd decal
- Recommended for areas with lower impact rate
- > Enhancer available separately
- Standard lengths: 66", 72", 78"
- Post color options: white, yellow, orange
   minimum order box 10
- Enhancer colors: white, yellow, orange, red, blue, green

#### Post Drivers Available:

Manual post driving tools for installing fiberglass posts permit easy ground installation into most soil conditions.

For especially hard or compacted soil, the pilot hole driver is used to simplify the post installation by loosening compacted soil allowing the marker to be driven into the ground.





GMD400 - Manual Post Driver

GP200 Post Puller

- GMD400 Manual Post Driver: For 5' 6' long Tri-Flex, Flex-Tough, Dual-Flex, Hiway-Flex, Sign Post Marker Posts
- > GBD250 Manual Post Driver: For 5' 6' long Flex Boundary/Survey Marker Posts
- > PHD100 Manual Pilot Hole Driver: For installation in especially hard or compacted soil
- > SPD300 Manual Post Driver: For fiberglass snow poles
- > UMD100 Manual Driver Tool: Drives 18" u-channel post anchors into the ground
- > GPP200 Post Puller: Accommodates all post styles





#### **Roadside Markers | Drivable Ground Mount Delineators**

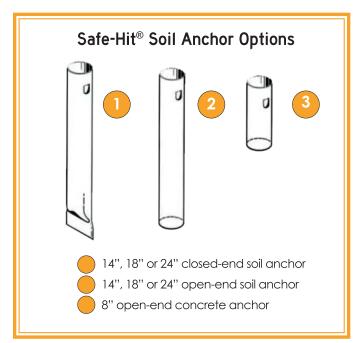
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#### Safe-Hit<sup>®</sup> Soil Anchored Delineators

Safe-Hit's complete line of durable and flexible, soil anchored posts provide delineation and enhance motorist safety on public and private roadways. Typical applications include guide posts, culvert markers, median crossovers, and mile markers.

The Safe-Hit<sup>®</sup> Surface Flexible Soil Anchored Guide Post System includes many features and benefits, including:

- > A unique two part system incorporates the use of a permanent anchor and a replaceable post
- Unlike steel posts, these flexible posts cause minimal damage to impacting vehicles while reducing personal injury
- > Tubular, galvanized anchor is available in various lengths to accommodate different soil conditions
- Permanent anchor can be installed with the use of a hand driver or power equipment
- > The post is easily replaced without having to reinstall the existing anchoring system
- > Sizes: 18", 24", 28", 36", 42", 48"
- > Color options: white, yellow, orange



> Pilot hole tool

Drive shanks and adapters

(For Jackhammer and Piston Hammer Power Installation)

- Manual anchor installation tool
- > SH-6 drive tool adapter
- > Anchor straightening tool
- Post removal tool

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#### **Driveway Markers**

- > 5/16" diameter rod
- High visibility for edge marking
- > Durable in extreme weather conditions
- Flexible to withstand high winds and retain upright position
- Includes 1 band of 5" reflective sheeting and black cap
- Standard lengths: 48", 60", 72"
- Color options: white, yellow, orangeminimum order box 45



#### 

#### **Standard Vinyl and Reflective Decals**

- > NHP, Inc.'s in-house graphics department can create custom messages and re-create company logos for decals
- All decals are coated with a clear UV overlay material to protect decal color from fading
- > Decals are available in non-reflective and reflective materials
- > All federal recreation symbols related to land, water, winter, accommodations/ services, facilities, and directional signage are available
- Standard decal widths: 2-3/8", 2-7/8"
- Various decal lengths available
- > Colors\*: white, yellow, orange, blue, green, black, purple, cobalt blue, and brown \*custom colors are available, and may incur a custom ink charge



#### Surface Mount Delineators | Roadside Markers



#### Great for use in high traffic areas and locations with potential for impact.

Pexco's roadside delineator posts are made from HDPE plastic, and are the quick, maintenance-free solution for better driver awareness. Roadside delineator posts can be placed at critical points along roadways at winding curves, near intersections, and at on-and-off ramps to identify safety hazard areas.

#### $\mathbf{O}$

#### FG 300 Surface Mount

- > Post size: 18", 24", 28", 36", 42", 48"
- > Post colors: yellow, white or orange
- > Post grade: PE, UR, EFX
- > The upright post is the durable and incredibly tough
- > Can fit multiple base options
- Two pins allow for quick and easy replacement of damaged posts



#### FG 300 Heavy Duty Base

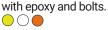
FG 300 Lite Black Base

Standard fixed base for general purpose installations. Installs easily to road surface

Pexco delineator posts utilize a clover leaf design providing far better rebounding than simple round tubes. Curving the sides of the tube changes the moment of inertia and builds up tremendous energy, resulting in a quick rebound when impacted.

# 20-





#### FG 300 Metro Base

Surface mount base for the FG 300 where space is a premium.

## lere



The FG 300 Invisi-Base allows for channelizer

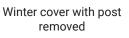
posts to be flush-mounted. An optional winter cover allows post to be removed to accommodate snow plow operations, for an extremely clean installed look.

> FG 300 Invisi-Base













#### DP 200 Series Post

The DP 200 Series post is a 3-inch round channelizer made of polyurethane, the toughest flexible plastic available. To reduce the risk of accidents, place durable polyurethane channelizer posts at critical points along your roadways where safety hazards exist.

- > 3" round channelizer post
- Post size: 18", 28", 36", 42", 48"
- Post colors: yellow, white or orange
- Made of highly durable thermoplastic polyurethane for high impact resistance
- > 360° of reflective visibility
- Stands up to extreme temperatures
- > No metal parts to rust or seize
- > UV stabilized polymers
- > 1-piece post construction
- Simple installation
- NTPEP tested and MUTCD compliant

## DP 200 Black Base

Standard surface mount base with quick-release pins for general purpose applications. Mounts with butyl pads, bitumen, epoxy or anchor bolts.





DP200 post with base





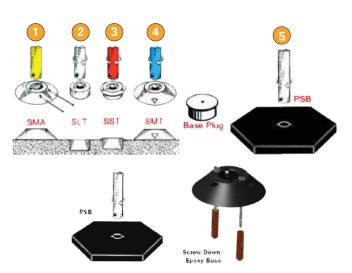
#### **Roadside Markers | Surface Mount Delineators**

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#### Safe-Hit® Surface Mount Delineators

Safe-Hit's durable and flexible posts are constructed of durable linear low density, coextruded polyethylene with ultraviolet inhibitors. They are available with portable bases, surface mount bases or soil anchors. Safe-Hit® surface mount posts have many features and benefits valued by roadway professionals, including:

- Delineating parking construction zones, centerline medians and H.O.V. lanes
- > Bases that feature either pin-lock or twist-lock systems
- > Posts that come in a variety of heights, shapes and colors to accommodate different reflective configurations
- Bases capable of being reused when installed with butyl epoxy is recommended for permanent applications
- > Easy installation on asphalt or concrete
- Twist-lock feature allowing quick replacement, which reduces maintenance crew traffic exposure
- > Sizes: 18", 24", 30", 36", 42", 48", 54"



Surface mount and twist lock base assemblies, for installation of channelizers on asphalt or concrete, include:



SMA standard surface mount base with locking pins for use where posts are permanently installed

- SLT sub-level twist lock base where it is desirable to have the base level with the concrete or asphalt surface. Highly recommended where foot traffic is present
- 3 SST sub-surface twist lock base where a low profile is desired due to vehicular or foot traffic
- SMT twist lock base, for use where delineators or sign posts must be installed, removed and reinstalled periodically



PSB portable base for temporary use of posts and signs

Note: A plastic insert (removable plug) is also available for all bases to protect against dirt accumulation and to protect foot traffic when post is removed.

#### $\bigcirc \bigcirc \bigcirc \bigcirc$

#### FG 300 Interstate Grade Curb System

The FG 300 Interstate Grade Curb System is a lane separation system that provides efficient and cost effective channelization of traffic on freeways, toll-ways, city streets and rail-highway at-grade crossings. This one-piece curb system links together for a continuous "picket fence" effect and consists of modular raised curb sections mountable by emergency vehicles. The Interstate Grade Curb System features our FG 300 EFX uprights, the toughest channelizer posts on the market.



- > Base dimension: 38"L x 8"W
- Low maintenance; super-tough polyurethane posts impact tested at 60 mph
- > Curb sections install in just minutes with one person
- > Installs with 4 bolts, or adhesive for temporary projects
- > Design allows for curved or circular installations for roundabouts
- Only curb and post combination warranty in the industry: 5-year limited prorated warranty on curb unit; 1-year limited warranty on the EFX upright post
- MUTCD Compliant and NCHRP 350 approved (FHWA Letter #WZ-193)

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#### FG 300 Turnpike Grade Curb System

The FG 300 Turnpike Grade Curb System is a raised lane separator with durable upright channelizer posts that provide efficient and cost-effective channelization of traffic on managed lanes, 2-way 2-lane work zones, and other areas where discontinuous channelization is desired. The picket fence effect divides lanes going in the same direction or opposite directions in high-speed, high-volume applications where continuous curb is too costly or not needed. Use where pavement markings alone are not sufficient to safely channelize traffic.



- > Base dimension: 36"L x 8"W
- > Low maintenance; super-tough polyurethane posts impact tested at 70 mph
- Engineering polymer alloys for superior toughness at all temperature extremes
- > Engineered to stand up to the toughest of conditions
- > Only requires 4 bolts per unit, quick and easy to install
- Installs with bolts, or adhesive for temporary projects
- > Only curb and post combination warranty in the industry: 5-year limited prorated warranty on curb unit; 1-year limited warranty on the EFX upright post
- MUTCD Compliant and NCHRP 350 approved (FHWA Letter #WZ-282)



#### Surface Mount Delineators | Roadside Markers

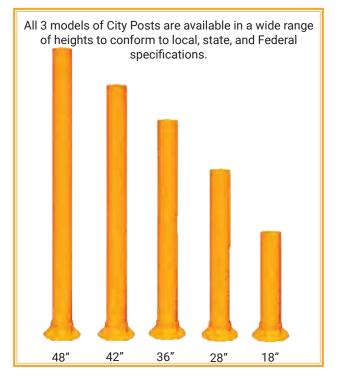
#### **Pexco® City Post**

Designed for superior durability and quick replacement, this 3-inch round channelizer post sets new standards for easeof-maintenance and ultra-high durability. City Posts remain flexible, even at extremely low and high temperatures (-20°F to +160° F), and return to an upright position after more than 100 impacts at 70mph (112 km/h). The City Post was created using advanced engineering resins to provide maximum strength and superior durability. The solid, one-piece polyurethane construction absorbs impacts and rebounds instantly.

- > 3" round channelizer post
- > Thermoplastic Polyurethane for high impact resistance
- > Crash friendly design
- > 1-piece construction with no mechanical springs to fail
- > 360° of visibility with factory-applied reflective sheeting
- > Installs in either concrete or asphalt
- > Standard post colors: white, yellow, fluorescent orange, and black
- > UV resistance keeps the City Post looking fresh and new after prolonged periods in the elements
- > Impact tested, MUTCD, NCHRP 350 compliant and MASH-16
- > 1-year limited warranty



\*These colors require a minimum order quantity of 250\*



City Post Family of Post Model Comparison									
Post Model	SM	GD	EAC						
Rating	Best	Best	Best						
Impacts @70mph	100	100	100						
1-Year Warranty	Yes	Yes	Yes						
Anchoring	Bolts	Ероху	Anchor Cup						
Standard Colors	White, Yellow, Fl Orange, Black								



#### **Roadside Markers | Shur-Tite® Surface Mount Delineators**

#### 

#### **U-Flex® Surface Mount Delineator**

U-Flex® posts can be mounted with the fixed surface mount base, curb base, or the ground mounted anchor making the U-Flex® system the most versatile on the market today.The flexible square to round post is a simple one-piece, nonmetallic molded design that absorbs impacts with immediate rebound response. The optional cap can be attached with our Shur-Weld process that mates the cap to the post with an unsurpassed adhesion method.

- > Utilizes the patented U-Flex® square to round design
- > Designed for HOV, managed lanes, & bike lanes
- > Highly visible 3" post
- > Post replacement independent of base
- > Premium UV added for extended use
- > Absorbs impacts with immediate rebound response
- > Sizes: 18", 28", 36", 42", 48", 54", 60"



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#### **Surface Mount Base**

- > Compatible with U-Flex® and Shurflex® posts
- > Bolt down installation or epoxy installation
- > Standard colors include white, yellow, orange, black and green
- > Custom colors available upon request with minimum order of 200 units







## Standard posts are round top providing 360° of reflectivity.

#### 

#### Shur-Flex® Surface Mount Delineator

Shur-Flex® posts are manufactured with greater wall thickness to provide structural integrity. The flexible square to round joint is a simple one piece, non-metallic molded design that withstands multiple impacts assuring long-life in corrosive environments All post colors or styles are interchangeable with any product utilizing the Shur-Flex® system. Making the Shur-Flex® system the most versatile on the market today. Multiple base options. 7"x 7", 7"x 10", and slope base.

2.25" OD

- > Utilizes the patented Shur-Flex® system
- Non-mechanical flexible design is self-righting upon impact
- Multiple reflectivity options
- Provides 360° of reflectivity
- > Premium UV added for long lasting color
- > Base can be bolted or epoxied
- NTPEP tested, MUTCD compliant



#### **Surface Mount Bolt Down Installation**

- Use supplied 5/8" green nylon plugs and 1/2" X 3 1/2" hex lag bolts with washers. Using a Hammer Drill with an Industrial 5/8" diameter bit, drill 4 ea -5/8" diameter holes 3-1/2" deep using the Base as your pattern. Blow the holes clean.
- Insert the nylon plugs into the holes so that the top of the plugs are flush with the surface of the roadway (the top of the plugs must fit flush with the surface of the roadway).
- Position the Base over the holes with plugs in place and screw the 1/2" lag bolts with the washers into the nylon plug and tighten. Use a 3/4" socket to tighten bolts snuggly to a (torque rating of min 30 – max 38 ft lbs). A impact wrench is recommended, however "DO NOT OVER TIGHTEN".
- After securing the base, insert the post into the base and secure with the L-Pin.

#### Shur-Tite® Delineators | Roadside Markers



#### 

#### Shur-Curb® Traffic Separator

The SHUR-CURB® Traffic Channelizer incorporates a round post capable of taking impacts omnidirectionally and is FHWA accepted. Post is self-righting and is designed to withstand multiple impacts; providing a long lasting, extremely durable product requiring little field maintenance. Posts are manufactured with greater wall thickness to provide structural integrity. Ideal for mounting object markers and other panel products for even greater visibility. Standard posts are round top providing 360° degrees of reflectivity. The flexible square to round joint is a simple one piece, non-metallic molded design that withstands multiple impacts assuring long-life in corrosive environments.

#### 

#### **U-Flex® Flush Mount Delineator**

The flexible square to round post is a simple one-piece, non-metallic molded design that absorbs impacts with immediate rebound response. Posts are manufactured with urethane for high speed impact resistance. The 2.5" anchor can be installed at multiple depths by increasing the metal cup by 1.5" increments. A 2" cored hole is required to install into concrete or asphalt with epoxy. The cap is attached with the Shur-Weld process that mates the cap to the post with an unsurpassed adhesion method.

- Designed for HOV, managed lanes, & bike lanes
- > Highly visible 3" OD post
- > Post replacement independent of base
- > Premium UV added for extended use
- Easily removed and capped for storage in winter
- > Heights: 18" up to 36"

#### $\bigcirc \bigcirc$

#### **U-Flex® Steel Flange Cup**

- > Use in concrete or asphalt
- > Epoxy installation



For deeper foundations, multiple extensions can be added in increments of 1.5" lengths.



#### Shur-Curb® Base

Each 40" SHUR-CURB® has 2ea. - 3M raised pavement markers installed on the top of the curb for maximum reflectivity at night.

- > 3 component design for quick and easy maintenance
- Added premium uv inhibitor for long lasting color
- Withstands multiple omnidirectional impacts
- Reflectivity included on base and post
- The Shur-Curb® base is 10" x 40" and has a low profile design
- MUTCD compliant; FHWA accepted
- Quick and easy installation and post replacement

#### 

#### **Shur-Flex® Driveable Delineator**

The SHUR-TITE® Driveable Delineator is multi-hit, omni-directional and self-righting; providing a long lasting, extremely durable product requiring little field maintenance. System is ideal for use as object markers, allowing for the discontinued use of costly 12"x 48" "sergeant stripe" aluminum panels which are very susceptible to downings in high wind conditions.

- Multiple hit & self-righting
- Maintenance cost savings due to durability, minimizing change-outs
- > NTPEP tested, MUTCD compliant
- Anchor is 2" x 12ga. square perforated tubing
- > Post diameter: 2.375" OD
- > Heights: 18" up to 72"

Reflective sheeting options include 3"x4", 3"x8" and 3"x12". Sheeting can also be wrapped for 360 degree visibility.

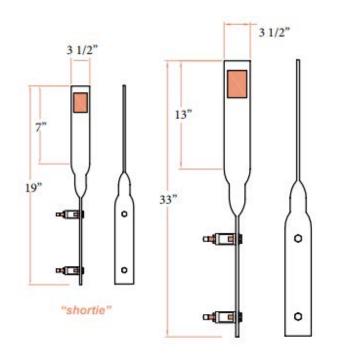
#### **Roadside Markers | Shur-Tite® Delineators**

#### 

#### Shur-Tite® Cable Barrier Delineator

Made from impact resistant recycled composite material designed for mounting on cable barrier posts. Posts are manufactured with greater wall thickness to provide structural integrity allowing it to hold up to wind and snow plow windrows. Standard posts are permanently sealed and partially flattened to accommodate a 3" x 3" and up to a 3" x 12" piece of reflective sheeting. Installed with two beam clamps or self-tapping screws.

- > Utilizes the patented U-Flex® square to round design
- > Mounts easily to post with flange-bracket or self-tapping screws
- > Fully customizable sheeting options
- > Manufactured from post consumer recycled materials



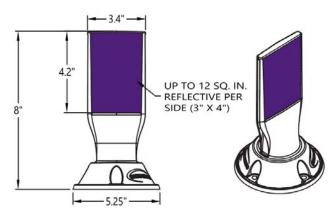
The "shortie" was designed to accommodate the passing of snow plows.

- Post size 19" or 33"
- Designed to increase visibility of cable barrier systems
- Highly visible reflectivity
- Premium UV added for long lasting color
- > Hardware included
- Fast and easy installation
- > MUTCD compliant



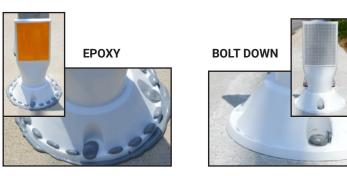
Posts are manufactured with greater wall thickness to provide structural integrity allowing it to hold up to wind and snow plow windrows. Made from impact resistant prime hdpe copolymer designed for mounting on concrete traffic barriers. Posts are sealed and flattened to accommodate a 3" x 4" piece of reflective sheeting. Installed with adhesive, concrete rivet anchors or tapcon screws.

- > Designed to increase visibility of concrete traffic barrier systems
- > Post size 8"
- > Highly visible reflectivity
- > Fast and easy installation
- > HDPE bright white base
- > Premium UV added for long lasting color
- > Base can be bolted or epoxied
- > MUTCD compliant
- > Fully customizable sheeting options
- > Savings in maintenance costs due to durability



#### **Installation Options**

- > (4) .3" diameter holes for bolt down installation
- > Channel ring with holes for epoxy adhesion







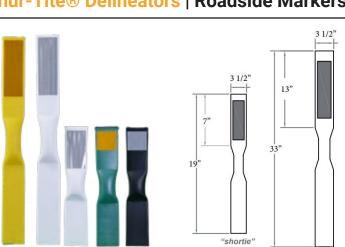
#### Shur-Tite<sup>®</sup> Delineators | Roadside Markers

#### 

#### Shur-Tite® Guardrail Post "Flat Mount" Delineator

Easily mounts to wood, steel and synthetic guardrail posts or block-outs. Manufactured from recycled materials.

- > Post size 19" or 33"
- > Designed to increase guardrail visibility
- Up to 13" flattened area for a greater reflective footprint >
- Mounting hardware included >
- Installed with two self tapping screws on metal or two lag screws for wood post
- Made from impact resistant recycled composite material > designed for mounting on guardrail posts or block outs
- MUTCD compliant



#### $\bigcirc$

#### Shur-Snap CTB Delineator

A concrete barrier delineator that mounts to the top or side of the barrier wall with the option for bi-directional sheeting.

- Top Snap or Side Snap design >
- Designed for higher visibility of concrete traffic > barrier systems
- Fully customizable sheeting options >
- Mounts with hammer drive anchors or tapcon > screws
- Base can be bolted or epoxied >
- Available with a 4 x 4 reflector panel in multiple sheeting specification offering up to 12 square inches of max reflectivity per side
- > MUTCD compliant

#### **Customize your Shur-Snap CTB Delineator by choosing sheeting** grade and color for each side.



## Shur-Flex<sup>®</sup> Snow-Pole Guide Post Utilizes the proven SHUR-FLEX® Sq2Rd Insert, a

#### sturdy, non-metallic, one component piece that holds up to the rigors of roadway abuse.

- Available in heights from 72" 96'
- Utilizes the patented Shur-Flex® system
- Telescoping design allows snow-poles to be lowered during the summer
- 360° multiple hit and self righting
- Easy Installation and post replacement >
- Anchor is 2" x 12ga. square perforated tubing
- Non-mechanical flexible design is self-righting upon > impact



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#### Roadside Markers | Impact Recovery Systems®, Pedestrian Crosswalk Safety



#### Put an emphasis on pedestrian safety.

Impact Recovery Systems<sup>®</sup> manufactures flexible, durable, high impact traffic control devices for both permanent and temporary applications. These products are designed to give upon impact, then quickly return to their original position. The heart of the devices is a patented reactive spring system - making their products the only ones on the market today that utilize a mechanical device to increase product durability. Use of the most durable sheeting on the market, as well as their quick release technology, allows upright replacement in less than five seconds.

Applications: Pedestrian Crossing · School Zones · Airports · Unsignalized Intersections · Special Events

#### $\bigcirc \bigcirc$

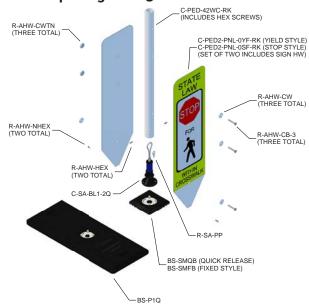
#### In-Street Pedestrian Crosswalk Sign

The In-Street Pedestrian Crosswalk Sign provides enhanced conspicuity at unsignalized intersections in order to alert motorists to local laws concerning yielding to or stopping for pedestrians in crosswalks. The effectiveness of these pedestrian safety signs has been repeatedly supported by independent testing to demonstrate distinct changes in motorist behavior and accident incidence following installation.



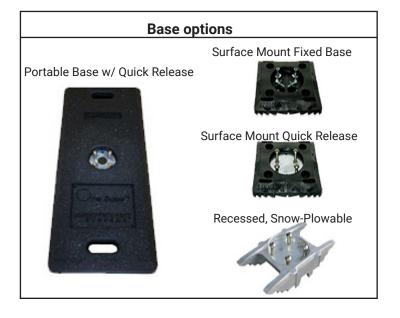
- > 12"x44" panel (47"H overall)
- > 12"x36" Fluorescent Yellow Green sheeting
- > Flexible polyethylene construction
- > Single or double sided
- > Anti-twist feature
- > Stop, Yield or School options

#### Replacement parts guide



R-MP2-CAP





#### Impact Recovery Systems<sup>®</sup>, MP Flex Post<sup>®</sup> | Roadside Markers



## Impact Recovery Systems'® products are flexible, durable, high impact traffic control equipment for both permanent and temporary applications.

#### 

#### MP Flex Post<sup>™</sup>

MP Flex Post<sup>\*</sup> is a durable, high-performance flexible polyethylene delineator and channelization post which is available in the various styles shown below. It is ideal for exit lane delineation, marking changes in road alignment, centerline traffic separation, bike lane protection and urban turn restrictions.

It can also be used effectively as an opposing traffic lane divider and to delineate the edge of a pavement drop off where space limitations do not allow the use of larger systems.

#### Product Specifications for all MP Flex Posts<sup>™</sup>

- > Post diameter (0.D.): 2-3/8"
- > Post colors: white, yellow, orange, red, gray, black, green
- > Post Heights: 28", 36", 42", 48"
- > Flexible HDPE plastic
- > Reflective sheeting types: Type 4, Type 9 or Type 11
- > Reflective sheeting colors: white, orange, yellow, red, green or blue
- > Bases sold separately; spring type must be specified at time of order
- > MUTCD compliant
- > Sustained 50 hits at 55 mph during testing
- Anti-twist reactive spring assembly rebounds post to its original upright position when struck

#### Post Spring Type

Fixed: For use with fixed bases. Upright must be secured to the base with tightened bolts.

**Quick Release:** A quick release pull pin is added to our standard post spring type for easy attachment and removal of uprights when used with quick-release bases. Change out or remove products in less than five seconds without the use of tools or special equipment.

**Drivable:** For use with in-ground drivable base fitting only. This spring type is not interchangeable with standard Impact Recovery Systems<sup>®</sup> uprights. It is designed for soil installations.



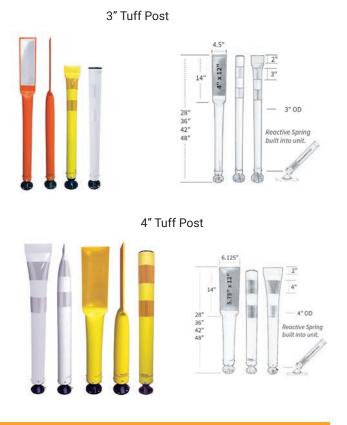
#### 3" and 4" Flexible Tuff Post®

Tuff Post 3" flexible posts are a high performance channelizer designed to meet the harsh demands of high speed and high traffic areas. Tuff Post has been tested to sustain 50 impacts at 50 mph with little damage to the unit and to the impacting vehicle, while remaining upright with no vertical listing.

The 4" large diameter, high performance channelizer is designed to meet the harsh demands of traffic delineation while providing high target value. These 4" posts are more conspicuous than standard posts and raise driver awareness.

Tuff Post is ideal for exit lane delineation, head-to-head traffic separation, urban turn restrictions, edge line delineation, or anywhere that durable, flexible, high performance channelization is required.

Tuff Post's patented reactive spring system ensures the post will return to its original position impact after impact, reducing replacement costs.



Base options shown on previous page.

#### **Bike Lane Delineator**

#### Low Profile Bicycle Lane Separator

Impact Recovery Systems® offers ideal bike lane traffic delineation systems. This safety bollard system is impact resistant and gives way using a patented internal spring system for increased cyclist safety.

MP Flex Post uprights provide 360° visibility and reflectivity, while the curbing system utilizes glass bead technology for long lasting, highly visible ground reflectors. The bollard base is sleek and low profile to provide maximum safety while providing the psychological barriers needed to keep bike lanes safe. These delineators are ideal for use in conventional bike



lanes, buffered, contra-flow, raised-cycle tracks and even twoway cycle tracks.



Installation done by Garden State Highway Products, Inc. in downtown Philadelphia, PA.



#### Impact Recovery Systems<sup>®</sup> ΩmegaPost<sup>1</sup> | Roadside Markers

#### 2" ΩmegaPost

High Speed High Performance Delineator

Recommended Uses: Managed lanes • HOV lanes • Bike Lanes • Urban turn restrictions • High speed traffic

#### **Specifications**

- Post is constructed of flexible plastic that > is resistant to ultraviolet light, ozone, and hydrocarbons
- > Abrasion resistant Type V reflective sheeting
- Galvanized keeper pin requires no special tools >
- Meets MUTCD specifications >
- Category 1 self-certified device >
- NTPEP tested to 200 hits at 70 mph >

Two Methods of Installation:

Optional 3" bands of flexible retroreflective sheeting Sheeting colors available: white, orange, yellow, red, green or blue **Reflector Options** 

#### **Base Options**

1. Anchor Kit

This product can only be used with Quarter Turn Surface Mount base in:

2. Epoxy Kit -

**High Speed Application** 



ΩmegaPost Delineator	Height	Post Diameter	Post Colors	Optional Sheeting	R. Sheeting Type	R. Sheeting Colors	Base Type
ΩmegaPost 2" Open Top	28" 36" 42"	2.375″	Yellow 2.375" Orange White	Two 3" bands of reflective sheeting	Type V High Intensity Abrasion Resistant Sheeting	White Orange Yellow Red Green Blue	Surface Mount Quarter Turn Base
ΩmegaPost 2" Cap							
ΩmegaPost 2" Long Squeeze							





1. Insert the threaded post into base with holes aligned 90 degree to keeper pin slot.





2. Push down to insert the 3. Install L-shaped keeper pin post and rotate clockwise through base and into post hole until fully seated.

such that the pin lies flat in the retention slot on the top of the base.

#### Roadside Markers | Impact Recovery Systems®, Post Selection Chart

**Post Selection Check List** Post Type Post Color White (T1, T2, T3, T4) Yellow (T1, T2, T3, T4) Type 2 Туре 3 Type 4 Type 1 Orange (T1, T2, T3) Grey (T1) Black (T1) 2" 3" 4" 2.375" ΩmegaPost Red (T1) Green (T1) Post Top **Post Height** 28" T1, T2, T3, T4 36" <sup>T1, T2, T3, T4</sup> 42" T1, T2, T3, T4 48" T1, T3, T4 Black Cap Short Squeeze Open Top Long Squeeze T1, T2, T3, T4 T1, T2, T3, T4 T1, T3, T4 T1, T2, T3, T4 **Sheeting Qty** Installation **Sheeting Color Sheeting Grade** One Multi-Purpose Sleeve Anchors White High Intensity (Std Long Squeeze) Green **Concrete Screw Anchors** Two Yellow Red (Std Tubular) Two-Part Epoxy **Diamond Grade** Orange Blue Other Super Bundy® Pads Base ..... Recessed, Socket Drivable Quarter Turn Surface Mount Surface Mount TuffCurb® XLP<sup>™</sup> TuffCurb<sup>®</sup> Snow-Plowable Fixed Base Quick Release ΩmegaPost **Base Color** White 5-9 Yellow 5-9 Black 7-9 Green 6 Purple <sup>6</sup> Other:\_

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#### Impact Recovery Systems®, Parking Lot Signs | Roadside Markers



#### A well-organized parking lot can mean the difference between traffic fluidity and traffic congestion.

4.060

PARKIN

With Impact Recovery Systems'<sup>®</sup> full line of parking lot signs and safety systems, vehicles and pedestrians can move through the parking lot quickly, efficiently, and most importantly, safely.

#### Lightweight • Impactable • Durable • No Warping • Fully Customizable • Easy to Install

#### Sta-Rite<sup>®</sup> Sign Posts

Light weight impactable aluminum sign posts Designed to withstand bumper hits and return to original position, without damaging the sign or vehicle.

Bollard Enhanced Signs – The sign post is available with an outer yellow bollard (optional) constructed of durable plastic.

- Post is constructed of a 2" diameter aluminum, powder coated white; enhanced yellow bollard is made of 4"D x 39"H durable plastic
- > Choose from 60", 78", or 102" overall height
- 78" post is ADA compliant designed to place a handicap sign at 60" above ground level, per ADA specifications
- > 102" post is MUTCD compliant for pedestrian travel zones placing the bottom of a 12"x18" sign 7' above the surface, per MUTCD specification
- > The sign post supports up to a 18"x24" sign
- > Universal sign post brackets are included

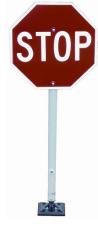
#### Portable or Fixed Stop Sign

#### Stop sign for parking lot applications

The 5' Parking Lot Stop Sign was designed for use in parking lots and other areas not covered by statutory requirements. It is a flexible parking sign for areas prone to occasional vehicle impacts.

The 5' Stop Sign comes standard with our patented anti-twist reactive spring system that will ensure the sign will stay in place after impact.

- Post and panel is constructed of flexible polyethylene plastic that is resistant to: ultraviolet light, ozone, and hydrocarbons
- Unit has an anti-twist reactive spring assembly that rebounds to upright when struck



#### Handicapped Parking Sign

Impactable parking lot signs

Handicapped parking signs are perfect for high traffic parking lot locations and are especially useful for lots without car stops. Much more durable than steel posts, these signs are designed to withstand bumper hits and return to original position, without damaging the sign or vehicle. This ADA compliant sign (see your local ADA compliant guidelines for details) utilizes reflective sheeting and is available with or without van accessible legend.



- > Post and panel is constructed of flexible polyethylene plastic that is resistant to: ultraviolet light, ozone, and hydrocarbons
- > Unit has an anti-twist reactive spring assembly that rebounds to upright when struck
- > 12"x 18" white reflective sheeting with blue and green ink
- > White post and panel made of HDPE
- Please see our Sta-Rite<sup>®</sup> sign post line that supports taller heights
- > This product can be used with any base see page 157 for base options



#### Roadside Markers | Impact Recovery Systems®, Traffic Panels



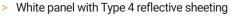
#### Directional traffic panels are used to give notice of a change of alignment in the direction of traffic.

Road crews and public safety officials use many kinds of traffic panels in today's world. They serve a vital role in today's rapidly changing infrastructure environment.

#### **Hazard Markers**

Hazard Markers are ideal for marking obstructions within or adjacent to the roadway. Hazard Markers are perfect for high water crossings, as well as protecting guardrail and bridge approaches.

- > Sizes: 8"x24", 12"x24" or 12"x36"
- > Available in a single or double sided version
- Come standard with patented anti-twist reactive spring assembly that returns the panel to its original position after impact to ensure product longevity and reduced replacement costs



#### **Object Markers – Type II**

Type II Object Markers may be used on island approach noses to indicate the presence of a raised curbs, other obstructions or anywhere that a Type II is appropriate.

- > Size: 12"x6"
- Post and panel is constructed of flexible plastic that is resistant to: ultraviolet light, ozone and hydrocarbons
- Unit has an anti-twist reactive spring assembly that rebounds to upright when struck to ensure product longevity and reduce replacement costs
- > Federal acceptance: WZ-2

#### All of these products can be used with a drivable base or a fixed base. Please specify at the time of order.

#### Sergeant Stripes

#### Higher target value object marker

Sergeant Stripes are used in lieu of Type II object markers when more target value is required or any area where traffic is directed around two sides of an object. Sergeant Stripes are ideal for marking island ends or in advance of impact attenuators in a highway gore area.

- > Sizes: 12"x24" or 18"x36"
- Post and panel is constructed of flexible plastic that is resistant to: ultraviolet light, ozone, and hydrocarbons
- Unit has an anti-twist reactive spring assembly that rebounds to upright when struck
- > Meets MUTCD specifications
- > Federal acceptance WZ-2

#### **K-Markers**

#### Mark obstructions near or within a roadway

K-Markers tubular markers may be used on island approach noses to indicate the presence of a raised curb or other obstruction or anywhere that a Type II Object Marker is appropriate.



- > Size: 12"x16"
- Post and panel is constructed of flexible plastic that is resistant to: ultraviolet light, ozone, and hydrocarbons
- Unit has an anti-twist reactive spring assembly that rebounds to upright when struck
- > Federal Acceptance: WZ-2

#### Impact Recovery Systems<sup>®</sup>, Traffic Panels | Roadside Markers

#### Vertical Panels

#### Work zone lane separators/ channelizers

Vertical Panels may be used to channelize traffic, divide opposing lanes of traffic, separate traffic lanes, for lane closures, or in place of barricades where space is limited. They are ideal for use in work zones where changes in road alignment or lane shifts can create motorist confusion.



> Sizes: 8"x24" or 12"x24"

#### **Opposing Traffic Lane Dividers**

#### Work zone opposing lane delineators

Opposing Traffic Lane Dividers are part of the highway safety

systems and provide work zones with more safety where traffic flow changes may become confusing for motorists. OTLDs are used at centerline to separate opposing traffic on two-lane, two way operations,

OTLDs come standard with our patented anti-twist, reactive spring system that returns the panel to its original position after impact, to ensure product longevity and reduced replacement costs.

#### **Temporary Stop Sign**

#### **Emergency and construction** situations

The 5' Temporary Stop Sign was designed for use as a temporary system and is ideal in emergencies such as power outages or incident management situations. In emergency situations when time is critical, this sign transports easily and takes only seconds to deploy. The Temporary Stop Sign comes standard with a patented anti-twist reactive spring system that will ensure the sign will stay in place after impact.





#### Base options shown on page 152.

#### One Base® Portable Sign Stand

#### Work zone roll-up sign stand

The One Base® Portable sign stand is utilized in work zones to alert motorists of approaching road work. This sign stand is truly universal and can be adapted to any of the 36" or 48" roll-up signs on the market. The Portable Sign Stand is easy to use and has no folding legs that can



interfere with vehicle or pedestrian travel ways.

#### **Chevron Panels**

#### **Directional warning signs**

Chevron Panels may be used as an alternative or supplement to standard delineators and to the large arrow sign. The chevron sign is intended to be used to give notice of a sharp change of alignment in the direction of traffic.

Chevron Panels are

available in a 5' version for soil and pavement installations, and are also available in a 36"

version designed for installation on jersey barriers. Panels come standard with a patented anti-twist reactive spring system that returns the panel to its original position after impact to ensure product longevity and reduced replacement costs.

- Post and panel is constructed of flexible plastic that is resistant > to: ultraviolet light, ozone and hydrocarbons
- Unit has an anti-twist reactive spring assembly that rebounds to upright when struck
- Meets MUTCD Specifications >
- Federal acceptance: WZ-2

Please use the diagrams shown here when ordering vertical panels, hazard markers and chevrons.



(Placed on the right-hand side of the road; directs traffic to the left)



(Placed on the left-hand side of the road; directs traffic to the right)

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#### Roadside Markers | Impact Recovery Systems®, SlowStop Guarding Systems



#### A revolutionary rebounding guarding system.

The SlowStop System helps absorb energy, reduce damage to vehicles and assets, and protect personnel.

#### **Rebounding Bollard**

During a collision, the kinetic energy of the impact is absorbed by an elastomer hidden in the base of the vertical post. The post is able to tilt approximately 20° as it progressively absorbs energy, softening the impact. After the impact, the post returns upright, leaving your guard intact and ready to perform again.

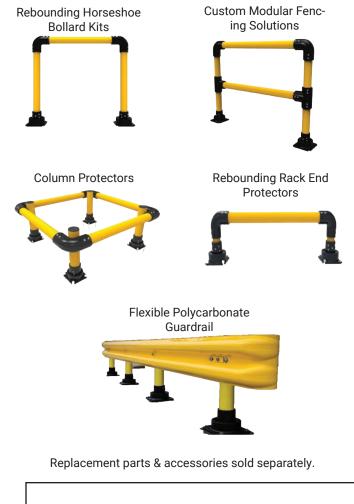
SlowStop is designed as a frangible, easily maintained, modular system that prevents damage to concrete and structural floors. The system is made up of four main components: the post (standard schedule 40 pipe), base, adapter and the energy absorbing elastomer. The system is installed using four to eight concrete anchor screws to secure the unit to concrete. Modular

connectors create fences, corner guards, column protectors and rack end guards. Each piece can easily be replaced should damage occur.



#### **Guarding Solutions**

SlowStop guarding systems are modular and expandable to meet all your protection needs. With the cast-iron SlowStop elbow, tee, and cross-shaped tubular joints, you can easily configure custom guarding such as u-shaped brackets, safety railings, protection buffers, fences and guardrail systems.



For more information, call your Account Executive! Call 800.338.5685 or email sales@nationalhighway.com

## Miscellaneous Safety Products Providing all your safety needs.



#### Miscellaneous Safety Products | Sign Frames



#### Durable, affordable and versatile enough for any business need.

Sign frames are a means of communicating to a crowd. These plastic sign frames can be internally or externally ballasted and serve a multitude of functions. Pictured here is an assortment of hollow plastic sign frames - each with its own unique applications. Our inhouse design experts can create a custom printed insert for your sign frame. Call an Account Executive at 800.338.5685 to discuss your needs.

#### 

#### Signicade<sup>®</sup>

- Outside dimensions: 45"Hx25"Wx3"D
- Weight: 18 lbs. >
- Recessed sign area helps to > protect sign faces
- Holds two signs, 24"Wx36"H >
- Molded-in handle for easy > portability



#### $\bigcirc \bigcirc \bigcirc \bigcirc$

#### Squarecade<sup>™</sup> 36

- Outside dimensions: > 36"HX25"Wx3"D
- Weight: 17 lbs. >
- Recessed sign area helps to protect sign faces >
- > Holds two signs, 24"Wx24"H
- Features "click lock" hinges for > a positive interlock in the open position
- > Can be internally ballasted with sand



#### Squarecade<sup>™</sup> 45

- > Outside dimensions: 45"HX25"Wx3"D
- > Weight: 18 lbs.
- > Recessed sign area helps to protect sign faces
- > Holds two signs, 24"Wx24"H
- Features "click lock" hinges for > a positive interlock in the open position
- Can be internally and externally > ballasted with sand





#### $\bigcirc \bigcirc \bigcirc \bigcirc$

#### Narrowcade®

- Outside dimensions: 45"HX13"Wx3"D
- Weight: 11 lbs.
- Holds two signs, 12"Wx24"H
- Recessed sign area helps to protect sign faces
- Features "click lock" hinges for a > positive interlock in the open position
- Can be internally and externally > ballasted with sand



#### Minicade<sup>®</sup>

- Outside dimensions: 36"HX13"Wx3"D
- Weight: 10 lbs.
- > Holds two signs, 12"Wx24"H
- Recessed sign area helps to protect > sign faces
- Features "click lock" hinges for > a positive interlock in the open position
- Can be internally ballasted with > sand



Signicade



800.338.5685 • www.nationalhighway.com



#### Sign Frames | Miscellaneous Safety Products

#### $\bigcirc$ Signicade<sup>®</sup> Deluxe

- Outside dimensions: 46-3/8"Hx27-1/8"Wx3-1/8"D
- Weight: 20 lbs.
- Change signs in seconds with patented > Quick-Change<sup>™</sup> feature, signs easily slide in and out
- Holds two signs, 24"Wx36"H up to > 3/16" thick
- Stay Tabs<sup>™</sup> ensure signs stay securely in place >
- > No maintenance, all plastic, use indoors and out
- No tape. Velcro<sup>®</sup> or screws needed >
- Hinges lock in open position, prevents over-extended sign > faces
- Can be internally ballasted with sand

#### $\bigcirc$ Signicade® MDX

- > Outside dimensions: 31-1/2"Hx20"Wx3"D
- Weight: 8 lbs. >
- A-frame with narrow footprint and easy to move
- Medium sized version of the popular > Signicade® Deluxe
- Holds two 18"Wx24"H signs up to > 3/16" thick
- Quick-Change<sup>™</sup> feature, signs easily slide in and out; no tape, velcro or > screws needed
- "Stay Tabs" ensure signs stay securely in place >
- No maintenance, all plastic, use indoors and out >
- Can be internally ballasted with sand

#### $\bigcirc$

#### The Metropolitan<sup>®</sup>

- > Outside dimensions: 45-1/2"Hx26-3/4"Wx3-1/2"D
- Side dimensions: >
  - Top: 3-3/4"
  - Bottom: 22-1/2"
  - Overall height: 29-1/2"
- > Weight: 24 lbs.
- > Six signs per frame 360° messaging
  - Two 24"x36" signs
  - Two side signs Two sided top rider
- > Wheels for easy movement
- Quick-Change<sup>™</sup> feature, signs > easily slide in and out; no tape, velcro or screws needed
- Arched top design for no visible hinges
- Customizable nameplate >
- "Stay Tabs" hold main signs securely in place >
- Can be internally ballasted with sand

#### $\bigcirc \bullet$

#### The Billboard

- Outside dimensions: 58"Hx39"Wx3-1/8"D
- > Weight: 45 lbs.
- Twice as big as a Signicade®, perfect for eye-catching outdoor advertising
- Six signs per frame 360° messaging
- Two 36"x48" signs up to 3/16" thick
- Two side signs
- Two sided top rider
- > Wheels for easy movement no installation needed
- Quick-Change<sup>™</sup> feature, signs easily slide in and out; no tape, velcro or screws needed
- "Stay Tabs" hold main signs securely in place
- > Can be internally ballasted with sand

#### $\bigcirc$

- Quik Sign<sup>®</sup> > Outside dimensions: 31-1/2"Hx26"Wx2"D
- > Weight: 7-1/2 lbs.
- Quick-Change<sup>™</sup> feature, signs easily slide in and out no tape, velcro, or screws needed
- Holds two signs, 24"Wx18"H up to 3/16" thick
- "Grabber Hinges" hold a sign rider -24"Wx6"H
- > All plastic sign frame - no rust, splinters, discoloration or maintenance
- Molded-in handle assures easy portability
- Stacking lugs nest into each other when units are stacked which prevents sliding

#### $\bigcirc \bullet$

#### SimpoSquare<sup>™</sup> 20 or 24

- > SimpoSquare 20:
  - Two 20"x20" signs per frame up to 3/16" thick
  - Outside dimensions: 22"Wx26-1/2"H
  - Weight: 5-1/2 lbs.
  - Sign rider: 22"Wx6"H
- > SimpoSquare 24:
- Two 24"x24" signs per frame up to 3/16" thick
- Outside dimensions: 26"Wx32-1/4"H
- · Weight: 7 lbs.
- Sign rider: 24"Wx6"H
- Change signs in seconds
- Quick-Change<sup>™</sup> feature, signs easily slide in and out; no tape, velcro or screws needed
- "Stay Tabs" ensure sign stays securely in place
- Grabber hinges hold a Sign Rider and also keeps frame from opening too far
- Molded handle for easy portability
- Stacking lugs keep stacked frames from shifting during transport
- Can be internally ballasted with sand >



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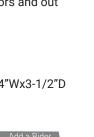
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**One Fran** 

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#### Miscellaneous Safety Products | Sign Frames

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#### SimpoSign® II

- Outside dimensions: 24-3/8"Wx 37-1/4"Hx2"D
- Weight: 10 lbs. >
- > Holds two 22"x28" signs up to 3/16" thick



- Textured feet help to secure frame on > smooth surfaces and dig into soft ground or gravel
- Stabilizing brace prevents accidental spreading or closing of the sign faces
- > Can be internally ballasted with sand

#### Wind Signs with Quick-Change<sup>™</sup>

- With patented Quick-Change<sup>™</sup> feature, signs easily slide in and out and stay securely in place
- No screws, Velcro® or tape needed to attach signs
- Plastic base has improved > stability
- Sand flows to outer edges increasing stability
- Additional feet on base, steadies unit on uneven ground
- Can be internally ballasted with > sand

#### Wind Sign Deluxe with Quick-Change<sup>™</sup> Frame

- Holds signs 28W"x44H" up to 3/16" thick
- Dimensions (frame only): > 30"Wx51"Hx2-1/2"D
- Dimensions (base only): > 29-1/2"Wx6-1/4"Hx24"D
- **Dimensions assembled:** > 30"Wx58-1/2"H
- Total weight assembled: 31 > lbs.
- Wind Sign Deluxe resists head-> on winds up to 50 mph

#### Wind Sign II with Quick-Change<sup>™</sup> Frame

- > Holds signs 24W"x36H" up to 3/16" thick
- Dimensions (frame only): 26"Wx43H"x2-1/2"D >
- Dimensions (base only): 29-1/2"Wx6-1/4"Hx24"D
- Dimensions assembled: 29-1/2"Wx50-1/2"H >
- Total weight assembled: 26 lbs.
- > Wind Sign II resists head-on winds up to 60 mph

#### Patented Quick-Change<sup>™</sup> feature Holds two signs, 24"Wx36"H up to 3/16"

**Econo Classic** 

42-3/4"Hx2"D

Weight: 11-1/2 lbs.

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>

thick

A durable A-Frame at an economy price

Outside dimensions: 26-1/2"Wx

- Molded-in stacking lugs nest into each other >
- Prevents sliding and shifting of stacked sign > frames
- Built-in stabilizing and weigh down brace >

#### Wind Signs w/Snap Frame

- Coil springs resist strong winds and return the sign to an upright position
- Change signs quickly and > easily
- Snap open, place graphic, snap close
- Aluminum frame
- Both sizes available in silver satin or gloss black frame with rounded corners
- Enclosed top and sides for moisture resistance
- PVC clear protective cover is included
- For outside use, weatherproof sign material should be used
- Plastic base has improved stability
- Additional feet on base, steadies unit on uneven ground

#### Can be internally ballasted with sand Wind Sign Deluxe<sup>™</sup> with

#### **Snap Frame**

- Dimensions (frame only): 30"Wx46"Hx1.3"D >
- Dimensions (base only): 29-1/2"Wx6-1/4"Hx24"D
- Dimensions assembled: 30"Wx54-1/2"H >
- Total weight assembled: 34 lbs.
- Sign insert size: 28"Wx44"H

#### Wind Sign II with Snap Frame

- Dimensions (frame only): 26"Wx38"H x1.3"D >
- > Dimensions (base only): 29-1/2"Wx6-1/4"Hx24"D
- Dimensions assembled: 29-1/2"Wx40-1/2"H >
- Total weight assembled: 30 lbs. >
- > Sign insert size: 24"Wx36"H







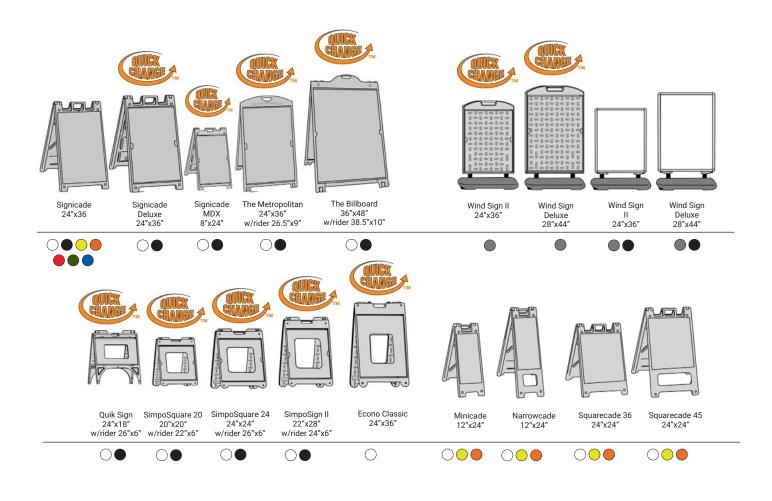






#### Sign Frames | Miscellaneous Safety Products

#### **Compare Frames & Sign Sizes**





Wind Sign Deluxe<sup>™</sup> with Quick-Change<sup>™</sup>

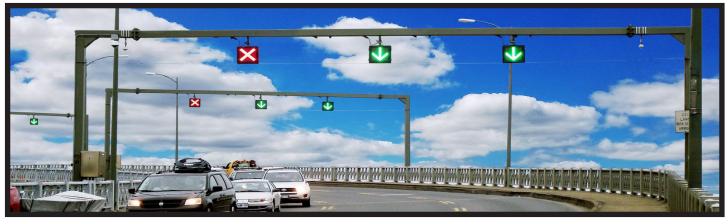




Minicade<sup>®</sup>

Quik Sign®

#### **Directional LED Signs | Lane Control**



#### Directional LED Signs warn motorists of changing road conditions.

Directional LED blank-out lane control signs communicate traffic pattern changes. These blank-out signs can be used to alert motorists to reversible lane changes or warn them of a closed roadway or approaching turn restriction (No Left Turn).

Our LED changeable lane control signs can be engineered with a single message that illuminates when activated and blanks out (disappears) when deactivated. When signs are designed with multiple messages in a single sign, the messages can be engineered to display individually like the red X, amber X and green arrow reversible lane signs used in a reversible lane system. The LED sign message can be words, symbols or both and can be designed to MUTCD LED layout guidelines. Our lane control signals and signs can be engineered to flash, display the messages in a specific sequence or be operated by an external device.

These directional LED signs withstand harsh weather and high vibratory conditions. Narrow-angled LEDs and photo-dimming are available for maximum visibility in all lighting conditions.

- > Cabinet: extruded aluminum cabinet with welded seams, NEMA 4X rated/IP66. Hinged door with 1" silicone gasket, toolless stainless steel latches. 5.0" deep
- Face material: replaceable 1/4" thick smoke-tinted polycarbonate (5109)
- Faces: single or double faced signs >
- Finish: powder coat black >
- Integral hood: optional hood available
- Input voltage: 12-24 VDC or 120-24 VAC >
- 5 Photo dimming: (3) redundant fail-safe photocells for auto photo dimming
- Power supplies: redundant
- UL/cUL listed: listed for wet locations
- Illumination: super bright direct view LEDs and message blanks out when off

12"Wx12"Hx2-1/2"D

#### Class: DOT series >

Control method: switch (not included) or external relay >





54"Wx36"Hx5-1/2"D

36"Wx18"Hx5"D

24"Wx24"Hx11-1/2"D

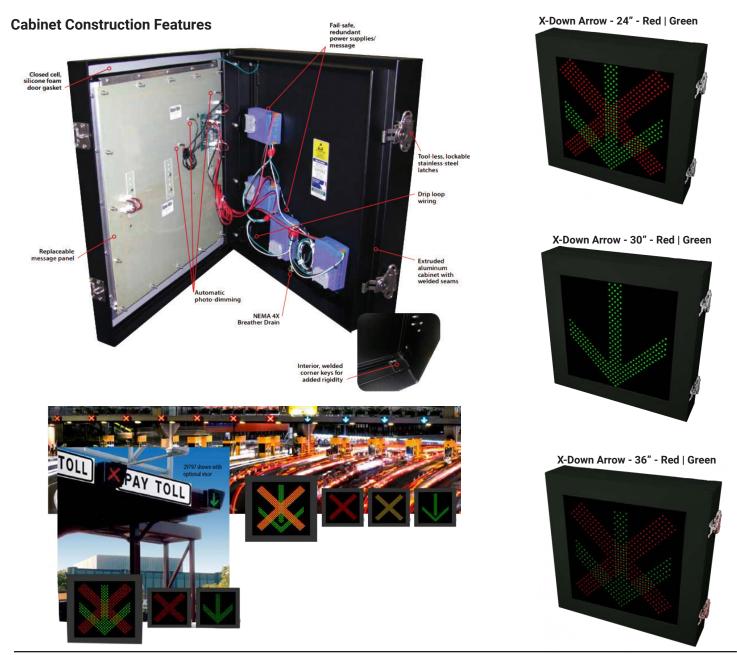


12"Wx12"Hx2-1/2"D

#### **Backlit Signs | Directional LED Signs**

#### **Reversible Lane and Toll Plaza Signs**

Clearly define open lanes from a distance. Bold symbols use super-bright LEDs to make messages readable in direct sunlight.



#### PHX Series: Outdoor, Blank-out LED Backlit Signs

The PHX Series LED sign is designed with high-intensity, LED backlit illumination and a block letter-style message face. The sign message illuminates when turned on and blanks out or disappears when off. PHX Series LED signs are guaranteed readable in direct sunlight.



Open Sign

Open Closed Sign







- > Light source: backlit, high-intensity LED
- > Cabinet depth: single faced 2-1/4" deep; double faced 5-1/2" deep minimum
- Construction: one piece extruded aluminum frame with an 1/8" thick grey acrylic face panel
- > Finish: duranodic bronze; optional finishes available
- Electrical: input voltage 120–277VAC or low volt 12–24V; UL/cUL listed for wet locations
- > Mounting: includes Lift 'N Shift wall mount
- > Warranty: five years

#### Miscellaneous Safety Products | Tuftile® ADA Warning Tiles



## A trusted source for ADA tiles with superior strength.



The Americans with Disabilities Act (ADA) "recognizes and protects the civil rights of people with disabilities." One sector of the ADA mandates that newly constructed pedestrian street crossings – curbs, curb ramps, blended transitions, rail crossings, medians and refuge islands – have detectable warnings for visually impaired individuals. The government also recommends retrofitting existing pedestrian street crossings wherever possible.

- > ADA compliant for wet and dry, slip-resistant surface
- Easy and fast installation, bilingual step-by-step installation instructions
- > Beveled edges meets "trip hazard" requirements
- > Replaceable
- > Long term durability
- > 100% Recyclable
- > Made in USA
- > Color is continuous through the tile

#### 

- > Polymer Colors: Yellow FED 33538, Colonial Red FED 20109, Brick Red - FED 22144, Safety Red - FED 31350, Dark Gray - FED 36118, Black - FED 3703
- > Sizes: 24"x12", 24"x24", 24"x36", 24"x48", 24"x60"



#### **TufTile® High-Impact Polymer Warning Tiles** Engineered for superior impact resistance, slip resistance and long term durability

#### Wet-Set / Replaceable

TufTile's<sup>®</sup> Polymer Wet-Set (cast-in-place) warning tiles are replaceable and high-impact designed for years of use on municipal (public) and private sidewalks, pedestrian ramps and platforms. Polymer Wet-Set tiles utilize a factory installed umbrella style anchor system with tamper resistant stainless steel fasteners for easy installation into wet concrete applications.

#### Surface-Applied / Replaceable

TufTile's<sup>®</sup> Polymer Surface Applied Tiles are replaceable highimpact detectable warning tiles, designed for years of use on municipal (public) and private sidewalks, pedestrian ramps and platforms. Polymer surface applied anchors hold tight to tamper resistant stainless steel fasteners and are easily installed into existing concrete or retrofitting installations. Alternatively, drive pins can be used in most installations.

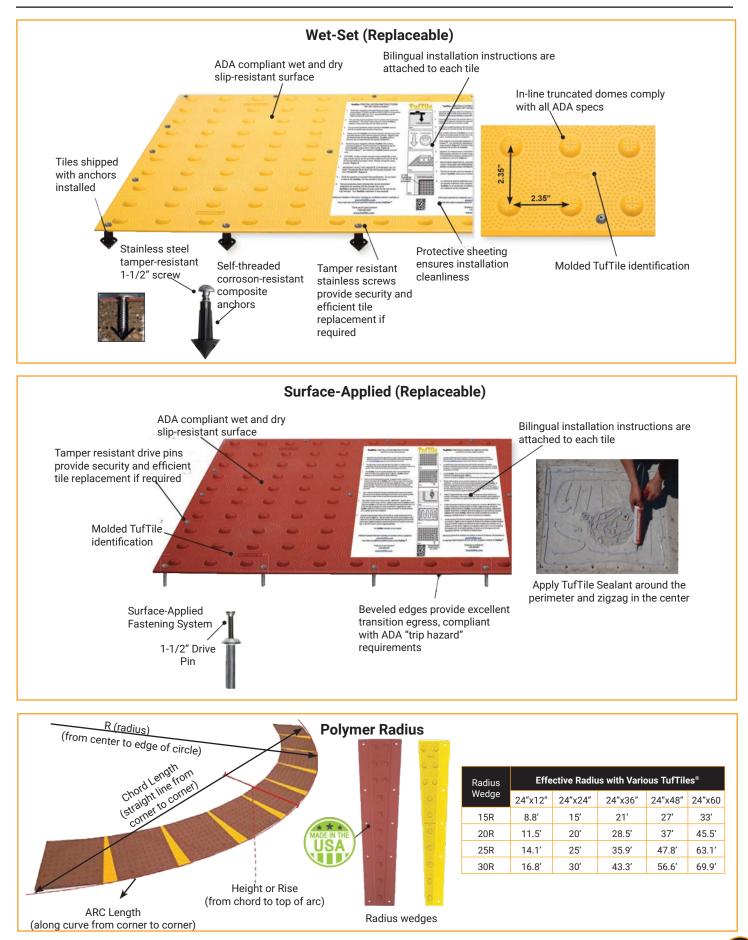
- > ADA Compliant wet and dry slip-resistant surface
- Tamper resistant drive pins provide security and efficient tile replacement if required
- Beveled edges provide excellent transition egress, compliant with ADA "trip hazard" requirements
- > Molded TufTile<sup>®</sup> identification
- > Bilingual installation instructions are attached to each tile

#### Surface Applied Fastening System/Accessories

- > 1-1/2" tamper resistant stainless steel #14 screws secure each anchor to the tile
- Polymer Surface-Applied anchors hold tight to stainless steel
- Optional anchor drive pins are available, depending on location and installation regulations
- > Weather resistant TufTile® SA sealant is applied to the back
- > 1/4" Carbide tip drill bits are provided with TufTile® SA tiles so that anchor holes may be drilled into the concrete



#### **Tuftile® ADA Warning Tiles | Miscellaneous Safety Products**



#### Miscellaneous Safety Products | Overheight Clearance Bars



#### Overheight clearance signs will help you regulate and bring order to your parking lots.

The free-hanging overheight clearance I-Bar is an ideal way to alert motorists to clearance height restricted areas or provide overhead way finding directions and lane designations. The sleek overheight clearance I-Bar design, with the EasyGlide" Adjustable Eye Nuts, makes installation simple and flexible. Simply slide the eye nut spacing to your needs, tighten and hang. Features high-performance reflective vinyl graphics for superior night visibility. NHP, Inc. also carries standard tubular clearance bars in a variety of colors and lengths. Both options are ideal for parking garage entrances, transitions between parking decks, overhead door openings, apartment buildings, car washes, and under drive-thru canopies.

#### I-Bar

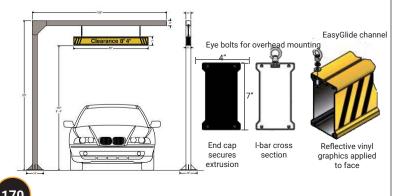
- > Made of heavy gauge, extruded aluminum
- > Available in lengths from 2' to 20', 7"Hx4"D
- Includes the EasyGlide<sup>®</sup> Mounting System for a simple yet flexible installation
- Ships ready to install with factory applied graphics (can be double sided)
- Message is high performance 7 year black reflective vinyl, custom colors available
- Mounting includes (3) EasyGlide<sup>®</sup> adjustable eye nuts for hanging (chain not included)
- Standard finish is traffic yellow
- > Custom colors: white, jet black, satin black, yellow, brushed aluminum, red, blue and green
- > Finishes: high-gloss, semi-gloss and low-gloss



#### **I-Bar Mast Arm Post**

4"x4" Extruded aluminum posts with end cap. Welded to 12"x12" aluminum plates and gussets; 120" Vertical x 108" Horizontal Mast Arm Structure. Painted standard duranodic bronze. Elbow attached with bolts. (Shown with optional mast arm post)



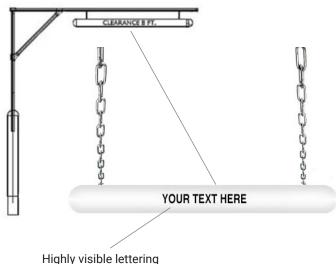


#### **Clearance Bars**

Make sure tall vehicles know your clearance before it's too late. Clearance bars are easy to read, highly visible and are made of HDPE plastic making sure that you never have to paint again. > Sizes:

- 5-1/4" O.D. 78" overall length (with 2 eyebolts)
- 5-1/4" O.D. 110" overall length (with 2 eyebolts)
- 7-1/4" O.D. 110" overall length (with 2 eyebolts)
- Maintenance free
- Standard color is yellow, custom options available upon request
- > Clearance bar apparatus available





#### Perimeter Protection & Security | Miscellaneous Safety Products



#### **Steel Bollards & Covers**

NHP, Inc. offers a wide array of steel bollards and pipe for all of your pedestrian and building protection needs. Bollards are available in a variety of lengths, thicknesses and finishes. Covers are also available to give your bollards a decorative look.

#### **Steel Bollards**

- > Available in 4", 6", 8" outside diameter
- > Can be cut to any specific size required
- > Raw, painted, galvanized, or stainless steel finishes available
- Optional welded top and surface mount options





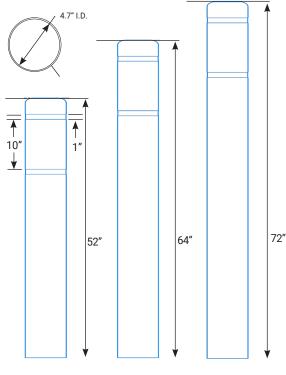
Raw steel bollard

Surface mount raw steel bollard

#### 

#### **Bollard Covers**

- > Available in 4", 7" or 8" Diameter
- > Lengths: 52", 64" or 72"
- > Colors: yellow, white, red, orange, light grey, grey, green, brown, blue, black, bright green
- > Available with or without reflective tape
- > Reflective tape colors: yellow, red, white, blue, black, green, orange
- > Custom lengths are available











#### **Miscellaneous Safety Products | Perimeter Protection & Security**



#### **Crash Rated Systems**

In today's world, perimeter protection is more important than ever. NHP, Inc. has recently added a full line of crash rated systems to meet all of your pedestrian and perimeter security requirements.

#### **Fixed or Removable Crash Rated Bollard**

- > K4, K8 and K12 rated bollards available
- > Most functional and easiest to install bollard on the market
- > Shallow foundation ensures easier installation
- > Available with a variety of decorative covers



#### **Portable Barriers**

- > Very easy to implement
- > Various models available
- > Fully crash rated barrier system
- > Towable units available





#### Perimeter Protection & Security/Lane Dividers | Miscellaneous Safety Products



#### **Security Blocks**

NHP, Inc. has access to a wide variety of barrier systems that excel in lane separation and perimeter safety. There are many standard configurations available, but our products can be made to fit your exact size and weight requirements.

#### **Concrete Beton Block**

- > 5'-2 7/8" L x 2'-7 1/2" H x 2'-7 1/2" W
- > Heavy duty 5400 lbs
- Forklift pockets and lifting rings provide for extra portability
- Stackable design allows for easy storage and height requirement needs
- > Colored finishes available
- > Custom planter design also available

## Built-in wheels for easy transportation Available in many colors

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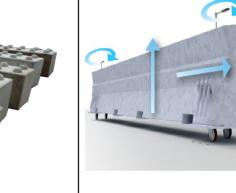
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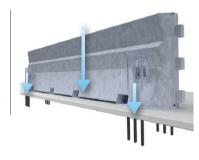
SafeZone<sup>™</sup>

> Anti-ram barrier

Steel mobile anti-terrorism barrier

Easy to move by 2 people





#### **BarrierGuard**®

 Flexible and lightweight



 Made of extremely robust hot dipped galvanized steel



- Has a unique "QuickMount" connector design without fasteners, allowing installation of up to 300 metres of barrier per hour
- Quickly installed and removed; limits the disruptions to traffic while reducing the overall
- carbon footprint
   Tested according to MASH and NCHRP 350 requirements

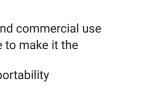
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#### **Concrete Jersey Barriers**

- > Lengths: 6', 8', 10' or 12'\*
- > Designed for heavy duty military and commercial use
- Constructed of 5,000 PSI concrete to make it the strongest design
- > Forklift pockets provide for extra portability



\*Minimum order requirement may apply to some sizes



#### Guide Rail Barriers | Miscellaneous Safety Products



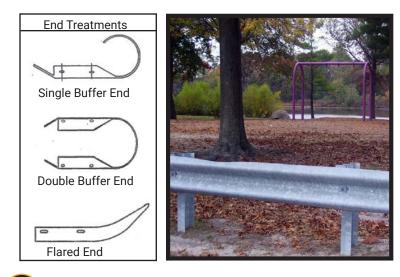
#### Guide Rail is an essential component to controlling and containing vehicle accidents.

#### W-Beam Steel Guide Rail

W-Beam Guide Rail comes in standard 12' 6". It is a roll-formed product that is shaped out of steel coil into the shape of a "W," and typically galvanized to prevent corrosion and increase the product's life-cycle. W-Beam Guide Rail can be installed on steel strong posts or weak posts, using a variety of different post spacing options, depending on the specific situation (typically 6' 3" spacing). Some states also specify wood posts for installation.

The W-Beam consists of two "humps" and one "valley". Humps are rises that face towards the traffic (convex surface) lane, while the valley (concave surface) points away from the traffic lane. The W-Beam guide rail measures 13' 6-1/2" in length, 12-1/4" in height, and 3-1/4" in depth. The lay length of the 13' 6-1/2" guide rail is 12' 6". This lay length represents the distance between the outermost post holes. Thus, a 12'6" panel has post holes centered at 6'3" apart. The thickness of the W-Beam guide rail is 12 gauge or roughly 1/8" thick. The W-Beam guide rail can be purchased for both straight and curved roads.

National Highway Products, Inc. offers several types of end treatments including the single buffer, double buffer, and flared end. Both the single and double buffer ends measure 16-1/4" in height and 24" in length, with a radius of 6-5/16". A flared end measures 27-1/2" in length, 15-3/8" in height and 9" in depth. Typical installation consists of a panel of guide rail attached to posts that have been pounded into the ground. The posts are spaced at intervals corresponding to the number of punches in the guardrail panel. Therefore, a 12'6" piece of guide rail at 6'3" post spacing require 2-3 posts, depending on the need for a center post.



#### Universal Tau-II®

The redirective, non-gating, partially reusable (R-NG-PR) Universal Tau-II<sup>®</sup> Crash Cushion consists of a full family of systems designed to meet the requirements of NCHRP Report 350, TL-2 & TL-3 to shield almost any width hazard. The system is available in lengths and capacities for both low and high speed applications from 30-75 mph. The Universal Tau-II system can shield hazards with widths up to 102". The Universal Tau-II System is ideally suited for roadway hazards located on the side of a road or in a median. Ease of installation, low profile foundation, numerous transition options, and low priced replacement components; make the Universal Tau-II System an ideal crash cushion to shield most roadside and median hazards.

#### Features:

- > High speed designs available
- > Minimum number of anchors needed to secure the system
- > Can be installed over bridge expansion joints
- > Low profile foundation ideal for deployment on bridge decks
- > Numerous transition options
- > Low priced replacement components
- Standard reusable nose
- > Designed for use with standard, thrie beam transitions



## **Ordering Information**

- Please have billing and shipping information ready when ordering. This information includes company name, billing & shipping addresses (please do not use PO Box for shipping address), telephone number, email and "Attention to:" (if applicable). This information will ensure fast, accurate processing of your order.
- 2. **Standard Signs** are considered to be those illustrated in this catalog along with all signs listed in the MUTCD (Manual on Uniform Traffic Control Devices). We will be happy to quote you on any non-standard requirements you may have.

#### Non-standard or custom signs are not returnable. When ordering signs please specify:

- Catalog Item Number or MUTCD Number
- Sign Size:

Horizontal by Vertical Measurements

- Legend Color and Background Color
- Sign Finish:
  - Non-Reflective -

Baked Enamel or Vinyl

Reflective -

Type 1

Type 4

Type 8 (Fl. Orange Only)

Type 9 (Fl. + Non-Fl. available)

Type 11 (Fl. + Non-Fl. available)

- Pressure Sensitive Face or Finished Sign Aluminum, Plywood, Plastic, Fiberglass
- 3. Orders for **Non-Standard Signs and Street Name Signs** must be submitted in writing in order to eliminate possible errors as a result of telephone conversations.
- 4. Restocking charge on **stock** items is \$25.00 or 20% of orders, whichever is greater.

#### NHP, Inc's. Guarantee

National Highway Products, Inc. guarantees all of its' products to be free from defects in materials and workmanship at time of delivery. We will repair or replace at our discretion, any product whose defect can be directly attributed to failure of either our materials or workmanship. Copy, finish, material and color choice as well as local, state, federal and corporate regulations concerning the suitability, legality, and/or safe use of any product purchased from National Highway Products, Inc. are the sole responsibility of the customer.

We look forward to working with you.

Thank you for contacting us.

- 5. When ordering standard catalog items, please specify quantity, catalog number (if possible), size, color (if there is a choice), and accessories (if applicable). When ordering non-standard or non-stock items, you may have to purchase in full box quantities per manufacturer's minimum requirements.
- 6. No merchandise may be returned without National Highway Products, Inc's. approval. All custom orders are nonreturnable. Goods returned without authorization will be returned at sender's expense. Should a return be authorized, the merchandise must be carefully packaged to ensure it reaches us in re-sellable condition. Credit cannot be given for merchandise returned in damaged condition due to improper packaging.
- Upon receipt of your order, please check all merchandise carefully. Take exception of the carrier delivery ticket for any item:
  - Not received when checked against our packing list
  - Showing evidence of damage during transit

All claims for shortages or damaged goods must be filed with the delivering carrier within 5 business days after receipt of goods. Keep all cartons and labels. Please do not deduct claims for loss or damage or transportation charges resulting therefrom from our invoice. If any discrepancies are found, note them in writing on both your and the carrier's delivery tickets. Be sure the driver signs both copies acknowledging the discrepancy and notify us immediately.

8. Hidden Damage: Should you discover any damage after delivery, you should contact the delivering carrier immediately and request that an inspection report be completed by the carrier.

#### **Terms and Conditions of Sale**

- 1. Prices are subject to change without notice. Minimum order is \$50.00.
- Terms of payment: Standard terms are net 30 days from date of invoice; subject to credit approval by NHP, Inc.
   Past due invoices are subject to 2% monthly interest charge. Orders received from past due accounts will not be processed until the account is current.
- 3. Shipping: All terms FOB factory unless otherwise noted in this catalog or quoted in writing.

#### Please mail, phone, fax or email orders to:

National Highway Products, Inc. 301 Riverside Drive, Millville, NJ 08332 Phone: 856-692-7572 - Fax: 856-692-7344 Email: sales@nationalhighway.com



## NATIONAL HIGHWAY PRODUCTS, INC.

THE BRANDS YOU TRUST, THE SAFETY YOU NEED



## EST. 2023

#### **FABRICATOR OF SIGNS & DISTRIBUTOR OF TRAFFIC SAFETY PRODUCTS**

301 Riverside Drive • Millville, NJ 08332

www.nationalhighway.com

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